INVESTING IN A STRONG FUTURE FOR CANADA'S BEEF INDUSTRY

CANADA'S NATIONAL BEEF STRAATEGY 2025-2030

THE NATIONAL BEEF STRATEGY IS ABOUT POSITIONING THE CANADIAN BEEF INDUSTRY FOR GREATER PROFITABILITY, GROWTH AND CONTINUED PRODUCTION OF HIGH-QUALITY BEEF PRODUCT OF CHOICE IN THE WORLD. IT BUILDS ON GAINS OVER THE LAST FIVE YEARS, WHILE ALSO ADDRESSING KEY CHALLENGES AROUND DOMESTIC REGULATIONS AND RECOVERY FROM DROUGHT.

WHY A NATIONAL BEEF STRATEGY?

- The National Beef Strategy provides clarity to stakeholders and governments as industry comes together to work towards common goals. It facilitates collaboration and coordination between the national organizations to leverage available resources on behalf of producers and processors.
- Research has shown that people who write down their goals are 42 percent more likely to achieve them than those who don't. This industry strategy is designed to provide clarity, so that more can be achieved faster.
- Renewing the strategy every five years addresses the unique challenges at different points in the cattle cycle. As the North American beef industry enters another



The National Beef Strategy is about the future. We want people to know that the beef industry is preparing the way for the next generation.

Bob Lowe, Public and Stakeholder Engagement Tracking goals has been a productive exercise. We are seeing wins and the Beef Advisors are excited about where we can go next.

Nathan Phinney, Canadian Cattle Association cattle cycle, maintaining core infrastructure will be a priority in the coming years. This time period also has opportunities as global population growth and the shift to the middle class continues to support protein consumption.

- Post-covid food price inflation, higher interest rates and input costs have shifted cost structures and the market environment supply chain participants are facing.
- The 2025-30 National Beef Strategy is aligned with the 2030 industry goals, identifying and filling gaps to help ensure those goals are met.

WHY 2030 GOALS?

The suite of 2030 goals were developed to position the Canadian beef industry as part of the solution on these topics, rather than the problem. In setting these goals, industry was aiming to build government and public support for beef production and its activities through a clear consistent message that addresses the challenges faced head-on, while also communicating its benefits.

The intent was that these "stretch" goals would encourage industry to strive for something we would not achieve without setting them. While efforts have been made to set realistic goals based on scenarios, it is possible that these goals will not be reached for a variety of reasons. Part of the reason for setting an ambitious "stretch" goal is to encourage innovation and push industry to think differently and move out of our comfort zone. It should not diminish what industry achieves if a specific goal is not reached. However, it will encourage industry to explain why a goal was or was not reached, as the Canadian Beef Advisors have committed to transparent reporting to industry through the National Beef Strategy.

Individual fact sheets that provide the goals, context, how the goals could be achieved and frequently asked questions are available at *beefstrategy.com*. THE NATIONAL STRATEGY HAS BEEN DEVELOPED WITH THE AIM TO ACHIEVE THE INDUSTRY 2030 GOALS THAT ARE ALIGNED WITH THE INDUSTRY'S VISION AND MISSION UNDER FIVE PILLARS. The addition of the Sustainability pillar addresses multiple 2030 goals and includes aspects of demand, competitiveness, and productivity. Each pillar identifies focus areas where industry stakeholders will work together to collectively achieve the objectives. Under each focus area specific tactics have been defined that work towards meeting the goals established. Focus areas and outcomes have been updated to reflect the current market and regulatory environment that producers face.

VISION

A dynamic, profitable Canadian cattle and beef industry

MISSION

To produce the most trusted and competitive high-quality beef in the world, recognized for our superior value, safety, innovation and sustainable production methods.

PILLARS

Beef Demand, Sustainability, Competitiveness, Productivity and Connectivity

PILLARS & FOCUS AREAS

BEEF DEMAND

The Beef Demand pillar will support domestic and international demand for Canadian beef by establishing the inherent quality and value of Canadian beef in markets, which supports comparative equivalency or superiority to alternatives. A key objective is the value of AAA and Prime carcasses to be equivalent with the U.S. by increasing demand for all cuts on the carcass. This will be achieved by focusing on market access, domestic and global marketing, marketing and enhancing the Canadian Beef Advantage, consumer confidence, and social license.

 Trade and Market Access — The Canadian beef sector heavily relies on exports, with about 50 percent of its production exported to over 90 countries worldwide. The sector aims to reduce tariffs and non-tariff barriers, promote science-based decision-making in trade policies and regulations, and secure predictable and stable market access. In addition, the sector aims to streamline cross-border trade and eliminate redundant border inspections, remove internal regulatory impediments to innovation, export, and commercial trade. Advocacy efforts will help take advantage of the reduction or removal of tariffs and non-tariff barriers.



The world is changing with new technology, such as artificial intelligence, giving the potential to change how marketing is done. Canada Beef is striving to keep pace with these technologies to ensure we reach our target audience and make a meaningful impact for beef demand, both at home and abroad."

Jeff Cline, Canada Beef

 Domestic and Global Marketing — Position Canadian beef as a premium product globally. Using market segmentation tools, Canada Beef will identify high growth-high value consumer groups. They will implement artificial intelligence (AI) to enhance consumer interaction and support.



A growing population and middle class means that the demand for protein is outpacing production, driving prices higher. The protein pie is getting bigger and Canada, as a relatively low emissions intensity producer, deserves a seat at the table.

Calvin Vaags, Canadian Meat Council

- Marketing the Canadian Beef Advantage Communication of the Canadian Beef Advantage will be undertaken through global resources developed for both consumer and meat professional audiences. Benchmarking will be conducted in domestic and export markets relative to key attributes including those related to quality, safety, value, and sustainability.
- Enhancing the Canadian Beef Advantage Refresh the National Beef Quality Audit to reflect increased further processing, incorporate modern imaging technology and real-time feedback, develop a shelf-life standard for Canada, and invest in new beef quality innovations and quality assessment technologies.
- Consumer Confidence Consumer confidence starts with understanding that Canadian beef is a safe, high quality, nutrient dense product that is produced in a sustainable manner. It is essential the core aspects of nutritional benefits and Canada's food safety systems are conveyed regularly to consumers domestically and internationally.
- Social License Promote the societal and environmental benefits of beef production. Engage in public perception research and advocacy to build public trust. Highlighting these benefits in ways that public audiences can relate to, told by trusted messengers and on content mediums they frequent, are key to building positive sentiment in beef production.

FOCUS AREAS AND OUTCOMES

Trade and Market Access

- 1. Reduce non-tariff and tariff barriers in our export markets for beef, live cattle, and beef cattle genetics
- Increase our capability to utilize preferential access in key exports markets for Canadian beef, live cattle, and beef cattle genetics
- 3. UPDATED Eliminate market access restrictions

Domestic and Global Marketing

- Establish the Canadian Beef Advantage as the most recognized and loyalty-based premium beef program for select markets and customers
- Reworded! Work with value-chain partners to best align product offerings and availability with market opportunities
- NEW! Maintain market share against other suppliers and protein choices in the domestic and international markets

Marketing the Canadian Beef Advantage

- Reworded! Communicate the attributes of the Canadian Beef Advantage through print and digital resources developed for global markets
- 2. *Reworded!* Benchmark attributes of the Canadian Beef Advantage in domestic and export markets
- Reworded! Enhance the Canadian Beef Advantage through applied research and communication of best practices

Enhancing the Canadian Beef Advantage

- 1. Improve customer satisfaction with Canadian beef
- Define, validate, and enhance the emotional and functional attributes of Canadian beef in domestic and international markets

- 3. Ensure food safety along the beef supply chain
- 4. Validate the efficacy and safety of new technologies in support of the rational regulatory approval and adoption of improved food safety interventions throughout the supply chain

Consumer Confidence

- Enhance consumer confidence in Canadian beef across all markets through a focus on enabling industry advocates, leadership in stakeholder engagement, and partnerships with influencers
- 2. Improve the effectiveness and reach of consumer communication
- 3. *NEW!* Promote the culinary enjoyment of beef to consumers
- 4. Promote the health and nutritional benefits of beef to consumers
- Support consumer food safety education initiatives that demonstrate the effectiveness of Canada's science-based food safety system

Social License

- Enhance the public image of the Canadian beef industry emphasizing the many positive benefits our industry contributes, along with the continual improvement in environmental sustainability, animal health and welfare, and food safety practices
- Increase public recognition of the beef industry's direct and indirect contributions to the Canadian economy and society

PILLARS & FOCUS AREAS

SUSTAINABILITY

The Sustainability pillar supports continuous industry improvement in natural and human resources. It focuses on reducing greenhouse gas emissions intensity and preserving native grasslands, while enhancing soil carbon sequestration and biodiversity. This will be achieved by addressing financial viability, environmental policy and research, on-farm quality assurance programs, measurement and verification claims, and social. Financial Viability — Industry recognizes the diversity of production systems and environments that producers operate in from coast to coast. To increase the financial viability of beef production in Canada, efforts are focused on financial literacy, business planning and encouraging financial incentives for ecosystem goods and services.

SUSTAINABILITY

- Environmental Policy Advocate for programs and policies that support the sound stewardship of grasslands and wetlands, biodiversity, and recognition for environmental goods and services. Solutions to ongoing environmental challenges such as land conversion, biodiversity loss, and climate change, need to be developed through partnerships and collaboration with stakeholders across the beef supply chain.
- Environmental Research Develop cost-effective strategies to reduce greenhouse gas emissions. Other aspects of this strategy pertaining to efficiency and productivity gains also contribute to reducing the environmental footprint of Canadian beef.
- Sustainability Measurement and Verified Claims

 Canadian Roundtable for Sustainable Beef (CRSB) works to build awareness and consumer trust in sustainable beef production in Canada and enhances the capacity of the beef supply chain to respond to market demands by supporting claims with quantifiable measurement, reporting, and demonstration of performance improvements.

- Quality Assurance With strong demand for CRSB Certified beef products from end-users, the expectation was that producers would see value in becoming trained and audited. The growth in audits has been less than anticipated, particularly at the cow-calf level. Increase producer understanding of quality assurance value. Expand participation in industry-supported verification programs.
- Social Through commitment, communication, and collaboration from all stages of the supply chain raise awareness of farm safety and mental health resources, and proactively manage change.



Despite low cow-calf enrollment and limited response to the CRSB's calls for increased producer enrollment to meet end-user demand for the CRSB Certified program, industry has recognized the need to continue to advance the Verified Beef Production Plus program." Craig Lehr, Beef Cattle Research Council The NBSA and CRSB Certified are important tools for the industry to measure and communicate progress on sustainability indicators that are relevant to the value chain, in both domestic and international markets."

Ryan Beierbach, Canadian Roundtable for Sustainable Beef

FOCUS AREAS AND OUTCOMES

Financial Viability

- 1. Increase producer financial literacy and viability
- Encourage financial incentives for beef producers related to ecosystems goods and services provided by the beef industry (see Focus Area Environment Policy)
- Support innovations that reduce labour requirements supporting economic viability and worker conditions (see Focus Area Social)

Environmental Policy

- 1. Reduce primary production greenhouse gas (GHG) emissions intensity by 33 percent from 2013/14 to 2030
- Maintain a network of natural landscapes and healthy functioning ecosystems through well-managed grazing systems that maintain sustainable plant communities and healthy rangelands
- Build recognition of the benefits provided by grassland ecosystems and open forests to water, including the protection of wetlands, water quality and

retention, nutrient filtration, drought/flood resilience, water holding capacity, groundwater recharge, and the role of wetlands as carbon sinks

- Encourage practices that build soil organic matter and enhance soil biodiversity resulting in both carbon sequestration and water infiltration
- NEW! Engage with the development of international and domestic measurement systems and standards (science, methodology, protocols) and implications for reporting burden on the supply chain

Environmental Research

- Develop cost-effective ways to reduce greenhouse gas emissions, maintain or improve biodiversity, increase soil carbon, or improve water infiltration on pastures and rangeland
- Develop cost-effective ways to reduce feedlot greenhouse gas emissions and evaluate the impacts of manure nutrients on pasture and cropping systems

Sustainability Measurement and Verified Claims

- 1. Support the activities of the Global and Canadian Roundtables for Sustainable Beef
- Develop a sustainability and quality assurance roadmap for the Canadian beef industry (including CRSB Certified and Verified Beef Production Plus) to identify and coordinate the alignment and integration of national and international programs
- Promote voluntary producer certification in the CRSB Certified program
- Promote CRSB Certified to supply chains seeking assured sustainability claims and other related method of production claims or attributes
- Inform and support improvements to the CRSB Certified program that advance beef sustainability in Canada

PILLARS & FOCUS AREAS

COMPETITIVENESS

The Competitiveness pillar encourages a competitive business and regulatory environment, a resilient supply chain, access to competitively priced inputs (with an emphasis on reducing the labour shortage), and regulatory approval of technologies (which support cost competitiveness, increase speed of commerce and reduce red-tape).

 Competitive Business and Regulatory Environment — Advocate for science-based, outcome-focused regulations; and, interpreted and enforced by an efficient regulator. Ensure tax policies and business risk management tools support competitiveness while limiting commodity disparities.

6. Facilitate increased collaboration and communication to encourage data and information sharing across the Canadian beef value chain

Quality Assurance

- Grow producer participation in the Verified Beef Production Plus (VBP+) standard and other industrysupported verification programs
- Generate industry metrics to confidently state Canadian producers' commitment to food safety through VBP+ training and/or certification, including benchmarks for adoption of best management practices contributing to sustainability goals

Social

- 1. Collaborate regarding on-farm health and safety awareness and best practices implementation
- 2. Enable dialogues regarding health and safety, including mental well-being, for all beef value chain participants
- Promote a culture of diversity, equity, inclusion, and transparency for all people within the beef supply chain
- 4. Support labour management and worker conditions



There are record high prices and renewed optimism. But there are still bottlenecks to work on. Notably labour, which has kept many from expanding. Immigration processes needs to be responsive, to put people where we need them.

Will Lowe, National Cattle Feeders Association

BEEF DEMAND

- A Resilient Supply Chain Proactively address supply chain disruptions and ensure emergency preparedness. To support a responsive marketplace, industry needs to have the necessary infrastructure to carry out business and be generating science-based information to inform regulations, as well as advocating for recognition of the global standards developed and used in Canadian beef production.
- Access to Competitively Price Inputs It is imperative that the beef industry has access to competitively priced inputs and that the business environment in Canada supports the development of new innovative inputs that could potentially reduce production costs. Advocate for faster approval processes for new technologies. Address labor shortages through improved immigration pathways and training programs.

 Regulatory approval of Technology to speed commerce — Support the development and adoption of validated precision agriculture technologies. Invest in technological solutions that improve traceability and reduce costs.





There have been significant strides forward with recognition that beef is part of the environmental solution. But producers have also faced a multi-year drought and a regulatory environment that has become more challenging to navigate. Staying on top of advocacy issues must continue to be a strong focus. Nathan Phinney, Canadian Cattle Association

FOCUS AREAS AND OUTCOMES

Competitive Business and Regulatory Environment

- 1. Improve return on investment and long-term profitability of the beef industry
- Advocate and uphold a scientific, risk-based regulatory system
- 3. Pursue outcome-based flexible alternatives to prescriptive tactic-based regulations
- Pursue regulatory cooperation with major trading partners
- 5. Ensure that traceability systems are based upon real benefits and fairly allocated costs, through national industry-led cattle identification systems with an emphasis on animal identification, premise identification, and animal movement
- NEW! Generate science-based information and data to inform emerging issues, policy, regulatory approvals, and public trust discussions related to industry sustainability, production practices, and the safety of technologies.

A Resilient Supply Chain

- NEW! Proactively address supply chain disruptions (e.g. labour/transportation strikes, protests) impacting commerce through enhanced policy and effective approaches (e.g. recognizing essential services permanently)
- 2. Renew the National Emergency Management Strategy in event of a major trade disruption (e.g. Foot and Mouth Disease)
- 3. Address internal barriers to a competitive marketplace
- 4. UPDATED! Generate science-based information to inform regulatory approvals
- Proactively address and influence domestic and global food production standards, codes of practices, and potential regulations
- NEW! Encourage transparent price reporting (for cattle, beef, and beef products), where confidentiality can be maintained, to support arbitrage, industry decision making, investments, and programs (e.g. livestock price insurance)

Access to Competitively Priced Inputs

- NEW! Support and encourage awareness of careers and employment in Canada's beef industry (See Social, Youth Programs)
- REVISED! Build an understanding and acceptance of the continued importance of international workers in agriculture, and design and implement an efficient system of programs and policies that facilitate the entry of international workers for the beef sector, including pathways to permanent residency/ immigration.
- Improve access to competitively priced inputs including animal health products, feed grains and forages, new technologies, and other inputs

Regulatory Approval of Technology to Speed Commerce

- Improvements in speed, reliability, accuracy, and costeffectiveness of traceability solutions that advance both business and regulatory objectives (i.e. electronic certification, process verification)
- Support functional information flow solutions to producers derived from a competitive service sector
- Invest in technological solutions that reduce costs, improve competitiveness and enable regulatory approvals and business functions that support trade and commerce (e.g. access to internet, cell service in rural areas)
- Support innovation, research, refinement, and commercialization of technologies throughout the supply chain that support economic viability and worker conditions
- 5. Promote the acceptance of sustainable and safe beef production technologies by customers and regulators, in both domestic and international markets

PILLARS & FOCUS AREAS

PRODUCTIVITY

The productivity pillar supports production efficiencies through the supply chain. This will be achieved by focusing on animal production and performance, precision genetics, feed production and performance, producer adoption, and research capacity. Measurements will include open rates, calving length, and calf death losses as monitored through regional cow-calf surveys, improving feed efficiency, and feed crop yields.

- Animal Production and Performance Further incremental improvements in animal health, welfare and antimicrobial stewardship will require significant research effort across a wide range of specialties, including beef cattle nutrition, grazing and pasture management, genetics, physiology, microbiology, virology, parasitology and development of diagnostic tests, vaccines, and other antimicrobial alternatives. Significant investment is also needed in surveillance for emerging and production limiting diseases as well as antimicrobial resistance to ensure the health and safety of human health and food production.
- Precision Genetics New innovative technologies, expanding knowledge and improving overall genetic literacy, combined with advanced individual animal management and improved data analytics and selection tools offer the opportunity to make more rapid advancement in beef cattle genetic improvements. Investments to improve access to trusted genetic data and encouraging the adoption of validated genetic technologies



Productivity is where producers are in direct control. Data and research must be transformed into information that is useful for decision making on the farm – it is only then that change occurs.

Craig Lehr, Beef Cattle Research Council will better inform producers' breeding decisions and will contribute to overall improvements in production efficiency and beef quality. The rate of genetic improvement for feed efficiency could be significantly increased through DNA testing if the accuracy of genetic markers for feed efficiency can be improved.



Genetic improvement is an important area of focus to achieve further advancements in sustainable production and to position the industry competitively both domestically, with other competitive proteins, and internationally, with other global exporters.

David Sibbald, Canadian Beef Breeds Council

- Feed Production and Performance Breeding and agronomic research efforts that improve feed grain yields will be essential to improve feed production competitiveness relative to our U.S. counterparts and ensure critical feed production acres are not replaced by alternative crops. The rate of genetic improvement for feed efficiency could be significantly increased through DNA testing if the accuracy of genetic markers for feed efficiency can be improved.
- Producer Adoption Encourage the adoption of innovative practices and technologies. Provide training and support to producers for implementation. Provide resources that enable Canadian beef cattle producers to analyze their production and financial records, including comparisons to applicable benchmarks, to make informed production decisions about adopting, and fully exploit innovation.
- Research Capacity Industry will continue to put focus on working with Research Institutions to ensure the maintenance or enhancement of existing research capacity (including equipment and technology), transitioning key positions upon the retirement of researchers, as well as addressing critical gaps in capacity through the creation of research chairs and other partnerships opportunities.

FOCUS AREAS AND OUTCOMES

Animal Production & Performance

- 92 percent or more of the cow herd weans a calf each year through cost-effective improvements in nutritional and overall management
- Develop and promote the adoption of cost-effective management practices and technologies that reduce the need for and help preserve the effectiveness of antibiotics
- Effective surveillance of production limiting diseases, production practices, and antimicrobial use and antimicrobial resistance
- Improved prevention and mitigation of animal disease issues

5. Improved prevention and mitigation of animal welfare issues

Precision Genetics

- Continue to develop the Canadian Beef Improvement Network (CBIN) as a collaborative initiative, that is focused on providing producers with genetic information, that will assist them in making data driven genetic selection decisions and provide world leading data analytics to inform herd management decisions
- Increase producer knowledge and adoption of genetic selection tools

Feed Production & Performance

- Improve feed grain and silage yields through plant breeding, agronomic practices, and harvest strategies
- Investigate feed processing, by-products, additives, supplements or other feeding strategies that optimize productivity and profitability
- Improved feed efficiency through identification of genetic differences and animal breeding
- Improve the management and productivity of native/ naturalized pastures to enhance profitability and discourage land conversion
- Better understand the impact of grazing management on plant, animal, and soil interactions and how the overall system contributes to plant and animal health and productivity
- Cost-effectively improve the agronomic performance, yields, nutritional quality, and palatability of annual and perennial tame species for grazing or stored forages

Producer Adoption

 Engage academic and research organizations to encourage the development of new technologies that will benefit the beef cattle industry

- Advance the development and implementation of the Canadian Beef Technology Transfer Network to encourage the more rapid adoption of relevant technologies and production practices
- Increase the proportion of producers adopting new technology with reduced lag from development to adoption

Research Capacity

- 1. Support the maintenance and renewal of key research capacity supporting Canada's beef industry
- National food safety, antimicrobial resistance and production limiting disease surveillance programs enhanced or developed, with research capacity and expertise in place
- Ensure research facilities in each region are maintained and staffed to support activities that address local production practices (in partnership with Provincial Associations)

PILLARS & FOCUS AREAS

CONNECTIVITY

The Connectivity pillar recognizes the value of industry synergies by connecting positively with partner organizations, industries, and government to proactively address issues, challenges, and opportunities with a unified industry voice. This will be achieved through industry communication, proactive issues management, youth programs and engagement with industry, government, and global partners. Connectivity is the responsibility of every organization in the industry.

- Industry Communication Effective communication is foundational to all policy, marketing, and research activities within the Canadian beef industry. "Team Beef" works to share messaging and have timely response to topics as they arise.
- Issues management Proactively manage and respond to industry issues. Sharing aligned, consistent, and science-based messages through trained spokespeople across Canada fosters transparency and trust. Media tracking and social listening tools are also utilized strategically to monitor misinformation, emerging issues, and public sentiment on issues.

- Youth Programs Support programs that engage and educate youth about the beef industry. Foster the next generation of industry leaders. Through professional and leadership opportunities offered through the mentorship program, and continued advocacy work with the Youth Council and its young beef producers, these programs serve as important industry succession tools within the sector.
- Engage Industry, Government and Global Partners — Maintaining long-term relationships with government, regulatory agencies, the public and consumers, partner industries, land use and conservation organizations, and at international forums is necessary to establish trust, transparency and build credibility that enables industry to effectively address issues that arise.

FOCUS AREAS AND OUTCOMES

Industry Communication

- 1. Timely concise, and effective delivery of industry communications
- Enhance industry's ability to speak with consistent messaging

Issues Management

- Maintain the Canadian beef industry's social license to operate through communicating production practices and identifying opportunities for continuous improvement in areas of public concern
- Monitor, track, and manage issues that could impact public trust in a timely manner with consistent and aligned messaging between industry partners and key stakeholders

Youth Programs

- 1. Amplify existing resources on succession planning with youth in the beef industry
- 2. Build collaborative, broader industry youth engagement initiatives

- 3. Attract new talent and entrants to the beef industry, while retaining young producers
- 4. Build the youth voice in domestic and international advocacy efforts
- 5. Continued support and investment in youth programming

Engage Industry, Government and Global Partners

- The Canadian Beef Advisors to oversee the delivery and reporting on the National Beef Strategy for the beef cattle industry
- 2. Facilitate a national event with multiple industry organizations conducting meetings and bringing industry together
- Build strategic partnerships with external stakeholders to support and promote beef production and consumption
- 4. Engage government and regulatory agencies to build and maintain long-term relationships
- NEW! Represent the Canadian beef industry at influential international forums

The Canadian Beef Advisors consist of the current chair or president and senior staff of each of the seven national beef organizations responsible for policy, marketing, research, and sustainability. They are a diverse group of experienced industry representatives who are leading the implementation of the National Beef Strategy on behalf of producers. They are tasked with prioritizing and reaching the goals outlined in the strategy.



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INTRODUCTION

In January 2015, the Canadian beef industry presented the inaugural 2015-19 National Beef Strategy. This communicated the industry's vision, mission, and priorities to stakeholders. It succeeded in facilitating greater collaboration and coordination between the national organizations.

During the 2020-24 National Strategy, the covid pandemic strained the North American beef supply chain and exposed both strengths and weak points in industry resilience. The combination of both supply and demand shocks from the pandemic have echoed with questions on if consumer demand will be sustained in the face of economic pressures, at home and abroad. In addition, the 2021-23 drought conditions over Western Canada and into the United States reduced beef cow inventories and led to the cattle price rally that started in the second half of 2022. The current cattle cycle is expected to have a slower expansion phase sustaining high retail prices for longer. More information on the accomplishments from the 2020-24 National Beef Strategy can be found in the <u>2020-22</u> and <u>2022-24</u> Status Update's at www.beefstrategy.com.

The Canadian Beef Advisors developed the draft National Beef Strategy for 2025-30 during the summer of 2024, and presented it to the provincial cattle associations for review and feedback in October 2024 at an in-person meeting in Calgary, Alberta.

This 2025-30 National Beef Strategy is aligned with the 2030 industry goals, identifying and filling gaps to ensure those goals are met. It builds on momentum gained over the last five years, while also addressing key challenges around domestic regulations and recovery from drought. As the North American beef industry enters another cattle cycle, maintaining core infrastructure will be a priority in the coming years. The expansion phase of the cycle typically takes 5-7 years, covering much of this strategy period. This rebuilding phase could have additional opportunities as global population growth and the shift to the middle class continues to support protein consumption.

Ensuring a resilient supply chain has been top of mind in recent years. One that provides accessibility of feedstuffs is key to industry competitiveness. This includes addressing transport challenges (i.e. rail dependability, road infrastructure), affordability, approval of by-products for feed (via upcycling of food waste), and emergency weather factors (i.e. fires, floods, drought).

The National Beef Strategy has been developed with the aim to achieve the 2030 goals that are aligned with the industry's vision and mission. The 2030 goals are measurable benchmarks to which the industry is held accountable with transparent reporting through interim and final status updates. The addition of the Sustainability pillar addresses multiple 2030 goals and includes aspects of demand, competitiveness and productivity.

VISION: A dynamic, profitable Canadian cattle and beef industry

MISSION: To produce the most trusted and competitive high-quality beef in the world, recognized for our superior value, safety, innovation and sustainable production methods.

Under each pillar focus areas and specific outcomes have been defined that work towards meeting the goals established by industry. Focus areas are assigned to individual organizations with shared topics being identified as C1 and C2, as responsibilities are split. Focus areas and outcomes have been updated to reflect the current market and regulatory environment that producers face.

PILLARS AND 2030 GOALS:

- 1) **BEEF DEMAND:** Support domestic and international demand for Canadian beef (see <u>Beef Quality</u> <u>and Food Safety Goals</u>)
 - a. Establish the **inherent quality and value** of Canadian Beef in domestic and export markets which supports comparative equivalency or superiority to alternatives
 - b. Increase the value of **AAA and Prime** carcasses, to be equivalent with the U.S., by building demand for all cuts on the carcass
 - c. Remove *internal regulatory impediments* to innovation, export and commercial trade and the competitiveness of Canadian beef in domestic and international markets
 - d. Support the development, regulatory approval and adoption of improved food safety interventions and technologies throughout the supply chain
- SUSTAINABILITY: Create compelling narratives on the positive impact of beef production (see <u>GHG and Carbon Goals</u>, <u>Land Use and Biodiversity goals</u>, <u>water goals</u>, <u>people health and safety</u> goals)
 - a. Safeguard the existing **1.5 billion tonnes of carbon** stored on lands managed with beef cattle
 - b. Sequester an additional 3.4 million tonnes of carbon every year
 - c. Reduce primary production **GHG emissions intensity by 33 percent** from 2013/14 to 2030
 - d. Reduce food loss and waste (from secondary processing to consumer) by 50 percent by 2030
 - e. Maintain the 35 million acres of native grassland in the care of beef producers
 - f. Maintain a network of natural landscapes and healthy functioning ecosystems through well-managed grazing systems that maintain sustainable plant communities and healthy rangelands
 - g. Promote practices that maximize water quality and retention, to deliver healthier landscapes, resilience to drought and flood events, and groundwater recharge as appropriate to the region's precipitation
 - h. Improve water use efficiency in the beef value chain
 - *i.* Build recognition by the public and policy-makers of the benefits provided by grassland ecosystems
 - j. Create a culture of safety across the beef industry supply chain
 - *k. Reduce serious, fatal, and fatigue-related incidents by 1.5 percent per year up to 2030, by supporting education, awareness and improvements in farm and ranch safety*

 COMPETITIVENESS: Encourage a competitive regulatory, policy, and market environment (see <u>Technology goals</u>)

- a. Improve business risk management, access for entrants, and equitable treatment with other commodities
- *b.* Reduce the labour shortage and other cost disadvantages compared to main competitors
- c. Improvements in speed, reliability, accuracy and cost-effectiveness of traceability solutions that advance both business and regulatory objectives
- d. Support functional information flow solutions to producers and processors, derived from a competitive service sector
- e. Invest in technological solutions that reduce costs, improve competitiveness, and enable regulatory approval and business functions that support trade and commerce

- *f.* Support innovation, research, refinement and commercialization of technologies throughout the supply chain that support economic viability and worker conditions
- g. Promote the acceptance of sustainable and safe beef production technologies by customers and regulators, in both domestic and international markets
- 4) **PRODUCTIVITY:** Improve production efficiencies throughout the supply chain (see <u>Animal Health</u> <u>and Care Goals</u>)
 - a. Ensure the five freedoms of animal wellbeing by increasing adoption of on-farm management practices
 - *i.* Attain 92 percent reproductive efficiency in Canadian beef production (85 percent in 2018)
 - *ii.* Adopt management and breeding choices that support animal welfare (e.g. calving ease, polled genes, pain relief)
 - *iii.* Establish and maintain a surveillance system to monitor cattle production practices across Canada
 - *b.* Ensure the effectiveness of existing and future antimicrobials is preserved to support human and animal welfare
 - *i.* Develop, monitor and disseminate best practices regarding antimicrobial use
 - *ii.* Quantify and describe baseline antibiotic use practices in Canadian feedlot production
 - *iii.* Determine and monitor antibiotic resistance profiles in bacteria of concern in feedlot cattle
- 5) **CONNECTIVITY:** Enhance industry synergies and connect positively with government and partner industries

THE CANADIAN BEEF ADVISORS

The Canadian Beef Advisors are stewards of the National Beef Strategy. They consist of the current chair or president and senior staff of each of the eight national beef organizations responsible for policy, marketing, research, and sustainability.

The **Canadian Beef Check-off Agency** (<u>the Agency</u>) manages and administers the Canadian Beef Cattle Check-Off, a mandatory levy collected on cattle sales throughout Canada to fund market development, promotion, and research activities on behalf of the entire industry. The levy is collected from cattle producers when they market their cattle by provincial organizations, using their existing collection systems involving auction markets, order buyers, brand inspectors, and others who handle cattle sales. The Agency distributes funds to Canada Beef, the Beef Cattle Research Council, and Public and Stakeholder Engagement Program. The Agency sits as an observer on the Beef Advisors.

The **Beef Cattle Research Council** (<u>BCRC</u>) is Canada's industry-led funding agency for beef, cattle, and forage research. The BCRC's vision is a transparent, competitive, resilient, and sustainable Canadian beef industry supported by strategic and effective research, technology transfer, and innovation. The BCRC's mission is to lead the Canadian beef industry as the most prominent supporter of cattle, forage, and beef research with a producer-led Council who invest producer funds into research and technology transfer to support growth in beef demand, increase productivity, and earn public trust.

Canada Beef is the national <u>marketing and promotion</u> organization developing and delivering programs domestically and internationally to maximize the cutout value. The domestic market continues to be the largest and most stable market for Canadian beef. Canada Beef identifies and develops key export markets

to increase the value of Canadian beef and veal products – in collaboration and cooperation with likeminded companies, organizations, and institutions.

The **Canadian Beef Breeds Council** (<u>CBBC</u>) works to support the seedstock sector through unified representation, strategic alliances, and implementation of innovative technology. The CBBC works on behalf of its members to be a catalyst to advance the Canadian beef cattle seedstock sector and promote Canadian beef cattle genetics both domestically and internationally. The CBBC also represents the purebred cattle sector to government by advocating effective policy, ensuring market access, and enhancing competitiveness.

The **Canadian Cattle Association** (<u>CCA</u>) is the national voice for beef producers on policy issues for its provincial members who include: the British Columbia Cattlemen's Association (BCCA), Alberta Beef Producers (ABP), Saskatchewan Cattlemen's Association (SCA), Manitoba Beef Producers (MBP), Beef Farmers of Ontario (BFO), Les Producteurs de bovins du Québec (PBQ), Prince Edward Island Cattle Producers (PEICP), New Brunswick Cattle Producers (NBCP) and Nova Scotia Cattle Producers (NSCP). All policy activities performed by the CCA and provincial organizations are funded through the provincial check-off. The CCA provides national policy representation in animal health and care, domestic agriculture policy, environment, international trade, and food policy.

The **Canadian Meat Council** (<u>CMC</u>) has represented Canada's federally registered meat packers, meat processors, and suppliers of good and services to the meat industry for nearly a century. CMC provides evidence-based advocacy on behalf of its members, works to secure and improve Canada's global meat competitiveness and promotes a balanced diet, which includes high-quality and nutritious Canadian meat. Funding is provided through member fees.

The **Canadian Roundtable for Sustainable Beef** (<u>CRSB</u>) is a collaborative multi-stakeholder community devoted to advancing sustainability in the Canadian beef industry. Its membership includes organizations across the beef value chain and beyond: farmer/rancher associations, academic institutions, processor and processor associations, food and agriculture businesses, non-governmental associations (animal care and environmental organizations), retail and foodservice companies as well as governments and observers. Funding is provided through member fees and matching government grants.

The **National Cattle Feeders' Association** (<u>NCFA</u>) represents Canadian cattle feeders on national issues and works in collaboration with other cattle organizations across the country. Key focuses include improving industry competitiveness, increasing domestic value-added production, and expanding markets for Canadian beef. Funding is provided through member fees.

PILLAR 1: BEEF DEMAND

The **Beef Demand** pillar will support domestic and international demand for Canadian beef by establishing the inherent quality and value of Canadian beef in markets, which supports comparative equivalency or superiority to alternatives. A key objective is the value of AAA and Prime carcasses to be equivalent with the U.S. by increasing demand for all cuts on the carcass. This will be achieved by focusing on market access, domestic and global marketing, the Canadian Beef Advantage, consumer confidence and social license.

The industry remains focused on getting the right product to the right customer every time, using product development and finding markets for under-valued cuts. To do this, market access is necessary along with marketing and promotion into those markets, communicating the attributes of Canadian beef. (see the <u>Beef Quality and Food Safety</u> 2030 Goal Fact Sheet for more details)

FOCUS AREA A: TRADE AND MARKET ACCESS (CCA, NCFA, CMC)

Context

The Canadian beef sector heavily relies on exports, with about 50 percent of its production exported to over 90 countries worldwide. The United States remains the largest and most crucial export market, accounting for about 75 percent of Canadian beef exports in 2023. The meat sector aims to enhance international trade by reducing barriers, promoting science-based policies, securing stable market access, and streamlining cross-border processes. In the current uncertain geopolitical climate, diversifying export markets is crucial. The sector aims to streamline cross-border trade with the U.S., eliminate redundant border inspections and will monitor closely the implementation to the voluntary country of original labelling. China remains a priority for beef producers. Establishing a meat office in China will support the development of strategic networks and help advance market access issues towards the reopening of the market for Canadian beef. Other priority markets in the Indo-Pacific region include Indonesia (halal certification), South Korea, Thailand, Japan, and Malaysia. While reciprocal access remains challenging in the EU and the UK, both markets continue to present large and high value opportunities. Other markets with significant potential include Saudi Arabia, Dominican Republic and Panama. Trade agreements are essential to ensure Canada has commercially viable access to markets on a level playing field with other major beef exporters. This adds value to every animal produced.

CMC and CCA are engaged and provide regular input to the FTA negotiations with various trading partners, including Indonesia, ASEAN UK, Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) members among others and also engage with officials at the WTO, FAO, WOAH and other international policy and standard setting agencies.

There are substantial export opportunities in Asian countries as a result of the CPTPP and Indo Pacific initiatives. Advocacy efforts will help take advantage of the major tariff reductions achieved. At the time of writing, previously very high tariffs in Korea (from 40 percent to zero), Japan (from 38.5 percent to 9 percent) and Vietnam (from 20 percent to 0) are well on their way to reaching their negotiated end-point. Further work is needed on full systems recognition.

Approach

- Pursue regulatory cooperation with major trading partners including U.S. and Mexico (through the Canada-United States-Mexico Agreement (CUSMA)).
- Seek full approval of Canada's meat hygiene systems in the EU (CETA), UK, and China.

- Pursue expansion of the CPTPP to countries prepared to meet the ambition achieved in the original 11 country agreement and are committed to market access established on internationally accepted (CODEX/WOAH) science-based requirements.
- Advocate for competitive access to large, high value and priority markets and improved access for offal items and meat and bone meal (MBM) in particular.
- Monitor and proactively engage with emerging issues that directly and in-directly impact trade flows
- Partner with national and international groups that carry the same message around trade established on internationally accepted science-based requirements.

OUTCOMES & OBJECTIVES

- 1. Reduce non-tariff and tariff barriers in our export markets for beef, live cattle, and beef cattle genetics
 - a. Reduce or mitigate re-inspection of beef exports to the U.S.
 - b. Achieve ability to utilize U.S. beef grading on exports to the U.S.
 - c. Establish maximum residue limits (MRLs) for ractopamine in China and achieve the resolution of other technical issues including the definition of chilled/frozen product
 - d. Negotiate acceleration of eliminating Korea's beef tariff, to be the same as the U.S., through CPTPP accession or other avenue
 - e. Continue to guard against resurgence of mandatory Country of Origin Labeling (mCOOL), Voluntary Product of USA or some other attempt to bar access to the U.S.
- 2. Increase our capability to utilize preferential access in key exports markets for Canadian beef, live cattle, and beef cattle genetics
 - a. Improve our domestic capability to certify cattle for EU-eligibility through use of Verified Beef Production Plus (VBP+) and establishment of a mature cattle protocol
 - b. Enhance communications to producers on protocols for exports to the EU
 - c. Ensure Veterinary Health Certificates required to export live cattle, semen and embryos are science based and non-prohibitive for beef cattle in all markets
 - d. Encourage government agencies to adopt user-friendly, streamlined import and export procedures for live breeding cattle, feeder cattle, semen and embryos
 - e. Ensure adequate port facilities to support trade for live animal trade
 - f. Ensure electronic certification is available to support timely exports
- 3. UPDATED Eliminate market access restrictions
 - a. Re-establish beef and live cattle access to China
 - b. Resolve Korea protocol that prevents Canadian fed cattle from being processed in U.S. facilities
 - c. Obtain approval for citric acid, peroxyacetic acid and blends by the EU for beef production
 - d. Achieve access for over-thirty-month (OTM) bone-in product in China and South Korea
 - e. Gain offal access to several markets, including Vietnam, Korea and China

FOCUS AREA B: DOMESTIC AND GLOBAL MARKETING (CANADA BEEF)

Context

In the domestic market, beef faces growing competition from traditional proteins (i.e. pork and poultry) and non-traditional proteins (i.e. plant-based protein and cell-cultured meat alternatives). In addition, the consumer demographics are changing as baby boomers retire and age, and millennials and generation Z, represent a larger portion of consumer spending. As well, new Canadians will represent a significant segment of potential new customers as Statistics Canada predicts that by 2048 immigrants and their

families will represent more than half of the total Canadian population. This shift in demographics provides both new opportunities and challenges for marketing and promotion of beef.

Each animal we raise will be processed into over 300 products. The Canadian consumer has a preference and culinary culture for a select few of those beef products. Other beef products command a higher value in international markets where those items are a staple or delicacy. While domestic consumers have historically had a strong preference for Canadian beef, limited domestic production and a strong export market for Canadian beef will likely lead to increased competition from imported beef.

Approach

Canada Beef's core behaviours and actions in the marketplace and with our industry partners and stakeholders will focus on being authentic, accountable, respectful, collaborative, and knowledgeable. Our aim is to position Canadian beef as the protein of choice, appreciated worldwide, to maximize the return on investment for our producers, partners, and customers. To achieve this objective, Canada Beef creates value for our producers and the entire Canadian beef value chain through impactful and innovative solutions to enhance demand, experience, and awareness.

The Canadian Beef Centre of Excellence will evolve, in collaboration with Canada Beef's market development teams to deliver their skills and expertise to clients across Canada and internationally. The Canadian beef brand will continue to be refined and evolve with focus on the functional and emotional attributes and benefits that define the brand position. Programs will continue to sustain and grow the number of domestic and international customers committed to 100 percent Canadian supply.

Using market segmentation tools, Canada Beef will identify high growth-high value consumer groupings by demographics, behaviour, ethnicity, geography, and other attributes. Then an overarching blend of emotional and functional attributes that are meaningful and relevant to each consumer group will be created and developed into marketing and promotional campaigns for specific segments resulting in increased awareness, improved perception, heightened product desire, and ultimately increased demand.

- 1. Establish the Canadian Beef Advantage (CBA) as the most recognized and loyalty-based premium beef program for select markets and customers
 - a. Ongoing development and communication of a differentiated brand position for Canadian beef leveraging the attributes of the CBA through technical resources, training platforms, advertising and trade media, and competitive benchmarking
 - b. Enhance existing communication and distribution platforms ensuring impactful communication of CBA messaging to targeted trade clients; including web platforms, trade advertising, and digital assets
 - c. Collaborate with brand license holders to leverage brand marketing initiatives
 - d. Positively impact key consumer influencers in domestic and export markets with positive messages on Canadian beef through the use of brand ambassadors, trade events, and marketing partnerships
- 2. **Reworded!** Work with value-chain partners to best align product offerings and availability with market opportunities
 - a. Develop and promote value cut options for retail and foodservice to increase carcass utilization, value optimization and offer lower cost beef options to price sensitive consumers
 - b. Procure market intelligence and direct resources to markets and market segments that represent opportunities for incremental value and return on marketing investments

- c. Engage targeted customers in priority markets/segments through retail, foodservice and influential industry events; support of trade partner programs; and trade missions with domestic and international clients
- d. Align with supply chain partners in target markets through the development of national programs, value-added beef products, and partnerships with packers and exporters, trade commissioners and other commodities
- e. Collaborate with industry and channel partners to implement targeted promotional brand initiatives in priority markets
- f. Through Export Market Development Programs, co-invest with trade clients in export development programs in traditional and emerging markets of opportunity
- g. Develop an Artificial Intelligence Strategy to enable Canada Beef to support related initiatives undertaken by industry partners and to develop new approaches to support global promotion of Canadian beef. Construct generative Artificial Intelligence (AI) chatbots to assist consumers with product and recipe selection in the format of a virtual butcher and chef with a natural language interface. Implement augmented reality approaches for use with the Canadian Beef Information Gateway on mobile devices to provide real-time information to consumers while shopping at retail.
- h. Establish linkages with major suppliers of automated solutions within the Canadian marketplace including robotics and computer vision tools. Provide support to help ensure automated solutions deliver on best practices relative to preparation and serving of Canadian beef products within foodservice establishments.
- i. Monitor the growth of E-commerce in the global marketplace and provide reporting to the supply chain in Canada Beef's market intelligence reporting. Develop an E-commerce Tool Kit to provide digital content to support on-line sales of Canadian Beef by industry partners. Extend the capabilities of the Canadian Beef Information Gateway architecture to provide a framework for E-commerce sales which can be utilized by industry partners.
- j. Develop marketing programming dedicated to promoting Canadian Beef to major ethnic groups within the growing immigration population. Create merchandising materials for foodservice and retail showcasing traditional beef cuts used in ethnic cuisine. Develop and/or adapt existing recipes to incorporate beef as the centre of the plate protein. Promote awareness of culturally significant events and calendar dates to encourage utilization of beef products. Produce digital content targeting ethnic communities and in particular social media recognizing the importance of this medium to new Canadians. Attend trade shows and other events which address the needs of ethnic populations. Partner with service providers who support new Canadians including during the period immediately prior to arrival. Seek opportunities to utilize resources developed for immigrants in their home countries given the growing size of these markets including Africa, Southeast Asia, India and the Middle East.
- k. Maintain and enhance the Canadian Beef Marketing Library to provide resources (photos, videos, artwork, and documents) to media, trade partners, and association staff to support marketing efforts in the global marketplace
- I. Through new product development enhance carcass utilization and value
- m. Continue to evolve the Canadian Beef Centre of Excellence with a focus on digital media production, product evaluation, and trade mission engagement. Digital media production is conducted in the Centre's three studios specializing in meat cutting, consumer culinary and foodservice commercial content. Training materials for industry and consumers are hosted on the Centres on-line educational platform. Product evaluation is performed in the test kitchen to support the development of culinary guidance and in the meat lab to evaluate yield and refine specifications for Canadian beef products. The Centre will host incoming and outgoing missions and conduct live webinars with a focus on communicating the Canadian Beef Advantage to customers in the global marketplace.
- 3. **NEW!** Maintain market share against other suppliers and protein choices in the domestic and international markets

- a. Increase brand awareness and loyalty through sharing the Canadian beef story, targeting key segments, and constant engagement
- b. Generate high-quality leads through building relationships with qualified clients and key decision makers
- c. Acquire new clients and consumers by expanding the reach, and leveraging sustainable and flexible tactics to scale
- d. Expand digital engagement with consumers and customers through all digital platforms and technologies (Canadian Beef Gateway, social media, web, video, e-commerce, AI tools, etc.)
- e. Entrench our industry authority by leveraging our knowledge, credibility, and partner networks to reach larger audiences
- f. Boost brand engagement by identifying client/consumer needs, and offering consistent and valuable solutions

FOCUS AREA C1: MARKETING THE CANADIAN BEEF ADVANTAGE (CANADA BEEF)

Context

The Canadian Beef Advantage is created by the supply chain and is communicated using proof points related to functional as well as emotional attributes. These proof points are validated using both laboratory studies and market research-based approaches. Continuous improvement in these areas supports consumer confidence and demand for Canadian beef in the global marketplace.

Approach

The development of the Canadian Beef Advantage will be supported by efforts on three levels: communication, benchmarking, and enhancement. Communication of the Canadian Beef Advantage will be undertaken through global resources developed for both consumer and meat professional audiences. Benchmarking will be conducted in domestic and export markets relative to key attributes including those related to quality, safety, value, and sustainability. Enhancement will be achieved by research as well as the communication of best practices to industry and consumers.

- 1. **Reworded!** Communicate the attributes of the Canadian Beef Advantage (CBA) through print and digital resources developed for global markets
 - a. Resources to communicate the CBA to consumers and meat professionals will be developed by Canada Beef for all key markets including print, social, web, and video formats. These resources will be focused on attributes which are broadly representative of the supply chain and Canadian beef products. Communication assets will be leveraged at trade shows, seminars, client meetings, trade missions, AGMs, festivals and ethnic activities, on-line training, and through other forms of direct engagement by Canada Beef.
 - b. Recognizing the importance of the Canadian beef grading system relative to CBA attributes related to quality, value and origin, Canada Beef will work with the retail and foodservice sector to encourage the communication of quality grades to consumers. These efforts will include the production and distribution of retail and menu labels and other point-of-sale resources which can be leveraged by the trade to promote quality grades.
 - c. Canada Beef will provide reporting to key stakeholders within the supply chain on the perceived importance of CBA attributes in the global marketplace including regional preferences. Efforts will be made to expand the reach and distribution of the information to ensure maximal uptake. This communication will be designed to sustain current efforts and to help guide future quality enhancement initiatives. Consultations will also be conducted to help determine the emphasis that should be placed on different CBA attributes given the level of investment made by the

supply chain and the view of stakeholders regarding their importance for their own marketing initiatives.

- d. Canada Beef will conduct a review of print and digital marketing resources developed by the Canadian industry to identify areas where support could be provided through the Marketing Library and other initiatives to work with industry partners to communicate the CBA. Communication approaches used by other major beef supplier nations and competing proteins within the domestic market will also be evaluated on a bi-annual basis with the intent to learn from others.
- e. Canada Beef will actively engage with trusted voices including scientists, professional specialists, associations, and industry partners to support communication of the CBA. This will include the continued utilization of Expert Advisory committees to assist in the development and review of CBA related resources.
- Reworded! Benchmark attributes of the Canadian Beef Advantage in domestic and export markets
 - a. Sensory and laboratory measurements will be obtained to evaluate key CBA attributes including the establishment of objective meat quality and yield benchmarks. Benchmarking evaluations may include imported beef product within the domestic market as well as comparisons to product from other supplier nations in export markets. Consideration will also be given to including plant-based and/or cultured meat products that are positioned as beef substitutes as well as beef products produced by new approaches to breeding, feeding, or other production approaches that could significantly influence meat quality or yield. All benchmarking studies will be guided by input received from the Canadian industry and will include partnerships with individual suppliers as well as national initiatives.
 - b. Attitudinal benchmarking for CBA attributes will be obtained through the marketing research including the Global Beef Quality Perceptions Survey. Dedicated national surveys of domestic consumers will be performed by Canada Beef relative to understanding, awareness and preferences for Canadian beef grades as well as overall satisfaction with Canadian beef.
 - c. A National Retail Meat Case Study and National Foodservice Menu Study will be conducted by Canada Beef in alternate years to benchmark CBA attributes related to merchandising including carcass utilization, grade, specification, composition, production and feeding claims, packaging, sustainability, branding, origin, and market share. Merchandising benchmarks for Canadian Beef will be shared with industry partners with participating operations.
 - d. A National Beef Sustainability Assessment (NBSA) will be performed by the CRSB to monitor the sustainability (social, economic, and environmental) performance of the Canadian beef industry, from farm to fork. The findings of the assessment will be communicated as a component of the Canadian Beef Advantage by Canada Beef.
- 3. **Reworded!** Enhance the Canadian Beef Advantage through applied research and communication of best practices
 - a. Suggested priorities for research to support CBA enhancement will be communicated by Canada Beef to the Beef Cattle Research Council and other funders based on attitudinal and objective benchmarking findings.
 - b. Workshops, on-line training, cutting demonstrations, blogs, manuals, fact sheets, and other training initiatives will be undertaken by Canada Beef to address priority areas as identified by packers, retailers, and foodservice operations. The objective of these efforts will be to enhance the CBA by communication of best practices. Collaboration opportunities with educational institutions including schools with culinary and meat cutting programs will be established.
 - c. Applied research will be conducted and/or commissioned by Canada Beef with a focus on enhancing customer (consumers and professionals) satisfaction with Canadian beef products through optimized purchasing, merchandising, handling, storage, preparation, and product development.

d. Canada Beef will commission research on new ways to communicate and benchmark the Canadian Beef Advantage including 3D imaging, artificial intelligence, virtual chefs or butchers with natural language interfaces, augmented reality, data capture on mobile devices and other novel approaches.

FOCUS AREA C2: ENHANCING THE CANADIAN BEEF ADVANTAGE (BCRC)

Context

Consumer beef purchasing decisions are both individual and complex. Although health, food safety, environmental, and ethical concerns are frequently cited as important consumer concerns, the two most important considerations continue to be price and quality. Research and development play a crucial role in supporting beef quality and ensuring consumer confidence in domestic and international markets.

Work is done to ensure that the domestic and international consumers who purchase high value and nutrient-dense Canadian beef are satisfied with their eating experience. Canada needs to clearly establish and validate the quality and value attributes of Canadian beef, seek to further improve the quality of Canadian beef, and ensure that Canada's beef industry has access to safe and effective technologies with the potential to improve or guarantee eating quality.

Food safety is also essential to maintain domestic and international consumer confidence and beef demand. Research plays an important role in developing improved food safety interventions that effectively combat multiple pathogens and methods to quantify the effectiveness of interventions. Commercial implementation of interventions like lactic acid washes and carcass pasteurization have significantly reduce pathogen contamination on the carcass. More recent efforts have focused on effective cleaning to avoid recontamination on the fabrication line. Research has underpinned the improvements in the safety of Canadian beef, but food safety is an evolving target. Known pathogens may evolve resistance to current interventions and new pathogens may emerge for which current interventions are ineffective.

Approach

Achieving industry's 2030 beef quality and food safety goals will require contributions from all stages of the supply chain and commitment from seedstock, cow-calf and feedlot producers, beef processors, and the retail and foodservice sectors to measure and monitor progress. Key research and technology transfer drivers that are of priority to achieving the industry's 2030 beef quality goals include refreshing the National Beef Quality Audit to reflect increased further processing, incorporate modern imaging technology and real-time feedback, develop a shelf-life standard for Canada, and investment in new beef quality innovations and quality assessment technologies.

It is essential that the industry maintain and support food safety research programming and capacity to proactively identify and respond to potential threats and maintain Canada's strong reputation within both the domestic and international market. Furthermore, not all food safety interventions that are utilized and demonstrated to be effective within the Canadian beef supply chain are approved in key international markets. In some cases, additional research may be necessary to help regulatory and technical barriers to trade. In particular, harmonization with the United States around access to pathogen control innovations, interventions, and testing will continue to be an important area of focus; ensuring science is available to address regulatory impediments and approvals as required.

OUTCOMES & OBJECTIVES

1. Improve customer satisfaction with Canadian Beef

- a. Modernize and conduct a National Beef Quality Audit that reflects the industry's evolution from carcass-based to cut-based marketing
- b. Develop and implement processes and technology to capture carcass quality defect data at processing plants in real-time
- c. Demonstrate and communicate the effectiveness of genetic testing to inform selection and production decisions and improve the uniformity and profitability within beef cattle production systems
- d. Develop and/or independently validate packaging technologies to extend and improve shelf life of beef
- 2. Define, validate, and enhance the emotional and functional attributes of Canadian beef in domestic and international markets
 - a. Develop objective measures to assess the eating quality of specific primals/cuts desired in highvalue export markets
 - b. Identify critical control points and develop best practices enabling processors, customers, and importers to ensure maximum shelf life of Canadian beef to ensure food safety and quality and reduce food waste
 - c. Compare the shelf life of Canadian vs. competing beef in key export markets
 - d. Quantify the value difference between fresh and frozen beef for Canadian retailers, considering differences in wholesale price and cutting performance
- 3. Ensure food safety along the beef supply chain
 - a. Develop and implement cost-effective technologies targeting multiple pathogens in cattle and beef production and processing facilities, including heat- and acid-resistant E. coli and biofilm forming bacteria
 - b. Identify key spots in processing plants that are prone to contamination and difficult to clean, and develop alternative designs, surfaces, and cleaning strategies to facilitate effective cleaning
 - c. Proactively (re)assess the prevalence of Salmonella in Canadian slaughter cattle, carcasses and beef, and develop strategies to effectively reduce food safety risks
- 4. Validate the efficacy and safety of new technologies in support of the rational regulatory approval and adoption of improved food safety interventions throughout the supply chain
 - a. Develop cost-effective cleaning technologies that reduce the need for (hot) water, sanitizers, and labor in large and small processing facilities
 - b. Conduct research to proactively identify and resolve potential market access concerns for Canadian beef

FOCUS AREA D: CONSUMER CONFIDENCE (CANADA BEEF)

Context

As a high cost, high value product, it is imperative that consumers have a satisfying culinary experience with beef where they believe they have received fair value for their investment. Canada Beef will offer effective marketing support for beef purchase, preparation and consumption.

Consumer confidence in, and affinity for, the health and nutritional benefits of beef and Canada's sciencebased food safety systems are continually being challenged. Consumers have more choice than ever on where they spend their food dollars. In general, when people feel good and are confident about Canadian beef, they will buy our products more often. Consumer confidence is essential to maintain current customers and attract new ones.

Approach

To inspire and enable consumer confidence in all aspects of beef purchase, preparation and consumption, the industry will offer convenient information and resources to consumers. Consumer confidence starts

with understanding that Canadian beef is a safe, high quality, nutrient dense product that is a produced in a sustainable manner. It is essential the core aspects of nutritional benefits and Canada's food safety systems are conveyed regularly to consumers domestically and internationally. Investment in food safety and beef quality research continues.

- 1. Enhance consumer confidence in Canadian beef across all markets through a focus on enabling industry advocates, leadership in stakeholder engagement, and partnerships with influencers
 - a. Increase the number of strategic partnerships and networking with food, media and nutrition influencers on the nutritional and environmental benefits of beef consumption
- 2. Improve the effectiveness and reach of consumer communication
 - a. Utilize the Canadian Beef Information Gateway and other digital content programs to support consumer and trade marketing efforts
 - b. Provide global social media support for all Canada Beef led and partnered activities
 - c. Conduct targeted promotional brand initiatives in priority markets through brand license partners, resource development, and brand mark promotion
 - d. Lead the development of industry consumer campaigns focused on delivering the Canadian beef story, executed in collaboration with national and provincial stakeholders
 - e. Conduct consumer research to understand purchase drivers/motivators, collaborate on research undertakings to maximize information use and leverage existing research efforts
 - f. Conduct cooperative marketing programs to cost-share regional consumer promotion and marketing initiatives with provincial producer associations, allowing for closer alignment and resource sharing between national and regional marketing programs, extending their reach and effectiveness
 - g. Develop consumer and trade marketing strategies, campaigns, resources and merchandising for the fast-growing market segments of newcomers to Canada and the aging population
- 3. **NEW!** Promote the culinary enjoyment of beef to consumers
 - a. Highlight/celebrate consumer enjoyment and satisfaction of cooking and consuming beef as a regular choice
 - b. Identify strategies and leverage holiday and life events (holiday, birthday, anniversary, etc.) as beef meal opportunities
 - c. Participate in culinary/food and agricultural events to promote and celebrate beef to consumers
- 4. Promote the health and nutritional benefits of beef to consumers
 - a. Support communication of beef's premium quality by development of culinary and nutritionrelated messaging and resources for inclusion in marketing campaigns
 - b. Produce nutrition communications promoting beef's nutrients to key demographics
 - c. Communicate beef's premium quality and safety by engaging targeted health professionals via trade events/conferences/seminars
 - d. Provide nutrition communications to key health professionals including doctors and dieticians focused on heart health and diabetes and early childhood nutrition
 - e. Participate and align with key industry networks (such as the International Meat Secretariat and Nutrient Rich Alliance) in order to connect and collaborate on key health and nutrition issues that impact beef
 - f. Research and establish new opportunities for beef with nutrition and health data. Utilize expert perspectives and partner with allied health and nutrition groups and platforms.
 - g. Continue to produce resources, with an emphasis on digital assets for maximum reach, to communicate the role of beef products and associated nutrients as part of the Canada Beef Healthy Aging Strategy. Conduct expert reviews in collaboration with the scientific community, patient groups and health professionals to establish the nutritional contribution of beef products in the management of common health conditions. Share market intelligence information with

the supply chain on the needs and preferences of the growing senior population relative to Canadian beef. Develop digital programming to support seniors including the Diet and Wellness module of the Canadian Beef Information Gateway.

- 5. Support consumer food safety education initiatives that demonstrate the effectiveness of Canada's science-based food safety system
 - a. Enhance consumer education regarding their role and responsibility in ensuring food safety in the home, including at-home food handling and storage practices to ensure food safety

FOCUS AREA E: SOCIAL LICENSE (PSE)

Context

The beef industry provides important societal benefits that are key to building public trust and ensuring continued social license. This includes preserving Canada's most endangered ecosystem, the native temperate grasslands, which has been identified as the largest natural climate change solution by Nature United. The lands under the care of beef producers sequester 1.9 billion tonnes of carbon, while providing 74 percent of the land used for wildlife to raise their young (when cropland and pasture are considered). Targeted grazing can be utilized to reduce the fine fuel loads in areas prone to wildfires, working to mitigate the risks to surrounding communities while supporting local food production. Upcycling of damaged crops, by-products of food manufacturing and even food waste into high quality balanced rations for cattle diverts these items from landfills while contributing to food security.

Approach

Highlighting these benefits in ways that public audiences can relate to, told by trusted messengers and on content mediums they frequent, are key to building positive sentiment in beef production.

- 1. Enhance the public image of the Canadian beef industry emphasizing the many positive benefits our industry contributes, along with the continuous improvement in environmental sustainability, animal health and welfare, and food safety practices
 - a. Conduct public perception consumer research every three years to determine key areas of concern in beef production, test key messages, trusted messengers, and mediums of content being utilized to inform the PSE outreach strategy on must-win target audiences
 - b. Conduct public perception research, whether qualitative or quantitative, in emerging areas of concern, innovation or subjects that require in-depth analysis
 - c. Maintain and create new tools and resources for producer advocacy including factsheets and public advocacy guidebooks in both official languages
 - d. Frequently update the Beef Advocacy Canada (BAC) program and promote to industry to ensure industry leaders are informed and prepared to communicate consistent key messaging
 - e. Produce and launch consumer directed advertising featuring science-based insights around Canada's beef production systems and standards that convey transparency and confidence, utilizing various mediums and influencers where appropriate
 - f. Align with key partners to develop short and long format videos that demonstrate the societal benefits of beef production
 - g. Participate in strategic partnerships and networking opportunities to positively influence attitudes regarding beef's role in a healthy and sustainable diet
 - h. Develop curriculum aligned resources for key education audiences that emphasize the environmental benefits of beef production, as well as provide content or subject matter expertise to those developing education materials, for all age groups (elementary through post-secondary), on agriculture in Canada

- 2. Increase public recognition of the beef industry's direct and indirect contributions to the Canadian economy and society
 - a. Maintain broad stakeholder support of beef cattle production practices
 - b. Clearly communicate beef as part of a healthy, balanced diet and that the Canada Food Guide supports protein consumption from a variety of sources
 - c. Speak on the beef industry's contribution to sustainability in partnership with Canada Beef, CRSB and other stakeholders; utilizing appropriate publications, video vignettes, social media, and other forums to reach end users, consumers, and the public
 - d. Increase public trust of beef industry animal production practices and how they are held up by the Code of Practice for the Care and Handling of Beef Cattle
 - e. Communicate the role of responsible antimicrobial stewardship in maintaining the effectiveness for animal welfare and human health

PILLAR 2: SUSTAINABILITY

Sustainable beef is defined as a socially responsible, economically viable, and environmentally sound product that prioritizes the planet, people, animals, and progress. The *Sustainability* pillar supports continuous improvement in natural and human resources. It focuses on reducing greenhouse gas emissions intensity and preserving native grasslands, while enhancing soil carbon sequestration and biodiversity. This will be achieved by addressing financial viability, environmental policy and research, on-farm quality assurance programs, measurement and verification claims, and people health and safety. The animal health and welfare, efficiency, and innovation components of sustainability are addressed in other pillars of this strategy.

As a global leader in beef sustainability, the Canadian beef industry works collaboratively throughout the value chain and beyond to advance environmental, social, and economic sustainability in Canadian beef. The National Beef Sustainability Assessment (NBSA) measures performance and the 2030 goals provide industry targets for the eight national beef organizations to work towards and achieve together. Verification has two parts: on-farm quality assurance programs that are producer facing, and consumer facing assurance of marketing claims. Sustainable beef practices are also recognized through CRSB Certified - a voluntary, third-party certification program developed through a credible, rigorous multi-stakeholder approach and included producer input from the very beginning.

FOCUS AREA A: FINANCIAL VIABILITY (CRSB, CCA, BCRC, NCFA)

Context

Sustainability takes a holistic approach that includes the following high-level guiding principles: natural resources, people and the community, animal health and welfare, food, and efficiency and innovation. It is well recognized that a supply chain cannot be green if they are in the red. Therefore, financial viability underpins all the guiding principles.

As cost structures shift with current markets and regulations, protecting margins throughout the supply chain requires more than the traditional focus on marketing to get the highest price and access to competitively priced inputs. It must now include other income sources for societal benefits such as biodiversity, wildlife habitat and ecosystem services. There also needs to be broad awareness and recognition of the reporting burden, cost of complying with regulations, and government and private sector environmental commitments/goals (e.g., climate, biodiversity, etc.) and mechanisms for reporting against those commitments and goals.

Approach

Industry recognizes the diversity of production systems and environments that producers operate in from coast to coast. Provincial programs play an integral role in providing services that are appropriate for their context. To increase the financial viability of beef production in Canada, efforts are focused on financial literacy and encouraging financial incentives for ecosystem goods and services. Federal and provincial governments, as well as voluntary programs, are actively developing carbon credit protocols that require industry feedback to ensure they are feasible for producers to work with.

OUTCOMES & OBJECTIVES

- 1. Increase producer financial literacy and viability.
 - a. Encourage initiatives that support the development of business plans and business risk management strategies for farm businesses.
- 2. Encourage financial incentives for beef producers related to ecosystems goods and services provided by the beef industry. *(see Focus Area B1: Environmental Policy)*.
 - a. Collaborate with provincial organizations, supply chain partners and policy-makers to provide input into programs that are credible, deliver economic value to producers for sustainable practices, and support continuous improvement in ecosystem benefits.
 - b. Provide a supportive environment for market-based solutions
 - c. Enhance industry communication of opportunities via supply chain partners (e.g. provincial organizations)
- 3. Support innovations that reduce labour requirements supporting economic viability and worker conditions (*see Focus Area D: Social*).

FOCUS AREA B1: ENVIRONMENTAL POLICY (CCA)

Context

Cattle farmers and ranchers have a long-standing tradition of doing the right thing for the land and their animals and have demonstrated a growing commitment to sustainability. The Canadian beef industry has a great environmental story to tell, with far reaching benefits for biodiversity, carbon, water, and air.

Issues such as land, water, and feed use, and the release of greenhouse gas (GHG) emissions from enteric fermentation and manure continue to be raised by consumers, retailers, and food service. Measuring and tracking the sustainability of the Canadian beef industry through the National Beef Sustainability Assessment will identify opportunities for improvement in areas of public concern. The beef industry will continue to seek recognition from the public and policymakers of the environmental benefits provided by healthy grassland ecosystems, including the conservation of wetlands, water quality and retention, biodiversity, carbon sequestration, drought resilience, nutrient filtration, and more.

To achieve these environmental benefits, a regulatory and policy environment that recognizes the Canadian beef industry's climate mitigation and adaptation potential and supports the industry's contribution to ecosystem goods and services is critical.

Approach

Government and consumer concerns will continue to be addressed through scientific and evidence-based studies and communications. The Canadian beef industry will continue to advocate for programs and policies that support the sound stewardship of grasslands and wetlands, biodiversity, and recognition for

environmental goods and services. Significant emphasis will be placed on engaging producers and partner organizations – domestic and international – to communicate the environmental efforts undertaken across Canada, and the progress made thus far. Solutions to ongoing environmental challenges such as land conversion, biodiversity loss, and climate change, need to be developed through partnerships and collaboration with stakeholders across the beef supply chain. The industry will promote the adoption of Beneficial Management Practices (BMPs) that support environmental outcomes and support the participation in important stewardship programs. All of this is aimed at encouraging continuous improvement. It is also becoming increasingly important to ensure various proposed climate solutions are science-based. (see the <u>Greenhouse Gas and Carbon Sequestration</u>, Land Use and Biodiversity, and <u>Water</u> 2030 Goal Fact Sheets for more details)

- 1. Reduce primary production greenhouse gas (GHG) emissions intensity by 33 percent from 2013/14 to 2030
 - a. Seek the regulatory approval of innovative technologies that can reduce methane emissions in beef cattle
 - b. Collaborate with the federal government to enhance protocols such as the Reducing Enteric Methane Emissions from Beef Cattle offset protocol
 - c. Communicate relevant information about how the beef industry can reduce its emissions, including reports such as FAO's Pathways to Lower Emissions in Livestock Systems
- 2. Maintain a network of natural landscapes and healthy functioning ecosystems through wellmanaged grazing systems that maintain sustainable plant communities and healthy rangelands
 - a. Develop innovative approaches that conserve native/tame grasslands, wetlands, other important habitats, and maintain the grasslands under livestock producer care
 - i. Through the development of short-, medium-, and long-term run-with-title conservation agreements
 - ii. An ecological goods and services management fund for sustaining grasslands
 - iii. Preferred financing opportunities for participants in the above innovative approaches
 - b. Support programs and policies that encourage payments for environmental goods and services (EG&S)
 - c. Encourage the adoption of Beneficial Management Practices that enhance soil and rangeland health and water infiltration
- 3. Build recognition of the benefits provided by grassland ecosystems and open forests to water, including the protection of wetlands, water quality and retention, nutrient filtration, drought/flood resilience, water holding capacity, groundwater recharge, and the role of wetlands as carbon sinks
 - a. Continue engagement with government, organizations, agencies, and others in an ongoing process of ensuring sound water policies and planning to not only conserve but enhance water resources for beef producers across Canada
- 4. Encourage practices that build soil organic matter and enhance soil biodiversity resulting in both carbon sequestration and water infiltration
 - a. Support the work of the Soil Conservation Council of Canada and encourage government investment in the development of an industry led national soil health strategy
 - b. Support initiatives such as the Living Labs to identify the Best Management Practices for specific regions and that are practical and profitable for producers
- 5. **NEW!** Engage with the development of international and domestic measurement systems and standards (science, methodology, protocols) and implications for reporting burden on the supply chain.

a. Financial disclosure requirements via International/Canadian Sustainability Standards Board (ISSB/CSSB), Scope 3 GHG reporting requirements for private companies, and others that emerge.

FOCUS AREA B2: ENVIRONMENTAL RESEARCH (BCRC)

Context

Beef production in Canada provides a unique set of positive environmental and human health benefits that few other food products can match. Much of the land that cattle graze cannot be used for other purposes. Sensitive grassland ecosystems and the endangered plants, animals and birds they support can be protected when managed by cattle producers. Well-managed grazing can restore unproductive soils that have been degraded through improper management. Most of the plants cattle eat are not digestible by humans, particularly low-quality forage, grains and by-products from other agricultural sectors and would otherwise go to waste. A vibrant Canadian environment and agriculture landscape includes beef production. Canada can secure its food supply and mitigate climate change through sustainable beef production, with continued research and adoption of innovations by producers.

Approach

Canadian beef is already successful in the global climate conversation, demonstrating continued reductions in the Canadian beef industry's greenhouse gas intensity, water usage, and land usage for every kilogram of beef produced. The beef industry's environmental sustainability research and technology transfer portfolio continues to grow. While the outcomes identified in this section of the strategy are specifically environmentally focused, it is important to note that other aspects of this strategy pertaining to efficiency and productivity gains all contribute significantly to reducing the environmental footprint of Canadian beef.

Research and technology transfer efforts need to continue to focus on implementing effective feed-based strategies and technologies to further reduce Canada's beef associated greenhouse gas emissions. Focus is also critical on increasing soil carbon and improving water infiltration on pastures and rangeland and creating a better understanding of industry's contributions to biodiversity. Focus is also necessary on continuing to reduce air, water, and soil impacts of the beef processing sector.

- 1. Develop cost-effective ways to reduce greenhouse gas emissions, maintain or improve biodiversity, increase soil carbon, and improve water infiltration on pastures and rangeland
 - a. Validate grazing practices that improve water infiltration, forage yield, and soil organic matter in Canadian conditions across a variety of ecoregions
 - b. Evaluate the roles of the soil microbiome and plant-soil interactions in short-, medium-, and longterm soil carbon storage and sequestration, plant yield, and water holding capacity
 - c. Develop simple outcomes- and systems-based approaches for producers to understand and quantify the costs and benefits of environmental best management practices
 - d. Investigate cost effective ways to reduce greenhouse gas emissions on pasture or forage-based systems
 - e. Quantify N and P excretion rates in grazing animals, N impacts on GHG emissions, and P runoff and leaching impacts on water quality/eutrophication in central and eastern Canada
 - f. Develop or repurpose materials with the potential to reduce the amount of single use plastics along the forage, cow-calf, feedlot, and broader beef production supply chain
- 2. Develop cost-effective ways to reduce feedlot greenhouse gas emissions and evaluate the impacts of manure nutrients on pasture and cropping systems

- a. Evaluate technologies and management practices used to reduce greenhouse gas emissions in the feedlot using a systems approach
- b. Quantify the effectiveness of forages to mitigate the nutrient mobility associated with extended winter grazing practices
- c. Develop manure management and processing technologies (e.g. biodigesters) and strategies that optimize manure by-product values and contribute to cost-effective soil health improvements
- 3. Identify cost-effective ways to improve air and water outcomes associated with beef packing and processing facilities while maintaining food safety and product shelf-life standards
 - a. Develop and validate cost effective cleaning technologies that reduce water and sanitizer use in packing plants (*see Enhancing Canadian Beef Advantage in the Demand Pillar*)
 - b. Identify and develop new revenue streams that also reduce environmental impacts by utilizing carcass by-products
 - c. Develop technologies that reduce odors associated with packing plants
 - d. Develop strategies and technologies that reduce food waste in the packing plant

FOCUS AREA C1: SUSTAINABILITY MEASUREMENT AND VERIFIED CLAIMS (CRSB)

Context

The sustainability landscape has evolved over the past ten years. Credible and science-based metrics and verified claims are increasingly important for industry and value chain partners as they work to achieve their environment, social and governance goals and report on progress.

The Canadian Roundtable for Sustainable Beef (CRSB) advances, measures, and communicates continuous improvement in sustainability of the Canadian beef value chain through its multi-stakeholder membership of 85 voting organizations. CRSB has four pillars of work: (1) the National Beef Sustainability Assessment and Strategy; (2) the Certified Sustainable Beef Framework (or CRSB Certified), (3) projects; and (4) communication.

The National Beef Sustainability Assessment and Strategy is an in-depth scientific analysis and is the main way the Canadian beef industry measures progress on sustainability indicators like greenhouse gas emissions, biodiversity, carbon storage, people's health and safety, animal care, economic contributions and more. A sustainability strategy complements the assessment and identifies areas for continuous improvement and collaboration. The NBSA tracks progress towards the industry's 2030 goals.

The *Certified Sustainable Beef Framework*, known as CRSB Certified, is a voluntary, third-party certification program that provides credible assurances for the production, processing and sourcing of beef through certified supply chains in Canada.

The NBSA and CRSB Certified are important tools for the industry to measure, track and communicate progress on sustainability indicators that are relevant to consumers, the value chain, stakeholders and governments, in both domestic and international markets.

Approach

CRSB works to build awareness and consumer trust in sustainable beef production in Canada, and enhances the capacity of the beef supply chain to respond to market demands by supporting claims with quantifiable measurement, reporting, and demonstration of performance improvements. They also support responsible communication of production practices that are of interest and concern to consumers and engage producers by demonstrating incremental value, education, and communication in sustainability priorities. Continuing to build partnerships and collaborations is also imperative for the organization to help advance the 2030 industry goals.

OUTCOMES & OBJECTIVES

- 1. Support the activities of the Global and Canadian Roundtables for Sustainable Beef
 - a. Recognize the CRSB as the go-to forum for beef sustainability in Canada
 - b. Support multi-stakeholder collaboration and science-based measurement to advance beef sustainability priorities
 - c. Utilize the roundtable for value chain discussions on sustainability priorities
 - d. Promote the CRSB's National Beef Sustainability Assessment report as a credible Canadian beefspecific source for data and metrics for inclusion in national and international reports
 - e. Encourage and ensure alignment in research priorities and data needs with partners, CRSB membership and the scientific community
 - f. Support the completion of the third National Beef Sustainability Assessment and encourage producer survey completion to increase sample size
- 2. Develop a sustainability and quality assurance roadmap for the Canadian beef industry (including CRSB Certified and Verified Beef Production Plus) to identify and coordinate the alignment and integration of national and international programs
- 3. Promote voluntary producer certification in the CRSB Certified program
 - a. Understand barriers to increase producer participation
 - b. Establish partnerships to remove barriers
 - c. Work with government, value chains and other stakeholders to recognize certification
- 4. Promote CRSB Certified to supply chains seeking assured sustainability claims and other related method of production claims or attributes.
- 5. Inform and support improvements to the CRSB Certified program that advance beef sustainability in Canada.
- 6. Facilitate increased collaboration and communication to encourage data and information sharing across the Canadian beef value chain.

FOCUS AREA C2: QUALITY ASSURANCE (BCRC)

Context

On-farm quality assurance plays an increasingly important role in the Canadian beef industry and consumers, end-users, government, and other industry stakeholders look for validation and monitoring of implementation of on-farm best practices linked to food safety, animal care, biosecurity, and environmental sustainability. Currently on-farm quality assurance programs/audits include the Verified Beef Production Plus (VBP+), the Canadian Feedlot Audit Program, Ontario Corn-Fed Beef, and Where Food Comes From. The size and uptake of these programs varies but demonstrates the growing importance of producer uptake of quality assurance programming.

With strong demand for CRSB Certified beef products from end-users, the expectation was that producers would see value in becoming trained and audited. The growth in audits has been less than anticipated; particularly at the cow-calf level.

The <u>VBP+ program</u> is Canada's largest industry-led quality assurance program focused on on-farm quality assurance for operations across the cow-calf, backgrounding and finishing feedlot, and the seedstock sectors. VBP+ has transitioned over the last 10 years from a single focus on on-farm food safety to include modules in biosecurity, animal welfare, and environmental sustainability. It became the largest certification body for the Canadian Roundtable for Sustainable Beef's (CRSB) Certified Sustainable Beef Framework. This came with a significant evolution of VBP+'s operations and infrastructure to ensure the rigor of auditor training and audit requirements, advanced audit reporting, and technology implementation to facilitate chain of custody information flow in real-time.

The <u>Canadian Feedlot Audit program</u> provides an animal care, beef quality and food safety assessment program specifically for the feedlot sector. It has been certified by PAACO (Professional Animal Auditor Certified Organization) and recognized by NFACC (National Farm Animal Care Council) and CRSB (Canadian Roundtable of Sustainable Beef Production).

In an effort to increase cow-calf certifications some incentives have been offered to assist producers in covering all or part of audit costs and receiving credits and/or money back. To this point, incentives have not been long-term and sometimes sporadic; creating producer skepticism and hesitancy to incur the cost of an audit. Other limiting factors to cow-calf producers becoming audited include inadequate (or the perception of inadequate) record-keeping to meet audit requirements and allocating time to complete training and audit preparation. Many cow-calf operators work off-farm and with limited time, programs like VBP+ have not demonstrated adequate value to motivate the reallocation of their time.

Despite low cow-calf enrollment and limited response to the CRSB's calls for increased producer enrollment to meet end-user demand for the CRSB Certified program, industry has recognized the need to continue to advance a producer-led VBP+ program. The broad-based support to move VBP+ forward is in recognition that all major animal protein sectors within Canadian agriculture have industry-led quality assurance programs. Likewise, many global competitors also have quality assurance programs. Quality assurance training and certification is a growing baseline expectation of supply chain customers and end-users.

There are also growing requests from governments, end-users, and other stakeholders for on-farm measurement and verification of environmental goods and services that require on-farm record-keeping, auditing and aggregated reporting. Banks, government, and insurance companies are also looking for producers to demonstrate risk management plans are in place to be eligible for financing, insurance, and government programs. Future concerns include increased discussion of non-tariff trade barriers related to environmental impact measurement and reporting to be eligible to export to certain markets.

Approach

Industry is supportive of the maintenance of a Canadian producer-led on-farm quality assurance program for a few reasons. On-farm quality assurance training and certification can be done by private sector firms. This approach is often used for private value chains marketing branded products, but it is less ideal for producers wanting to sell into the open market. Typically, these audits are more costly, as they are done on a for-profit basis. More importantly industry-supported quality assurance programs are producer-led and focus on ensuring the program meets consumer and end-user expectations, while also being practical and auditable on farm. It accounts for a varied beef production landscape across Canada and significant differences across individual operations. In the absence of an industry-led program, growing demands from other stakeholders and government could risk a top-down approach where externally developed training and audit requirements are imposed on producers.

Key outcomes focus on ensuring the long-term sustainability and growth of industry-supported verification programs (VBP+, Feedlot Audit Program, Ontario Corn-Fed Quality Assurance Program) with strategy development moving forward focused on ensuring the program can be adaptable to the expectations of end-users, government and other stakeholders while also demonstrating value for producers to grow participation.

OUTCOMES & OBJECTIVES

1. Grow producer participation in the Verified Beef Production Plus (VBP+) standard and other industry-supported verification programs.

- a. Ensure a sustainable funding and delivery model for VBP+ and VBP+ Delivery Services Inc. to maintain a national industry-led quality assurance program to address producer, industry stakeholder, and end-user needs
- b. Increase producer understanding and awareness of the value of VBP+ to mitigate industry level risks (consumer demand, market access) and operational level risks related to human & animal toxins, foreign object exposure, disease outbreak, animal welfare, and environmental concerns
- Increase producer value from VBP+ participation through the addition of other modules/ standards for certification to meet market demands and reduce producer administration (i.e. EU certification)
- d. Increase producer value from VBP+ participation by ensuring its recognition by federal and provincial governments, and other industry stakeholders, as an eligible industry quality assurance standard when required (i.e. SCAP producer funding, BRM programs, EGS credits)
- e. Increase producer value from VBP+ participation by enabling the sharing of aggregated standardized operational data in exchange for appropriate recognition/credit by end-users and industry stakeholders to fulfill sustainability reporting/measurement requirements
- 2. Generate industry metrics to confidently state Canadian producers' commitment to food safety through VBP+ training and/or certification, including benchmarks for adoption of best management practices contributing to sustainability goals
 - a. Development of industry communications demonstrating the value of VBP+ training and certification to contribute to industry sustainability
 - b. Broadscale of VBP+ training in multiple formats to ensure producer accessibility
 - c. Development and delivery of key benchmarking indices to communicate progress and fulfil industry/stakeholder requests
 - d. Establish methods to measure practice adoption/implementation by producers

FOCUS AREA D: SOCIAL (CRSB)

Context

The Canadian beef industry prioritizes the wellbeing of people throughout the supply chain; supporting policies that improve people's health and safety. Canada's red meat processing sector has well-established worker health and safety procedures, systems and practices to help protect its workforce. Throughout COVID-19, organizations and individual companies across the supply chain worked closely with public health and labour officials to develop protocols and implement rigorous risk mitigation practices to help keep people safe while continuing to provide food to consumers.

Approach

It is recognized that the people health and safety goals require contributions from all stages of the supply chain. Reaching these goals requires the commitment of producers including the cow-calf, backgrounding and finishing sectors, beef processors, through to the retail and foodservice sectors to measure and monitor progress. Key drivers that can contribute to achieving these outcomes include: raising awareness of resources, mental health and proactively managing change (See <u>People Health and Safety 2030 Goals</u> Fact Sheet for more details).

- 1. Collaborate regarding on-farm health and safety awareness and best practices implementation
 - a. Support farm safety capacity and adoption of best practices through knowledge-sharing and training promotion
 - b. Encourage development and implementation of farm safety plans on beef operations

- c. Promote and encourage initiatives that build awareness and provide supports related to workload, labour and stress implications for physical and mental health and farm safety
- d. Encourage identification and removal of economic barriers to implementation of new on-farm technologies
- 2. Enable dialogues regarding health and safety, including mental well-being, for all beef value chain participants
 - a. Encourage safety awareness, access to training and adoption of best practices to prevent safetyrelated incidents across the beef supply chain
 - b. Encourage considerations around health and safety as part of business planning and risk management
 - c. Support continued engagement with government and policy makers regarding the development and implementation of [practical] policies and regulations related to farm safety
- 3. Promote a culture of diversity, equity, inclusion and transparency for all people within the beef supply chain
 - a. Support protection of rights of all workers, and a culture of safety, particularly for those who may be at increased risk
- 4. Support labour management and worker conditions
 - a. Support initiatives that increase labour availability, training, recruitment and retention
 - b. Promote implementation of practices to enhance labour management
 - i. Support initiatives to increase communications skills and dispute resolution
 - ii. Promote professional development of employees and employers
 - c. Support adoption of best management practices, business tools and new technology to reduce workloads across the beef supply chain, focusing particularly on family farm businesses, while considering the practicality of implementation

PILLAR 3: COMPETITIVENESS

The **Competitiveness** pillar encourages a competitive business and regulatory environment, a resilient supply chain, access to competitively priced inputs (with an emphasis on reducing the labour shortage), and regulatory approval of technologies (which support cost competitiveness, increase speed of commerce and reduce red-tape).

Competitiveness with other commodities within Canada is critical as there is competition for land, labour and capital, as well as compared to other major beef exporting countries. Domestically, there needs to be equality in the business risk management programs and services provided to each commodity as these can create distortions in resource allocation within the marketplace.

FOCUS AREA A: COMPETITIVE BUSINESS AND REGULATORY ENVIRONMENT (CCA, NCFA, CMC)

Context

For the Canadian beef industry to be competitive, it is necessary to have a regulatory system that encourages innovation, efficiency, and does not add unnecessary costs. Government's policy on <u>limiting</u> <u>regulatory burden</u> on business is positive; but how it is being applied to agriculture, if at all, is still unclear. The one for one approach where one regulation is removed for every new regulation introduced provides an environment where very careful thought must be given before any new regulation is introduced and

offsetting alternatives to regulation are given greater credence. This is a critical topic when the United States, a major competitor, is actively reducing regulatory burden, supporting future competitiveness.

The expansion of livestock price insurance into eastern Canada is a positive development, providing a much-needed risk management tool for producers there.

Approach

Regulations must be outcome and scientifically based, as well as interpreted and enforced by an efficient regulator. Ongoing work is needed to ensure a competitive tax regime and business risk management suite for beef producers that does not create international or commodity disparities.

Canada received negligible bovine spongiform encephalopathy (BSE) risk status in 2021. Moving to a short list of specified risk materials (SRM) in harmony with the U.S. and in accordance with scientific research on the effectiveness to eradicate BSE in Canada is necessary to reduce costs for packing plants that are currently facing higher costs than U.S. counterparts.

- 1. Improve return on investment and long-term profitability of the beef industry
 - a. Improve Business Risk Management for producers to reduce the exposure associated with market volatility, varying climatic conditions, and other unforeseen events (e.g. disease outbreak)
 - i. Improve risk management access for new entrants
 - b. Work with governments to ensure tax policies (e.g. climate, income, tax deferral) do not put producers at a competitive disadvantage
 - c. Work with the federal and provincial governments to ensure government programs adequately address the production risks and encourage best management practices to improve environmental stewardship
 - d. Advocate for ongoing investment in the Canadian processing sector, including ongoing plant modernization that ensures Canada's competitiveness with international counterparts
 - e. Protect and enhance property rights by advocating on behalf of producers during the creation or amendment of government Acts, regulations, and policies
 - f. Reduce regulatory burden on producers to support international competitiveness
- 2. Advocate and uphold a scientific, risk-based regulatory system
 - Actively engage in consultations on the regulatory modernization framework that streamlines approvals of agriculture inputs, forage and grain varieties, and biotechnology to encourage investment in research and the development of new products that are accessible to the Canadian beef industry
 - b. Support and encourage the government policy of one for one removing a policy/regulation for every new one introduced
- 3. Pursue outcome-based flexible alternatives to prescriptive tactic-based regulations
 - a. Pursue the movement toward outcome-based food safety regulations that define the desired outcomes and allow for flexible approaches to achieving outcome rather than point by point prescriptive regulations
 - b. Create the equivalent of an Agriculture Marketing Service to provide efficient administration of regulations and advance industry
 - c. Pursue the move to a short list SRM, in harmony with the U.S. and in accordance with scientific research on the effectiveness to eradicate BSE in Canada
- 4. Pursue regulatory cooperation with major trading partners

- a. Actively engage in discussions with the Regulatory Cooperation Council and other efforts to harmonize regulations that facilitate trade, reduce transaction costs and improve data available to industry
 - i. Streamline regulatory requirements to allow free flow of cattle and beef products between the United States and Canada
 - ii. Develop 'disease zoning' agreements that minimize trade disruptions with trading partners
 - iii. Streamline and align livestock handling procedures and standards at border ports
 - iv. Prioritize development and delivery of electronic certification at all livestock border port crossings
- b. Actively participate through the International Beef Alliance and in partnership with the grains and oilseed sector to support adoption of regional standards in advance of full CODEX adoption of standards for new technologies
- 5. Ensure that traceability systems are based upon real benefits and fairly allocated costs, through national industry-led cattle identification systems with an emphasis on animal identification, premise identification, and animal movement
 - a. Implement the use of electronic manifests (movement documents) for traceability
 - b. Adhere to the industry endorsed Cattle Implementation Plan for traceability implementation
 - c. Actively research new and emerging technologies in animal identification
- NEW! Generate science-based information and data to inform emerging issues, policy, regulatory approvals, and public trust discussions related to industry sustainability, production practices and the safety of technologies
 - a. Industry leadership in ensuring access to necessary science capacity and funding to complete timely, independently reviewed, science-based research and information to address key competitiveness challenges and opportunities.

FOCUS AREA B: A RESILIENT SUPPLY CHAIN (CCA, NCFA, CMC)

Context

A resilient supply chain is one that quickly responds and finds solutions to both supply and demand shocks. This is supported through industry's response to supply chain disruptions and producer requests for changes in services and demand for solutions to issues. Industry must be prepared for emergencies and maintain infrastructure that facilitates business at the speed of commerce. This was highlighted during the pandemic with the need for recognition of packing plants and livestock producers as essential services (since animals need care every day), protection for perishable products during port strikes during union negotiations, and storage costs associated with backlogs. In addition, changes to Class 1A licenses have resulted in a shortage of truckers, impacting availability and how the supply chain functions.

Approach

To support a responsive marketplace, industry needs to be prepared for emergencies, have the necessary infrastructure to carry out business and be generating science-based information to inform legislation, regulations, and policies as well as advocating for recognition of the global standards developed and used in Canadian beef production.

- 1. **NEW!** Proactively address supply chain disruptions (e.g. labour/transportation strikes, protests) impacting commerce through enhanced policy and effective approaches (e.g. recognizing essential services permanently)
 - a. Align approaches with the United States

- Renew the National Emergency Management Strategy in event of a major trade disruption (e.g. Foot and Mouth Disease)
 - a. Support the development of a collaborative national multi-stakeholder risk management structure supporting Canada's prevention, preparedness, response, and current-value financial recovery to an emergency or animal health risk event
 - b. Address provincial gaps in a cross-sector Emergency Preparedness Plan
- 3. Address internal barriers to a competitive marketplace
 - a. Identify, preserve and enhance infrastructure necessary to carry out business and minimize transactions costs (i.e. border crossing facilities)
- 4. **UPDATED!** Generate science-based information to inform regulatory approvals of:
 - a. Effective food safety interventions in key international markets (i.e. European Food Safety Authority approval of peroxyacetic and citric acid interventions for beef)
 - b. Harmonization of specified risk material (SRM) Canadian regulations to align with the U.S. to align with Canada's negligible risk status and reduce SRM disposal costs
 - c. Evidence-based antimicrobial resistance decision making and communication:
 - i. Ensure the ongoing maintenance of the Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS) on-farm, abattoir and retail beef antimicrobial resistance surveillance, including *Enterococcus hirae* or other indicator organisms that are informative with regard to macrolide resistance
 - ii. Conduct pilot projects to identify whether the prevalence of antimicrobial resistance in market beef cows, dairy cows and bob/veal calves differ from fed cattle, and include in ongoing CIPARS surveillance
 - Ensure the ongoing maintenance of CIPARS surveillance of antimicrobial resistance through sampling of live animals at feedyards, focusing on Bovine Respiratory Disease (BRD) pathogens and enteric bacteria
 - d. Ensure that Canada's beef industry continues to have access to antimicrobials to protect animal health and welfare:
 - i. Continued advancement and development of an antimicrobial use database for the beef industry with leadership from a collaborative stakeholder working group
 - ii. Conduct pilot projects to identify which sectors of the beef and veal industries (cow-calf, feedlot, dairy, bob/veal) pose the greatest antimicrobial use risk (classes of antimicrobials used, treatment rates, etc.)
 - iii. Maintenance of CIPARS database to track antimicrobial use in sectors deemed to be highest risk
 - iv. Use the database to monitor changes in antimicrobial use over time and relate changes in antimicrobial use practices to changes in antimicrobial resistance in cattle pathogens and indicator organisms isolated from cattle, beef and cattle associated environments
- 5. Proactively address and influence domestic and global food production standards, codes of practices, and potential regulations
 - a. Maintaining an active presence in appropriate global and domestic forums focused on animal health, food safety and quality, sustainability, environment, and public and social welfare topics
 - b. Encourage Canadian regulators and legislators to champion the Canadian food-safety system at home and abroad as ways of maintaining and growing consumer confidence and market access
- 6. **NEW!** Encourage transparent price reporting (for cattle, beef and beef products), where confidentiality can be maintained, to support arbitrage, industry decision making, investments, and programs (e.g. livestock price insurance)

FOCUS AREA C: ACCESS TO COMPETITIVELY PRICED INPUTS (CCA, NCFA, CMC)

Context

Decisions as to the number of cattle born, raised or processed in Canada is dependent on a competitive cost structure. Free trade with the U.S. forces every sector to be competitive. This is really about the relative costs of inputs and ensuring the prices paid are not artificially inflated by regulations, a cumbersome approval process, lack of access to new and more innovative products, or a lack of arbitrage that can result in a pricing to market policy that makes Canadian producers less competitive.

Accessibility of feedstuffs has been top of mind in recent years, from both a transport perspective (i.e. rail dependability, road infrastructure), affordability, approval of by-products for feed (via upcycling of food waste) and emergency weather factors (i.e. fires, floods, drought). Ensuring a resilient supply chain (see above) along with timely approvals and research to utilize by-products is key to industry competitiveness.

According to the Canadian Agricultural Human Resources Council (CAHRC), Canada's agriculture sector experienced a peak vacancy rate of 7.4 percent in 2022, which resulted in over 28,200 unfilled jobs and a staggering \$3.5 billion in lost sales. Two out of five employers struggle to hire necessary workers now, a trend that is only expected to worsen. The aging of Canada's population will contribute to what is expected to be a 15 percent labour gap by 2030 during peak season, or 22,000 jobs. In the processing sector, many employers cannot find enough people to fill positions, with data suggesting almost 50,000 job vacancies; and, almost all establishments experience chronic recruitment and retention difficulties. Most Canadians reside in urban centers whereas the majority of agriculture employment is in rural locations, so attracting and keeping labour in rural communities is difficult for all sectors.

Approach

It is imperative that Canada's beef industry has access to competitively priced inputs and that the business environment in Canada supports the development of new innovative inputs that could potentially reduce production costs. Canada is a relatively small market in terms of population and industry size, which can be a disincentive for companies to pursue commerce in Canada and register new products. For example, ensuring that there are pathways for approval of new products (such as Bovar) to provide Canadian producers access to products used in other exporting countries is important. Improve access to solutions that enhance efficiencies and reduce costs (i.e. Electronic Delivery Platform for trade data).

Continue to work with the Government of Canada to find workable solutions to the acute labour shortage in Canadian agriculture that threatens the viability of food production and the competitiveness of beef producers in Canada. Renaming the Temporary Foreign Worker program as "International Worker program" would recognize the goal of these workers becoming permanent residents and their contributions as an essential service.

- 1. **NEW!** Support and encourage awareness of careers and employment in Canada's beef industry
 - a. Encourage training and educational programs for various job opportunities (See Social, Youth Programs)
- REVISED! Build an understanding and acceptance of the continued importance of international workers in agriculture, and design and implement an efficient system of programs and policies that facilitate the entry of international workers for the beef sector, including pathways to permanent residency/immigration

- a. Actively pursue improvements in the Labour Market Impact Assessment (LMIA) process and Temporary Foreign Worker (TFW) program including a more streamlined process, improved coordination between international embassies, reduced processing time, and increased communication of the processing stages and any processing changes
- b. Streamline and increase pathways to permanent residence for TFWs by increasing the numbers of immigrants allowed to apply for permanent status, and increase the duration of the LMIA to allow international workers the appropriate amount of time to meet all the necessary requirements of permanent residency.
- c. Encourage stakeholder consultation in development of programs, and before new policies are announced
- 3. Improve access to competitively priced inputs including animal health products, feed grains and forages, new technologies, and other inputs
 - a. Advocate for faster approval times and more streamlined processes that are competitive with other countries
 - b. Advocate for greater coordination of approvals between government agencies and acceptance of new biotechnology by all levels of government
 - c. Advocate for change to the current extended approval process to recognize other countries' regulatory regimes and approval processes as being equivalent. Facilitating faster approval times and greater availability of products for Canadian producers through a more cooperative synergistic approach to product approval with regulators of similar caliber around the world
 - d. Advocate for the harmonizing of approvals for products already approved in the U.S.
 - e. Advocate for the harmonization of withdrawal periods and maximum residue levels for products between countries
 - f. Advocate for price equivalency of products between countries
 - g. Advocate for electronic reporting of information to support commerce

FOCUS AREA D: REGULATORY APPROVAL OF TECHNOLOGY TO SPEED COMMERCE (CCA, NCFA, CMC)

Context

It is expected technology will evolve more rapidly over the coming decade than it has in the last 40 years. Advancements in technologies have the potential to disrupt and transform agriculture and agri-food value chains. One question is "how quickly can things happen?" Historically, animal agriculture has adopted new technologies at a slower pace than other sectors. Smart farming, also known as precision farming, has the potential to make farming more profitable and reduce the ecological footprint. Smart or precision ranching has a lot of potential to help achieve economic, environment and animal performance goals.

There are hurdles to address as technology is adopted. One hurdle is having an outcome-based regulatory system that keeps up with these changes as they occur. In areas such as traceability and export digitization, entire generations of technology can be leaped to bring these systems into the 21st century and better serve an export-oriented industry at the speed of commerce, thus avoiding trade impediments and delays in product movement. Not only must the beef industry implement technology to stay competitive, but also technology has the potential to support new products and investments that drive economic development. It should be recognized that technology frequently needs a dedicated operator and therefore does not always reduce labour needs. In fact, technology can increase labour demand for a different skill set and labor output towards the production of value-added products. While technology brings the potential of greater transparency of production systems, there is also the need to address acceptance of technological use in food production.

Approach

All technology needs to start from solving an existing problem that is recognized as a problem versus having a technological solution in search of a problem to fix. Every technology needs a tangible benefit for the sector adopting it. As the cost of implementing technologies become more affordable, the cost: benefit needs to be tested and validated at a commercial scale. (see the <u>Technology</u> 2030 Goal Fact Sheet for more details)

OUTCOMES & OBJECTIVES

- 1. Improvements in speed, reliability, accuracy, and cost-effectiveness of traceability solutions that advance both business and regulatory objectives (i.e. electronic certification, process verification)
- 2. Support functional information flow solutions to producers derived from a competitive service sector
- 3. Invest in technological solutions that reduce costs, improve competitiveness and enable regulatory approvals and business functions that support trade and commerce (e.g. access to internet, cell service in rural areas)
- 4. Support innovation, research, refinement and commercialization of technologies throughout the supply chain that support economic viability and worker conditions
 - a. through connecting cattle industry domain expertise with cutting edge technological expertise
- 5. Promote the acceptance of sustainable and safe beef production technologies by customers and regulators, in both domestic and international markets

PILLAR 4: PRODUCTIVITY

The *Productivity* pillar supports production efficiencies through the supply chain. This will be achieved by focusing on animal production and performance, genetic selection, feed production and performance, producer adoption and research capacity. Measurements will include open rates, calving length, and calf death losses as monitored through regional cow-calf surveys, improving feed efficiency, and feed crop yields.

Productivity is where producers are in direct control. Research and adoption must include the entire supply chain from seedstock through to the packer, and all climatic conditions where beef is produced across Canada recognizing that what works in one location for that production system may not work elsewhere. Data and research must be transformed into information that is useful for decision making on the farm – it is only then that change occurs. (See the <u>Animal Health and Welfare</u> 2030 Goal Fact Sheet for more details)

FOCUS AREA A: ANIMAL PRODUCTION & PERFORMANCE (BCRC)

Context

Canada is world renowned for producing healthy beef cattle in a pristine environment and for having a strong commitment to animal health, welfare and antimicrobial stewardship. These attributes are becoming increasingly important among both domestic and export customers and consumers. There are also clear linkages between improvements in animal health and welfare and increased productivity, which is fundamental for the long-term competitiveness and sustainability of all sectors of the Canadian beef industry.

For cow-calf producers, good reproductive rates are critical to profitability regardless of calf prices. Cows that do not wean calves every year use resources that could be used to support more productive cattle. Increasing pre-weaning survival rates from 85 percent (current) to 92 percent would be worth over \$160 million to Canada's beef industry. Feedlots face significant costs associated with mortality, treatment and reduced performance due to respiratory disease, digestive disorders and lameness. Animal welfare is closely linked with animal health, particularly as calves transition through weaning and into the feedlot.

There are areas of the country where veterinary care is difficult to access. Programs that recognize and accredit internationally trained veterinarians are important. Extension materials are being developed in collaboration with veterinarians, but these do not replace veterinary care.

Approach

Identifying and implementing alternative production practices and treatment strategies that costeffectively support animal health and welfare while reducing antimicrobial use will benefit both industry sustainability and public confidence. Surveillance serves a critical role, both in identifying emerging issues as well as monitoring producer adoption of technology and recommended management practices.

The Canadian beef industry is committed to protecting the health and welfare of the cattle under our care. Canada's beef industry is a global leader in recognizing the importance of appropriate beef cattle health and care practices, having developed the first Code of Practice for the Care and Handling of Beef Cattle more than 20 years before the World Organization for Animal Health adopted an animal welfare chapter to the Terrestrial Animal Health Code.

Further incremental improvements in animal health, welfare and antimicrobial stewardship will require significant research effort across a wide range of specialties, including beef cattle nutrition, grazing and pasture management, genetics, physiology, microbiology, virology, parasitology, and development of diagnostic tests, vaccines, and other antimicrobial alternatives. Significant investment is also needed in surveillance for emerging diseases and antimicrobial resistance to ensure the health and safety of human health and food production.

- 1. 92 percent or more of the cow herd weans a calf each year through cost-effective improvements in nutritional and overall management
 - a. Refine nutritional and related management strategies to improve rebreeding success, calf survival and herd retention in replacement females
 - b. More precisely define micronutrient requirements and develop regionally-appropriate supplementation recommendations for breeding cattle of different ages throughout the production cycle
 - c. Assess the impacts of water quality on reproductive performance, health, and calf growth performance
 - d. Clarify how management practices impact reproductive performance in cattle that differ in their genetic potential for growth, efficiency and carcass traits
- 2. Develop and promote the adoption of cost-effective management practices and technologies that reduce the need for and help preserve the effectiveness of antibiotics
 - a. Continued development of alternative health products and management practices to maintain animal health and reduce the need for antibiotic treatment
 - b. Controlled trials to independently assess or validate the cost-effectiveness of promising traditional or alternative animal health products and/or management strategies
 - c. Identify key management practices and preconditioning program component(s) that are most critical to reducing respiratory disease in the feedlot

- d. Understand how stress (e.g. transportation, marketing, commingling, social dynamics) impacts the ability of cattle to acclimate to new environments
- e. Assess how nutritional and health management (e.g. vaccination) of the cow herd impacts calf health pre- and post-weaning
- 3. Effective surveillance of production limiting diseases, production practices, and antimicrobial use and antimicrobial resistance
 - a. Support the ongoing collection of antimicrobial use and resistance information in beef production systems and environments
 - b. Support the ongoing surveillance of management practices and animal health and productivity information at the cow-calf and feedlot levels across Canada
- 4. Improved prevention and mitigation of animal disease issues
 - a. Develop vaccines and delivery systems to cost-effectively prevent economically important production-limiting diseases
 - b. Develop management strategies and approaches to cost-effectively maintain calf health through the weaning process into the feedlot
 - c. Develop point-of-care and other diagnostic tools that rapidly, accurately, and cost-effectively identify infectious diseases, immune/vaccination status, antimicrobial susceptibility/resistance or nutritional status
 - d. Improve understanding of the etiology and pathophysiology of common production limiting diseases that lack effective vaccines or treatment
 - e. Use new techniques and traditional microbiology to understand the role of the microbiome(s), their development and interactions, and learn how they can be manipulated to help prevent, mitigate, and manage major diseases
 - f. Take advantage of opportunities presented by artificial intelligence and other technologies to develop cost-effective and accurate tools to predict disease in individuals or groups of animals before clinical signs become apparent
 - g. Identify and quantify biosecurity and animal health risks associated with transport rest stops and other commingling sites
- 5. Improved prevention and mitigation of animal welfare issues
 - a. Improved understanding of the physiological and economic impacts of stresses associated with weaning and acclimation to the feedlot, and develop cost-effective strategies to improve behavioral, health and productivity outcomes
 - b. Develop cost-effective and easily administered options to alleviate procedural pain associated with castration, branding, and dehorning
 - c. Develop cost-effective chronic pain management strategies
 - d. Identify factors contributing to lameness, develop cost-effective preventions, treatment options, and methods to control or limit environmental spread of the pathogens involved

FOCUS AREA B: PRECISION GENETICS (CBBC)

Context

Continuous improvement within agricultural systems requires regular and repeated investments and adoption of innovative advancements in many management areas (i.e. fertilizer, implants, antimicrobials, vaccines). One of the most challenging but critically important areas is in genetic decision making which has long-lasting implications in both crop and animal efficiency and productivity. The utilization of genetic technologies in beef cattle production has lagged both poultry and pork for various reasons including longer gestation periods and lower reproductive rates; and, slower than in the dairy sector because of negative genetic associations between traits that are economically important to the cow-calf (reproductive traits), feedlot (growth and efficiency) and packing (meat quality) sectors. Furthermore,

some economically important traits are hard to select for because they are difficult and expensive (i.e. feed efficiency) or impossible to measure in live breeding stock (i.e. tenderness).

Genetic improvement is an important area of focus to achieve further advancements in sustainable production and to position the industry competitively both domestically, with other competitive proteins, and internationally, with other global exporters.

Approach

New innovative technologies, expanding knowledge and improving overall genetic literacy, combined with advanced individual animal management and improved data analytics and selection tools offer the opportunity to make more rapid advancement in beef cattle genetic improvements. Investments to improve access to trusted genetic data and encouraging the adoption of new genetic technologies will better inform producers' breeding decisions and will contribute to overall improvements in production efficiency and beef quality.

Through the creation and ongoing development of the Canadian Beef Improvement Network (CBIN) there has been increased awareness of the value of genetics to increasing the overall economic and environmental sustainability of the Canadian beef herd. Collaboration through CBIN amongst breed associations, genetic service providers and researchers has advanced the development of a trusted data repository to support enhanced genetic selection tools that inform genetic selection decisions for both seedstock and commercial cattle producers.

- Continue to develop the Canadian Beef Improvement Network (CBIN) as a collaborative initiative, that is focused on providing producers with genetic information, that will assist them in making data driven genetic selection decisions and provide world leading data analytics to inform herd management decisions
 - Collaborate with genetic service providers, researchers, and breed associations to standardize data capture, ensure data access and security through trusted data management, provide improved data analytics, and support the enhanced development of genetic improvement programs
 - Support collaborative opportunities for academia and service providers to work with the sector to expand research and development capabilities for improved genetic analytics and selection tools
 - c. Support the development and adoption of genetic selection tools for traits that help reduce the environmental impact of cattle through improved efficiency
 - d. Support the development of genetic selection tools for traits of importance to producers such as fertility, disease resistance, carcass quality, and overall environmental efficiency
 - e. Deploy infrastructure to support a modern high availability genetic data repository to support data processes, data integration, and data pipelines to allow stakeholder data integration and linkages to enhance data driven genetic decision making for both seedstock and commercial cattle producers.
- 2. Increase producer knowledge and adoption of genetic selection tools
 - a. Encourage greater technology adoption by cattle producers to facilitate genetic improvement and improved management practices
 - b. Work with industry partners to deliver extension services that educate producers on the application of genetic improvement tools and programs in commercial herds
 - c. Increase producer knowledge regarding genetic improvement programs and how to effectively apply that information in herd management decisions in both purebred and commercial operations using a variety of methods

- d. Ensure integration with the Canadian Beef Improvement Network data repository that will allow producers to access genetic data and utilize improved data analytics in their decision-making processes
- e. Effectively communicate the critical role of genetic data in improving environment and economic sustainability throughout the production chain and support producers to utilize data analytics to achieve breeding goals through aligned genetic selection decisions.

FOCUS AREA C: FEED PRODUCTION & PERFORMANCE (BCRC)

Context

Feed Production and Performance is categorized into three key areas: 1) Feed Efficiency, 2) Feed Grain Production, and 3) Forage and Grassland Productivity. Feed is the second largest variable cost for producers, second only to the cost of animals. Feed and forage productivity research and technology transfer efforts are focused on developing improved feed grain, annual, and perennial forage varieties and management strategies that increase yields, maintain or improve nutritional value and contribute to economically competitive cow-calf, backgrounding, and feedlot operations.

Specific to forage and grassland productivity, approximately 80 percent of Canada's beef production while animals consume forage. Extending the winter grazing season continues to present a major opportunity to reduce winter feeding costs. Research has focused on the viability of individual winter grazing alternatives, but has not evaluated various combinations of swath-, bale- and stockpiled grazing that would help encourage wider adoption among producers. Keeping all of Canada's beef cows and replacement heifers on pasture for one more day every winter would save the cow-calf sector between \$3 million and \$4.9 million annually. Likewise, a 2.5 percent increase to restore average hay yields to 1990s levels would be worth \$89 million per year.

Feed efficiency and a lower feed:gain ratio in cattle at all stages of the life cycle (preweaning, postweaning, backgrounding, grassing, and feedlot) is key to reducing cost of production and ensuring industry competitiveness. Efficiency research and extension activities are integral to developing and validating cost-effective methods to identify more efficient cattle, feeds, and feeding strategies. Improving the feedto-gain ratio (feed:gain) by one percent would save Canada's feedlot sector an estimated \$13.5 million annually. A one percent improvement in feed:gain could have an economic effect four times greater than a one percent improvement in average daily gain.

Producing more feed per acre is also a priority. Canadian corn yielded on average 16 percent less than U.S. corn from 2000 to 2020, ranging from 36 percent less than the United States to 24 percent more. Canadian barley yields were on average 8 percent lower than U.S. yields for the same time period. These fluctuations significantly impact the competitiveness of Canadian cattle feeders.

Approach

Maintaining international competitiveness requires improved forage yields and beef production (fewer acres per cow or more beef per acre) on marginal land. Higher yielding varieties have been developed but have not fully compensated for the move to less productive marginal land. Further work is required to ensure producers can produce forages in an economically viable way such that marginal lands stay in grasslands where they are sequestering carbon and providing value to the producer and the environment.

Achieving industry's goals related to grassland preservation will entail significant research and extension efforts including investment across a range of specialties, forage and grassland productivity, plant breeding, animal nutrition, grazing and animal behavior, and soil health and quality.

The rate of genetic improvement for feed efficiency could be significantly increased through DNA testing if the accuracy of genetic markers for feed efficiency can be improved. It is important though that improvements in feedlot feed:gain must not be to the detriment of reproductive or feed efficiency in mature cows. Research is needed to identify the best way to define and express feed efficiency in breeding females that are maintaining or regaining body weight and condition where feed:gain is of limited value. Genomic tests that could quickly, accurately and cost-effectively sort individual feeder cattle according to their genetic potential for feed efficiency would also be of value, thereby facilitating the assembly of more uniform, economically optimal marketing groups.

Breeding and agronomic research efforts that improve barley and other feed grain yields will be essential to improve feed production competitiveness relative to our U.S. counterparts and ensure critical feed production acreage is not replaced by alternative crops.

A wider range of by-products is also expected to become available as the acreage of alternative crops expands and processing facilities are developed. By-products that are abundant, affordable, and economical to transport can be economically attractive feeds for cattle, provided proactive research and extension efforts can identify and mitigate potential risks related to nutrient levels and potential toxins.

Feeding strategies to improve production and feed efficiencies appear to be quickly adopted by industry at both the feedlot and cow-calf levels. Feed efficiency in Canadian feedlot cattle has improved by more than 40 percent (12.5:1 to 6.5:1 or less) since the 1950s. Growth enhancing technologies are readily available and widely publicized throughout the industry. However, there is a need for effective alternatives to these technologies to balance industry needs for efficient production with desires and concerns expressed by some global trading partners, consumers, foodservice, and retail operations. Basic research is needed to investigate and develop these alternatives to the point where they can be commercialized.

- 1. Improve feed grain and silage yields through plant breeding, agronomic practices, and harvest strategies
 - a. Develop new, high yielding feed grain and silage varieties with superior agronomic performance and nutritional quality
 - b. Investigate agronomic, harvest, and ensiling practices to optimize feed and silage yield, nutritional quality, and animal health and performance
- 2. Investigate feed processing, by-products, additives, supplements or other feeding strategies that optimize productivity and profitability
 - a. Develop rapid and cost-effective ways to assess nutritional value, digestibility, and optimal processing of feedstuffs and by-products
 - b. Develop cost-effective methods to measure, and feeding strategies to ensure, uniform supplement intake on pasture
 - c. Re-investigate and update nutritional recommendations to maintain optimal animal health and performance
 - d. Investigate feed processing methods and practices, additives, and management systems to improve digestibility, animal maintenance costs, and cost of gain
 - e. Quantify the role and identify opportunities to further use cattle to upcycle and reduce food loss and waste
- 3. Improved feed efficiency through identification of genetic differences and animal breeding
 - a. Develop and validate practical, accurate and cost-effective ways to quantify forage intake in grazing cattle and feed efficiency in the cow herd and the feedlot
 - b. Validate genetic markers for feed efficiency in commercial crossbred cattle

- c. Identify genes with functional roles in microbiological and physiological processes affecting feed intake and efficiency in feedlot and cow-calf production
- d. Determine the impact of genetics, management, and environmental interactions on growth and reproductive efficiency
- 4. Improve the management and productivity of native/naturalized pastures to enhance profitability and discourage land conversion
 - a. Identify practices that optimize utilization and resilience of pastures which may include indicators of appropriate recovery times
 - b. Identify or develop cost effective management strategies to control the spread of invasive plant species on rangeland
- 5. Better understand the impact of grazing management on plant, animal, and soil interactions and how the overall system contributes to plant and animal health and productivity
 - a. Quantify the impact of agronomic and grazing management practices on economic and environmental outcomes such as plant health, forage yields and quality, animal health and performance, soil carbon sequestration and organic matter, soil health and quality, water infiltration, and nutrient cycling in different ecoregions of Canada
 - b. Identify and validate technology to simply and cost-effectively manage grazing systems and quantify improvements in forage productivity
 - c. Identify simple, practical, cost-effective indicators of soil quality that have impacts on forage quality and productivity
 - d. Evaluate long term effects of incorporating grazing on crop production land
- 6. Cost-effectively improve the agronomic performance, yields, nutritional quality, and palatability of annual and perennial tame species for grazing or stored forages
 - a. Develop strategies and best management practices to promote stand productivity and longevity, preserve forage quality, and prevent waste in stored forages
 - b. Develop and evaluate new varieties with improved germination, emergence, yield, digestibility, salinity, drought and flood tolerance, reduced fall dormancy, and improved winter hardiness and plant persistence
 - Independent comparisons of promising international and domestic forage varieties and mixtures on a meaningful scale to determine varietal and mixture adaptation under a range of environmental conditions and soil types

FOCUS AREA D: PRODUCER ADOPTION (BCRC)

Context

Knowledge dissemination and technology transfer are critical to realize the economic, environmental and social benefits of investments in beef research. Much of Canada's beef industry success to date is due to improvements in average daily gain, reproductive efficiency and animal health, forage and feed yields, and nutritional and grassland management. These achievements have been supported by research, but technology transfer is also critical in driving industry and producer awareness and adoption of existing and new research, technology, and practices. There is more work needed to encourage broadscale adoption of recent breakthroughs.

Historically, provincial governments and universities employed extension specialists and supported field days, seminars, and other initiatives. However, these activities have significantly declined. Moving forward, industry must take leadership in ensuring technology transfer and research adoption occurs to support long term industry growth and sustainability.

Approach

Technology transfer efforts through the BCRC and Beefresearch.ca will continue to be expanded and the Canadian Beef Technology Transfer Network will better connect, empower and support regional beef and forage extension agents to collaboratively develop and deliver effective technology transfer initiatives. Through the utilization of expertise in the Canadian Beef Technology Transfer Network, online resources and materials will be developed to enable Canadian beef cattle producers to analyze their production and financial records, including comparisons to applicable benchmarks, to make informed production decisions about adopting, and fully exploit innovation.

For additional details, please refer to the <u>5-year Canadian Beef Research and Technology Transfer Strategy</u>

- 1. Engage academic and research organizations to encourage the development of new technologies that will benefit the beef cattle industry
 - a. Enable and encourage communication and collaboration between industry and research organizations to better understand industry needs for innovation and translate this into research
 - b. Achieve industry-wide support for the Canadian Beef Research and Technology Transfer Strategy ensuring industry's research and technology transfer priorities are adequately addressed and maximizing the value of research investments
- 2. Advance the development and implementation of the Canadian Beef Technology Transfer Network to encourage the more rapid adoption of relevant technologies and production practices
 - a. Enable and encourage academia, government, and industry stakeholders to develop on farm decision making tools and other knowledge and technology transfer initiatives by academia, government, and industry partners
 - b. Develop and continually improve resources that support Canadian producers in the maintenance and analysis of their production and financial records, including comparisons to applicable benchmarks, to make informed production decisions about the adoption of technologies and production practices
 - c. Support short-term proof of concept-based projects and clinical trials to identify new technologies/practices of value to the Canadian industry and allow their validation and/or adaptation as appropriate
- 3. Increase the proportion of producers adopting new technology with reduced lag from development to adoption
 - a. Continually develop and widely distribute information with a variety of technical content, topic and format (e.g. fact sheets, blog articles, webinars, videos, cost of production tools, podcasts, radio, workshops, etc.)
 - b. Develop BeefResearch.ca into a comprehensive resource for beef, cattle and forage research information and effective extension tools for easy access to industry stakeholders and increased collaboration among extension groups
 - c. Promotion of BeefResearch.ca and other extension resources to increase awareness of and motivation to understand and adopt innovation
 - d. Provide economic analyses regarding the benefits of adopting new technologies and best management practices
 - e. Communicate the benefits of increased focus on technology transfer to encourage funding and best practice
 - f. Continually improve knowledge dissemination and technology transfer effectiveness
 - g. Achieve adoption of best technology transfer practices industry-wide; collaborating with other organizations and researchers to share resources and improve adoption

FOCUS AREA E: RESEARCH CAPACITY (BCRC)

Context

Canada is a large country with beef production occurring in many different regions. For innovation to take place that is suitable for local situations, facilities, and infrastructure research across Canada is needed. Budgetary pressures at many academic and research Institutions have been an ongoing challenge that means the loss of key research and teaching positions through either attrition as researchers retire or redirection of activities to other priorities. Where gaps in research capacity exist, it is crucial that industry work with research institutions to fill these gaps and maintain strong research programs that drive progress.

With the retirement of many researchers, many of the young researchers replacing them do not have connections with the Canadian beef industry. Training and connecting young researchers with producers and other relevant industry stakeholders ensures that research being undertaken addresses industry needs and local situations

Approach

Industry will continue to put focus on working with Institutions to ensure the maintenance of existing research capacity, transitioning key positions upon the retirement of researchers, as well as addressing critical gaps in capacity through the creation of research chairs and other partnerships opportunities. The Beef Research Mentorship program will also be continued to allow for the more direct mentorship and engagement of new researchers within industry.

The cow-calf surveillance network will be prioritized to protect the health of the national beef herd and inform future research and extension priorities. A feedlot surveillance system will be pursued to provide a similar dataset for the feedlot sector to inform future priorities. Continued partnerships with the Canadian Integrated Program for Antimicrobial Surveillance (CIPARS) will be maintained and enhanced to ensure both human and animal health antimicrobial resistance and use surveillance priorities are addressed.

- 1. Support the maintenance and renewal of key research capacity supporting Canada's beef industry
 - a. Continued industry mentorship of new scientists, with an additional 15 scientists completing the BCRC's Beef Researcher Mentorship program by 2028
 - b. Establish and/or maintain critical research and technology transfer capacity needed to address key opportunities facing Canada's forage, cattle and beef industry through the creation of 3 to 4 industry supported research chairs in identified priority areas
- 2. National food safety, antimicrobial resistance and production limiting disease surveillance programs enhanced or developed, with research capacity and expertise in place
 - a. Strengthen the current proactive food safety and antimicrobial surveillance system to identify emerging public health issues
 - b. Maintain an effective proactive surveillance system to identify (re)emerging animal disease issues before they pose a widespread risk to animal health and industry productivity
- 3. Ensure research facilities in each region are maintained and staffed to support activities that address local production practices (in partnership with Provincial Associations)

PILLAR 5: CONNECTIVITY

The *Connectivity* pillar recognizes the value of industry synergies by connecting positively with partner organizations, industries and government to proactively address issues, challenges and opportunities with a unified industry voice. This will be achieved through industry communication, proactive issues management, youth programs and engagement with industry, government and global partners. Connectivity is the responsibility of every organization in the industry.

Successful organizations and industries have made long standing connections with governments, influencers, knowledge leaders, and are attuned to public opinion and changing trends. Being connected and prepared to communicate in a meaningful way when events occur can directly influence how these events impact our industry.

FOCUS AREA A: INDUSTRY COMMUNICATION (BEEF ADVISORS)

Effective communication is foundational to all policy, marketing, and research activities within the Canadian beef industry. "Team Beef" works to share messaging and have timely response to topics as they arise.

Communication needs to be transparent and consistent, with a common voice across all industry organizations. This is especially imperative in times of industry crisis. It is also critical to maintaining and enhancing consumer confidence. Consistent industry communication increases the public's understanding of the contribution the beef industry makes to the economy and environmental sustainability. Two-way communication of customers' demands throughout the supply chain from end users to primary producers is also important to clearly understand market trends and align production accordingly.

OUTCOMES & OBJECTIVES

- 1. Timely concise, and effective delivery of industry communications
 - a. Ensure coordination of communication between national organizations
 - b. Ensure the timely transfer of information to provincial associations and other industry organizations to ensure they are prepared to handle media inquiries
 - c. Maintenance of an Industry Crisis Communication plan that is updated on an ongoing basis including direct engagement of key industry organizations, CFIA and AAFC to ensure appropriate linkages are made and processes are understood
 - d. **NEW!** All organizations will actively engage and collaborate with provincial and national beef organizations to ensure stakeholders are aware of investments and activities undertaken on their behalf and to encourage regular communication and feedback
- 2. Enhance industry's ability to speak with consistent messaging
 - a. Provide ongoing development of approved key messages for industry to utilize
 - b. Encourage provincial associations and their members to engage stakeholders using approved messaging and providing resources for local adaptation

FOCUS AREA B: ISSUES MANAGEMENT (PSE)

Context

While public trust research continues to show strong support for the beef industry, it also highlights the growing knowledge gap between public audiences and agricultural producers. Negative attitudes are only seen by a small percentage of consumers who largely do not eat meat and these opinions do not have

much influence on most Canadians. However, the knowledge gap means that many are not able to have a strong opinion on many production practices because they simply do not know much about what happens on-farm. This opens the door to misconceptions about beef production – whether it is animal care, hormone implants or the environmental footprint of the industry. It is important that the industry is working proactively to provide this information to consumers but also prepared to strategically respond to misinformation or issues that could impact public trust.

Approach

In all consumer research on public trust, farmers and ranchers continue to be the top source that Canadians want to hear from when it comes to raising and producing food. Therefore, significant emphasis is placed on engaging, equipping and training producers and industry partners with the tools and resources needed to communicate directly with consumers and the general public. Sharing aligned, consistent and science-based messages through trained spokespeople across Canada fosters transparency and trust. Media tracking and social listening tools are also utilized strategically to monitor misinformation, emerging issues and public sentiment on issues.

- 1. Maintain the Canadian beef industry's social license to operate through communicating production practices and identifying opportunities for continuous improvement in areas of public concern
 - a. Actively participate through with global partners on issue tracking and response including the National Cattlemen's Beef Association, the Global Roundtable for Sustainable Beef, the International Meat Secretariat and the Global Meat Alliance
 - b. Keep the Code of Practice for the Care and Handling of Beef Cattle current with consideration for advances in science, production practices, availability of new technologies, and public expectations
 - C. Active participation in international forums (ISO, WOAH) on animal care and handling to ensure Canadian beef production practices are appropriately represented and understood as new international standards are developed
- 2. Monitor, track and manage issues that could impact public trust in a timely manner with consistent and aligned messaging between industry partners and key stakeholders
 - a. Media monitoring subscription that is shared between national industry partners allows for issue tracking and social listening to measure public sentiment
 - b. Share insights with national communications managers and provincial associations as appropriate, determining course of action for communication
 - c. Quarterly strategy discussions between national organizations and provincial communication staff on issues management to clearly define industry priorities and organizational strategies
 - d. The Expert Network solidifies relationships with spokespeople across the country who have expertise in various subject matter areas and are updated regularly
 - e. Media training is offered to a wide variety of industry representatives including primary producers (with a focus on young producers and TESA nominees), veterinarians and culinary influencers to prepare for public facing interviews
 - f. Make information easily understood and readily accessible to assist producers in being industry advocates
 - g. Solidify relationships with key public influencers to support and promote the healthfulness of beef in the diet

FOCUS AREA C: YOUTH PROGRAMS (CYL/YOUTH COUNCIL)

Context

Filling the labour gap in the Canadian beef industry and addressing an aging workforce continues to be a large challenge. Attracting young entrants and retaining young producers in the sector will be key to future growth. According to the Canadian Agricultural Human Resource Council (CAHRC) Commodity Dashboard, the current labour gap in the beef sector for 2022 is 5,856 jobs and this estimate is expected to reach around 14,000 by 2029.

The average age of Canada's farm operator was reported as 56 years old in the 2021 Canadian Ag Census. At the same time, the Census also showed only 12 per cent of all Canadian beef cattle farms have an operator 35 years old or younger. Of the beef operation multi-generational farms identified in the 2021 Ag Census, 10.5 per cent have a written succession plan indicting family members as the farm successor, showing room for increased engagement to encourage beef cattle producers to take proactive action on transitioning their farm businesses. To build a sustainable beef industry in Canada, youth continues to be front and center, while also proving to be an integral part of domestic and international advocacy opportunities. Various topics such as succession planning, new entrants, and engaging a broader group of young beef producers have been raised as areas of interest to various national and provincial beef industry organizations, and industry stakeholders.

Approach

The youth programs are designed to be a funnel, training individuals so they are confident when the time comes to become engaged with industry through provincial association boards and move onto national associations. It is recognized that many of these individuals may take a season away from industry as they build their family, business or career. Others become leaders within the service sector or with NGOs. All of this, strengthens the beef industry as a whole. Build a strong next generation in the Canadian beef industry by continuing to advance and grow the Canadian Cattle Association's Youth Programs; the Canadian Cattle Young Leaders (CYL) Program and the Canadian Cattle Youth Council (Youth Council). Through personalized professional and leadership opportunities offered through the mentorship program, and continued advocacy work with the Youth Council and its young beef producers, these programs serve as important industry succession tools within the sector. There will also be opportunities to look at broader youth engagement strategies within the Canadian beef industry.

- 1. Amplify existing resources on succession planning with youth in the beef industry
 - a. The Youth Council will strive to amplify industry resources with young producers on succession planning and various options to access capital by engaging with its membership (newsletters, social media, etc.) and collaborating with industry to reach new audiences
 - b. The Youth Council will work with CCA to advocate for policy and programs that assist the younger generation with accessing capital, farm transfers and building additional revenue streams
 - c. Provide succession planning training/workshop content to every cohort of Canadian CYL Program participants
 - d. Provide financial literacy/management training to Youth Council delegates and Canadian CYL Program participants to aid in succession at the farm and board level
- 2. Build collaborative, broader industry youth engagement initiatives
 - a. Work in collaboration with breed associations, provincial CCA members, and other interested parties to incorporate more youth involvement at existing, or new, regional events and field days
 - b. Host biannual calls with the various beef organizations, 4-H, and Junior Breed Associations

engaged in youth development to share updates and collaboration opportunities

- c. Encourage other organizations and regional boards in the Canadian beef industry to look at creating a youth position to support board continuity and transition, and provide a young producer perspective. (Doesn't need to formally be affiliated with the Canadian Cattle Youth Council)
- d. Invite <u>Beef Advisors</u> to serve on the CYL Mentor Selection Committee
- e. Explore the concept of a YouTube video series targeted at young people in the beef industry to support knowledge transfer, encourage youth to action, and create a sense of community with the next generation on social media
- f. Create and compile mentorship resources for mentors in the Canadian CYL Program that can be shared and utilized by the broader industry
- 3. Attract new talent and entrants to the beef industry, while retaining young producers
 - a. Youth Council to work collaboratively on CCA policy to build a profitable beef industry that is economically viable to attract new entrants. Work with CCA to advocate for policy and programs that build the profitability of young people with feasible access to capital
 - b. Continue to utilize the Canadian CYL Program to provide young people more opportunities for career exploration
 - c. Participate in career fairs and build engagement with post-secondary institutions to attract new talent and entrants to the Canadian beef industry
 - d. Continue to support existing young beef producers through CCA's youth programming, and working collaboratively with industry, to ensure they have the knowledge, skills, and opportunities to run a viable farm/ranch business in Canada that can be passed down to future generations
- 4. Build the youth voice in domestic and international advocacy efforts
 - a. Continue to incorporate youth into provincial, domestic and international advocacy efforts to further position the Canadian beef industry as a global leader in sustainability.
 - b. Explore advocacy training opportunities for youth engaged in provincial, domestic and international advocacy efforts to help strengthen their leadership and influence in local and global dialogues.
- 5. Continued support and investment in youth programming
 - a. Continued support and further advancement of the Canadian Cattle Young Leaders (CYL) Program.
 - b. Empower the Canadian Cattle Youth Council to become more engaged in CCA policy development.

FOCUS AREA D: ENGAGE INDUSTRY, GOVERNMENT AND GLOBAL PARTNERS (ALL)

The national beef organizations share a common goal to enhance the productivity, profitability and competitiveness of the various sectors within our industry. The National Beef Strategy has strengthened the communication and collaboration between the national organizations, reducing duplication and amplifying messaging as industry speaks with one-voice.

"It is about who you know, not what you know" is an axiom that recognizes the importance of relationships and networking. Particularly, as faces change in organizations and these relationships need to be rebuilt. The Canadian Beef Industry Conference (CBIC) provides a single meeting place for everyone in the supply chain to stay connected. It also encourages information sharing across industry organizations to avoid duplication of efforts and builds strategic relationships in order to facilitate responsiveness of the industry to a wide range of demands.

Maintaining long-term relationships with government, regulatory agencies, the public and consumers, partner industries, land use and conversation organizations, and at international forums is necessary to

establish trust, transparency, and build credibility that enables industry to effectively address issues that arise.

The national beef organizations are committed to communicating what they are doing transparently with the provincial associations and keep them abreast of activities conducted to benefit the entire industry.

- 1. The Canadian Beef Advisors to oversee the delivery and reporting on the National Beef Strategy for the beef cattle industry
- 2. Facilitate a national event with multiple industry organizations conducting meetings and bringing industry together
 - a. Bring together a large audience of producers to engage in multiple meetings and place continued focus on the National Beef Strategy, with annual performance reporting and priority discussions
 - b. Facilitate formal and informal collaborations between industry leaders, staff, and stakeholders to encourage ongoing discussions and exchanges of information regarding issues and opportunities of priority
- 3. Build strategic partnerships with external stakeholders to support and promote beef production and consumption
 - a. Invest in developing long-term relationships with a broad range of stakeholders, including domestic and international organizations, encouraging collaboration on priorities of mutual interest (i.e. trade agreements, animal health and care, government policy and programming, research, marketing, environment and biodiversity conservation) and open discussion when differences arise
 - b. Participate in consumer discussions and forums to obtain feedback and provide information regarding the Canadian beef industry (i.e. producer participation in retail/end-user marketing initiatives and end-user consumer forums)
- 4. Engage government and regulatory agencies to build and maintain long-term relationships
 - a. Continued investment in long-term relationships with government bureaucrats and elected officials to establish trust, transparency, and build credibility to encourage open dialogue and communication channels that are available in times of normalcy and crisis
 - b. Encourage industry to speak with one voice when engaging government to ensure clarity of priority and direction
 - c. Active participation in government/forums to ensure continued progress is made on files of priority to the industry
 - d. Actively partner with provincial organizations, Federal and Provincial Governments in international ministerial trade missions and market development activities with trade commissioners, embassies and consulates in markets of interest to the Canadian beef industry
- 5. **NEW!** Represent the Canadian beef industry at influential international forums
 - a. Protect and enhance Canadian beef's reputation as a high-quality, nutrient-dense protein produced in an environmentally sustainable manner within markets and international forums
 - b. Draw awareness to the Canadian beef industry's role in achieving the UN Sustainable Development Goals (SDG), specifically SDG 2,12, 13 and 15. Monitor and engage in UN and other international forums to amplify the Canadian beef industry's contributions to biodiversity, climate change solutions, food security, nutrition, animal health, and trade
 - c. Monitor and inform domestic and international target setting, and advocate that any policy recommendations and pathways be science and evidence-based and enhance the Canadian beef industry's ability to feed a growing global population
 - d. Raise awareness amongst Canadian beef producers of the importance of why the Canadian beef industry engages in international forums

CONCLUSION

The National Beef Strategy demonstrates leadership and provides clarity as various stakeholders come together to work towards a common goal. The five pillars address every aspect of the industry from grass-roots supply to consumer demand and all the issues that arise in between. Communicating efforts that contribute to these goals will ensure duplication of efforts are reduced and existing investments are leveraged.

The 2025-30 National Beef Strategy builds on the successes reported from the <u>2020-24 National Beef</u> <u>Strategy</u> in the <u>2020-22</u> and <u>2022-24</u> Status Updates.

Learn more at <u>www.beefstratetgy.com</u>

APPENDIX A: BASELINE METRICS FOR 2030 GOALS

Beef Demand	2024 Baseline
% AAA and Prime Production of all A Grades	82.2%
Value of AAA and Prime carcass (source: USDA Choice-Select	US\$16/cwt
spread)	2019-23 avg US\$17.67/cwt
Sustainability	2021 NBSA
Safeguard the existing 1.5 billion tonnes of carbon stored on lands managed with beef cattle	1.9 billion tonnes (Source: 2021 NBSA)
Sequester an additional 3.4 million tonnes of carbon every year	N/A
Reduce food loss and waste (from secondary processing to consumer) by 50%	N/A
Maintain the 35 million acres of native grassland in the care of	33.9 million acres of Natural Pasture
beef producers (Census of Agriculture, 2016)	(Census of Agriculture, 2021)
Reduce serious, fatal, and fatigue-related incidents by 1.5	Canadian agriculture had a fatality rate of
percent per year up to 2030	11.5 people per 100,000 farm population
Between 1990 and 2012 fatality rates declined on average 1.1%	(including non-workers) from 2003-2012
per year (CAIR, 2016). The goal set is designed to accelerate the	(CAIR, 2016).
already good efforts in this area by provincial agricultural safety	
boards.	
boards. Competitiveness	Baseline
	Baseline Agriculture vacancy rate of 7.4% in 2022
Competitiveness	
Competitiveness Reduce the labour shortage and other cost disadvantages	Agriculture vacancy rate of 7.4% in 2022
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production	Agriculture vacancy rate of 7.4% in 2022 (CAHRC)
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11%
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>)
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11% <i>Source: 2023 Canadian Cow-Calf Survey</i> 80.6% of herd have >75% polled genetics
CompetitivenessReduce the labour shortage and other cost disadvantages compared to main competitorsProductivityAttain 92% reproductive efficiency in Canadian beef production (85% in 2018) (Source: July 1st Statistics Canada Inventories)	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11% <i>Source: 2023 Canadian Cow-Calf Survey</i>
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production (85% in 2018) (Source: July 1 st Statistics Canada Inventories) Adopt management and breeding choices that support animal	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11% <i>Source: 2023 Canadian Cow-Calf Survey</i> 80.6% of herd have >75% polled genetics 47% used pain mitigation all the time for dehorning, 23% used depending on age and
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Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production (85% in 2018) (Source: July 1 st Statistics Canada Inventories) Adopt management and breeding choices that support animal	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11% <i>Source: 2023 Canadian Cow-Calf Survey</i> 80.6% of herd have >75% polled genetics 47% used pain mitigation all the time for dehorning, 23% used depending on age and method. 26% used pain mitigation all the time for castration, 20% used depending on age and method. 80% used a rubber band at <3
Competitiveness Reduce the labour shortage and other cost disadvantages compared to main competitors Productivity Attain 92% reproductive efficiency in Canadian beef production (85% in 2018) (Source: July 1 st Statistics Canada Inventories) Adopt management and breeding choices that support animal	Agriculture vacancy rate of 7.4% in 2022 (CAHRC) 2024 Baseline 85% in 2024 (<i>Source: Statistics Canada</i>) Open rates for cows 7.4%, heifers 11% <i>Source: 2023 Canadian Cow-Calf Survey</i> 80.6% of herd have >75% polled genetics 47% used pain mitigation all the time for dehorning, 23% used depending on age and method. 26% used pain mitigation all the time for castration, 20% used depending on age and