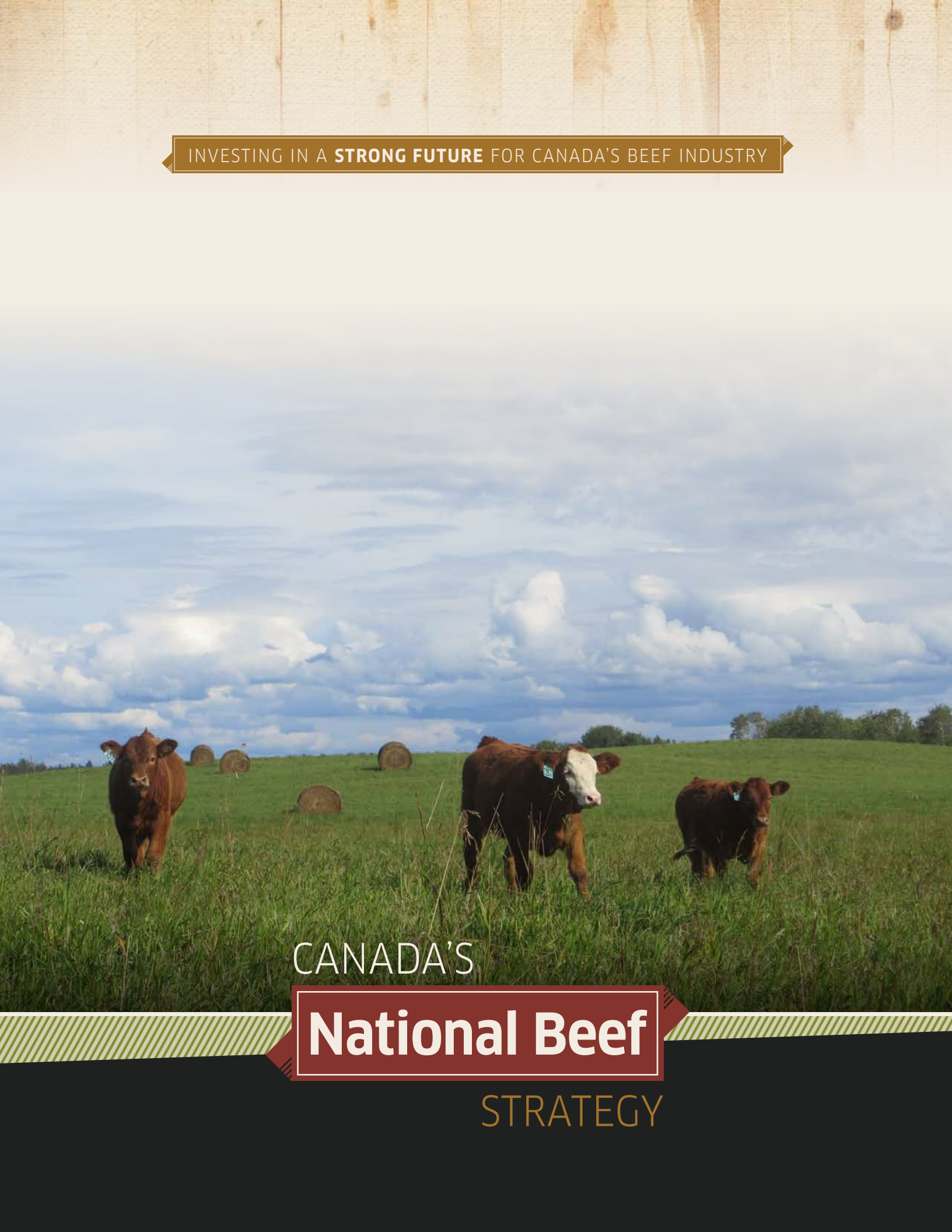


INVESTING IN A **STRONG FUTURE** FOR CANADA'S BEEF INDUSTRY



CANADA'S

National Beef

STRATEGY

Canada's National Beef Strategy

Alberta Beef Producers

British Columbia Cattlemen's Assoc.

Canadian Cattlemen's Assoc.

New Brunswick Cattle Producers

Saskatchewan Cattlemen's Assoc.

Beef Cattle Research Council

Canada Beef Inc.

Manitoba Beef Producers

Nova Scotia Cattle Producers

Beef Farmers of Ontario

Canadian Beef Breeds Council

National Cattle Feeders' Assoc.

*Prince Edward Island Cattle
Producers*

December 22, 2014

Table of contents

- Executive summary 2
- Background 4
 - Rationale for a National Beef Industry Strategy 5
 - Process of development 6
- National Beef Strategy 7
 - Vision..... 7
 - Mission 7
- Strategy Pillars and goals 7
- Pillar 1: Beef Demand 7
 - Focus Area A: Domestic and global marketing 7
 - Focus Area B: Market access 8
 - Focus Area C: Validate and enhance the Canadian Beef Advantage 10
 - Focus Area D: Consumer confidence 12
 - Focus Area E: Social license 13
- Pillar 2: Competitiveness 14
 - Focus Area A: Supportive regulatory environment 14
 - Focus Area B: Access to competitively priced inputs 16
 - Focus Area C: Maintain and enhance key research capacity (expertise and facilities) 17
 - Focus Area D: Economic, social and environmental sustainability 18
- Pillar 3: Productivity 20
 - Focus Area A: Genetic selection 20
 - Focus Area B: Research and development 21
 - Focus Area C: Technology development and adoption 22
 - Focus Area D: Enhance information flow 23
- Pillar 4: Connectivity 25
 - Focus area A: Industry communication 25
 - Focus Area B: Engage industry partners 26
 - Focus Area C: Engage government and other industry/global partners 27

EXECUTIVE SUMMARY

The Canadian beef industry is at a pivotal point in time. Cattle numbers are down across much of the world and demand for high quality protein is increasing in most developing nations. The majority of markets closed due to BSE have been reopened and a number of new and very significant trade agreements will come into effect over the next several years that open new opportunities for Canada's beef industry.

Today the industry is enjoying record beef and live cattle prices. In the past this would have attracted record imports of manufacturing beef into Canada and the USA, but with strong world demand particularly in Asia and Brazil and tight world supplies, those beef products are sold at a better return into those markets. It is believed that the Canadian beef industry has moved into a new price range that can and needs to be sustained in order to create the returns necessary to stabilize and grow our cattle numbers.

Normally the current conditions would compel a strong and rapid expansion of cattle numbers in North America. However with strong returns in the grains and oilseeds sector and strong future prospects, there is more competition for arable land and more acres being cultivated into annual crop production. Canada's beef cattle numbers are stabilizing and should begin to grow. This is likely to be much slower than seen in most previous cattle cycles as producers choose between the economics and risks of annual cropping or raising cattle. Higher feed and production costs, as well as greater market volatility will also be major factors affecting producers' decision making processes moving forward.

Given the expectation for continued growth in global beef demand coupled with tight supplies, there is an opportunity for the Canadian beef industry to position itself strategically and grow demand for Canadian beef products globally. To help make this happen, national and provincial industry organizations worked together to address identified priorities and ensure key initiatives are appropriately funded. With Canada currently at the bottom of its cattle cycle, check-off revenues are the smallest since the early 1990s. Since the National Check-off was introduced in 2002, inflation and a reduced number of marketings resulted in less check-off collected, limiting resources.

The need for all beef industry stakeholders to collaboratively discuss funding issues and to develop, implement, and report on a national strategy that could be used to communicate the value of check-off to producers is clear. Acting on this, representatives from the Canadian Cattlemen's Association (CCA), its provincial members, Canada Beef Inc. and Beef Cattle Research Council (National Check-off recipients), the Canadian Beef Breeds Council (CBBC) and the National Cattle Feeders' Association (NCFA) have worked together as the National Beef Strategic Planning Group (NBSPG) to draft this National Beef Strategy.

This strategy is about how we can work together to best position our industry to compete for a larger share of the world market and to become the high quality beef product of choice in the world. The Strategic Plan has been developed with the aim to achieve targeted industry goals that are aligned with the industry's vision and mission under four pillars:

Vision: *A dynamic profitable Canadian cattle and beef industry*

Mission: *To be the most trusted and competitive high quality beef cattle producer in the world recognized for our superior quality, safety, value, innovation and sustainable production methods.*

Industry Pillars: *Beef Demand, Competitiveness, Productivity and Connectivity*

The pillars identify key focus areas where industry stakeholders work together to collectively achieve the outcomes identified. Under each focus area specific outcomes have been defined that work towards meeting the goals established by industry. The goals established are measurable benchmarks for which the industry is held accountable.

The goal of the **Beef Demand** pillar is to enhance beef demand and as a result enhance carcass cutout values by 15% over the next five years. This will be achieved by focusing on domestic and global marketing, market access, validating and enhancing the Canadian Beef Advantage, consumer confidence and social license. The goal of the **Competitiveness** pillar is to reduce production cost disadvantages compared to our main competitors by 7% over the next five years. This will be achieved by focusing on regulatory burden, access to competitively priced inputs, maintaining and enhancing key research capacity, and economic, social and environmental sustainability. The goal of the **Productivity** pillar is to increase production efficiency by 15%, through focusing on genetic selection, research and development, technology development and adoption, and enhanced information flow. The fourth pillar, **Connectivity**, is unique in its goal which is to enhance industry synergies, connect positively with consumers, the public, government, and partner industries by actively addressing industry issues.

The NBSPPG, with input from elected officials and members of their respective groups, is positioned to oversee the development and implementation of a five year Strategic Plan. The Plan is intended to be supported and delivered through a comprehensive operational strategy upheld by the various provincial and national industry stakeholders. Funding scenarios to support the operational strategy and ensure resources are leveraged effectively on behalf of producers will be developed.

The Strategic Plan is intended to be a dynamic document and process, which continues to evolve based on stakeholder feedback and ongoing review as identified outcomes are achieved and industry priorities change. The Plan will also be reviewed on an annual basis to ensure the priorities and outcomes established are aligned with the needs of the beef cattle industry. Communicating a consistent message that transcends all industry activities and programming is imperative to maintain consumer confidence in the Canadian beef industry.

A National Beef Strategy involving the participation and agreement of all stakeholders demonstrates leadership and provides clarity to achieve industry commitment and ensure adequate funding to meet industry's goals for the future.

BACKGROUND

The Canadian beef industry, as represented by the national policy, marketing and research organizations and their provincial members, has recognized the need for a comprehensive industry strategy that communicates to stakeholders what the industry's vision, mission, and priorities are. The intent of an industry strategy is to clearly define a five year plan with specific outcomes defined in key priority areas and see the alignment of various industry organizational plans to ensure industry is working together and leveraging its resources effectively on behalf of producers. In 2013, the process was initiated which led to the development of this **National Beef Strategy**.

Key industry stakeholders involved in the development of the strategy include the following.

The **Canadian Cattlemen's Association (CCA)** 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), 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, which is \$2-3/animal marketed across the provinces. The CCA provides national policy representation in several areas including animal care, animal health and meat inspection, domestic agriculture policy, environment, foreign trade, and value creation and competitiveness.

The **National Cattle Feeders' Association (NCFA)** was established in 2007 to represent Canadian cattle feeders on national issues and works in collaboration with other cattle organizations across the country. Funding is provided through membership fees. Key focuses include: improving industry competitiveness, increasing domestic value added production, and expanding markets for Canadian beef.

The **Canadian Beef Breeds Council (CBBC)** supports Canadian purebred cattle producers through service provision aimed at genetic improvement, animal health, extension services and information dissemination. The CBBC is focused on the promotion of Canadian beef cattle genetics both domestically and internationally by identifying market opportunities, facilitating access through timely intelligence and informing the commercial industry of the attributes of the Canadian Beef Advantage both at home and abroad. The CBBC also represents the purebred cattle sector to government by advocating effective policy, ensuring market access and enhancing competitiveness. Funding is provided through member fees and matching government funds.

Canada Beef Inc. (CBI) is the national organization that collects the National Check-off and provides market development programs for Canadian beef domestically and globally that maximize the cutout value. The domestic market continues to be the largest and most stable market for Canadian beef. CBI identifies and develops key export markets to increase the value of Canadian beef and veal products – in collaboration and cooperation with like-minded companies, organizations and institutions.

The **National Check-off (NCO)** is one dollar per head collected on cattle sales throughout Canada. The NCO was created in January 2002 and is legislated under the federal *Farm Products Agencies Act*. The fee is collected through the provinces, using their existing collection systems involving auction markets,

order buyers, brand inspectors and others who handle cattle sales. The National Check-off is remitted to the **Canadian Beef Cattle Research, Market Development and Promotion Agency** operating as **Canada Beef Inc.** The overarching goal of the NCO is twofold: (1) to increase Canadian beef demand, domestically and globally; and (2) to reduce costs of production and improve competitiveness by finding better and more efficient methods of producing beef. To achieve these goals the NCO funds Canada Beef Inc. and Beef Cattle Research Council.

The **Beef Cattle Research Council** (BCRC) is the national research group. Its purpose is to fund research, technology development and adoption in support of the vision to “Be recognized globally for beef research that delivers innovations contributing significantly to the profitability and sustainability of the Canadian beef cattle and meat industry.” Research priority areas include: Animal Health & Welfare, Beef Quality, Feed Grains & Feed Efficiency, Forage & Grassland Productivity, Environment and Food Safety.

RATIONALE FOR A NATIONAL BEEF INDUSTRY STRATEGY

The Canadian beef industry has gone through ten years of tremendous change from 2003 to 2013. Following the announcement of BSE in May 2003 and closed markets, excess production and depressed prices, the industry went through one of the largest liquidation phases in history with 25% of beef cow inventories removed between 2006 and 2013. This liquidation was amplified by a structural shift in the grain market, driven by ethanol demand for corn; the dramatic appreciation of the Canadian dollar at the same time; and rising labour costs with a strong resource sector driving increased competition for labour. Higher input costs squeezed margins throughout the supply chain. In addition to higher costs, commodity markets underwent significant volatility with a global financial crisis in 2008 that shook western consumer demand, while at the same time there was dramatic growth in Asian demand for commodities; particularly oilseeds and protein.

Competition in the global beef market has seen continual change over the last decade, with market share held by major beef exporters shifting due to market restrictions, supply and demand, competitive advantages and/or disadvantages for particular exporters, and changes within import markets resulting in new opportunities. Of particular note India became a new player in the global beef export business and within three years it has become one of the top three exporters in the world.

For Canada in particular, while market access to many major export destinations has been regained over the last decade, trade restrictions do remain in some markets and non-tariff trade barriers have become more common in protecting domestic producers and impeding trade. In addition, the US introduced mandatory Country of Origin Labelling (COOL) in 2008 with regulations becoming even more stringent with an amendment in 2013, which has substantially impacted Canadian live cattle exports and also impacted beef trade.

Consumer concerns about production practices (environmental impact, animal welfare and sustainability) have also come to the forefront both at home and abroad in recent years. Sustainability is a buzz word that is causing retailers and foodservice to struggle to communicate to consumers how beef is produced. Communicating a consistent message that transcends all industry activities and

programming is imperative moving forward to maintain consumer confidence in the Canadian beef industry.

Global beef demand is expected to continue to grow, as the global population increases and a rising middle income class in several major regions encourages increased beef consumption. At the same time global beef supplies are currently very tight, as China becomes a major importer and many exporters struggle to expand beef production. Beef production has been slow to expand in many major beef producing regions in light of increased competition for acreage for crop production and higher labour costs affecting the costs of production. This represents an opportunity for the Canadian beef industry if it can position itself strategically and grow demand for Canadian beef products globally, while also seeing significant improvements in productivity to enhance the competitiveness of Canadian beef production relative to other commodities and other major beef producing regions in the world.

In order to take advantage of the current global market environment industry organizations need to work together to address identified priorities and ensure key initiatives are appropriately funded and limited resources and capacity are directed in the most efficient manner possible. At the bottom of the cattle cycle check-off revenues are currently the smallest since the early 1990s. Furthermore, since the National Check-off was introduced in 2002, inflation and a reduced number of marketings per animal have meant that less check-off is collected for every animal. Many other commodities have experienced the same decrease and have undergone reviews of their check-off levels over the last three years. (see *Appendix*)

A National Beef Strategic Plan involving the participation and agreement of all stakeholders demonstrates both leadership and provides clarity to achieve industry commitment and ensure adequate funding to meet industry's goals moving forward.

PROCESS OF DEVELOPMENT

Discussions were initiated between the CCA, its provincial members and national check-off recipients (CBI and BCRC) in October 2013 to discuss funding issues as the industry moves forward with reduced numbers and to explore the need/value of a medium/long term industry strategy that could be used to communicate to producers how check-off dollars were being invested and the value that investment has represented over time.

In December 2013, a more inclusive process was initiated with the creation of the National Beef Strategic Planning Group (NBSPG) and appointment of co-chairs Martin Unrau (CCA) and Chuck MacLean (CBI). The National Cattle Feeders' Association and Canadian Beef Breeds Council were asked to join the NBSPG and partake in the development of the strategic plan. A collaborative process followed with staff time contributed by each organization.

The NBSPG is intended to be an industry body with membership representing various beef and cattle industry stakeholders who will oversee and approve the development and implementation of a five year National Beef Strategic Plan that encompasses a solid vision and mission supported by key pillars. The intent is that the Strategic Plan will be supported and delivered through a comprehensive operational strategy upheld by industry stakeholders.

The development of the National Beef Strategic Plan has been a huge undertaking by all the industry organizations and stakeholders involved, with the intent of resulting in a truly collaborative and highly focused plan that encompasses targeted outcomes in the identified priority areas. The strategic plan is intended to be a dynamic document and process, which continues to evolve based on stakeholder feedback and ongoing review as identified outcomes are achieved and industry priorities change. The intent is that the five year strategy and operational plan will be reviewed annually to ensure alignment with the strategic plan and timely and successful execution. The strategic plan will also be reviewed on a regular basis to ensure the priorities and outcomes established are aligned with the needs of the beef cattle industry.

NATIONAL BEEF STRATEGY

Vision

- A dynamic profitable Canadian cattle and beef industry

Mission

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

STRATEGY PILLARS AND GOALS

The National Beef Strategic Plan has been developed with the aim to achieve targeted industry goals that are aligned with the industry's vision and mission under four key pillars. The pillars identify key areas of focus where industry stakeholders will work together to collectively achieve the outcomes identified. Under each focus area in the strategic plan specific outcomes have been defined that work towards meeting the goals established by industry. The goals established are measurable benchmarks for industry to be held accountable to.

The four pillars and goals are:

- 1) **BEEF DEMAND:** Increase carcass cutout value by 15%
- 2) **COMPETITIVENESS:** Reduce cost disadvantages compared to main competitors by 7%
- 3) **PRODUCTIVITY:** Increase production efficiency by 15%
- 4) **CONNECTIVITY:** Enhance synergies within industry and connect positively with consumers, the public, government, and partner industries

PILLAR 1: BEEF DEMAND

The goal of this pillar is to enhance beef demand and as a result enhance carcass cutout values by 15% over the next five years.

FOCUS AREA A: Domestic and global marketing

Context

A number of areas contribute to growth in beef demand including marketing and promotion activities that encourage increased sales of Canadian beef both domestically and globally. Each animal we raise will be processed into over 300 products. Steaks, roasts, and ground beef are generally the products in

the greatest demand in Canada and the USA. Many of the other products such as short ribs, skirt, flank, short plates, tongues, etc. and a whole range of offals will command greater value in other markets where those items are a staple or delicacy in that countries diet. Exporting those products to customers who are prepared to pay a higher value for them incrementally returns over \$300 additional value per animal we produce. By distributing the value over more part of the animal, it also allows the steaks and roasts we sell in Canada to be priced more competitively.

Approach

We are the second largest producer of high quality grain fed beef in the world. Consequently marketing and promotion efforts are focused on ensuring Canadian beef is recognized for its premium quality, safety and value in priority markets while driving incremental value. Over the last ten years the Canadian beef industry has placed significant emphasis on developing the Canadian Beef Advantage brand and growing brand awareness. Moving forward Canada Beef Inc. is working to continue to grow awareness of the Canadian Beef Advantage and continuing to enhance customer loyalty to the Canadian beef brand through marketing and promotion activities in both the Canadian and international markets. Emphasis will also be placed on aligning industry stakeholders to foster collaborative, sustainable Canadian beef solutions.

KEY OUTCOMES & OBJECTIVES

1. Establish the Canadian Beef Advantage (CBA) as the most recognized and loyalty-based beef program in the world
 - 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 export markets with positive messages on Canadian beef through the use of brand ambassadors, trade events, and marketing partnerships
2. Get the right product to the right customer every time
 - a. Through new product development and the Centre of Excellence enhancing carcass utilization and value
 - 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

FOCUS AREA B: Market access

Context

At any given time there are dozens of tariff and non-tariff barriers that foreign governments have in place, which result in access limitations for Canadian beef in specific markets or place Canadian beef at a

competitive disadvantage relative to other importers and/or local producers. Over 40% of Canadian beef production is exported so minimizing the impact of these measures through the establishment of free trade agreements, enforcement of existing trade agreements, and resolution of market access issues is integral to increasing the number of customers of Canadian beef and thus growing Canadian beef demand.

The development of free trade agreements and reduction of market access restrictions can involve a tremendous amount of industry and government time and effort. In addition, the commercial impact of various trade agreements and market access issues are not equal. Consequently it is important that there is consensus between industry partners as to the top trade priorities to focus on. This graduated list of priorities must be reviewed on a regular basis by industry partners to determine if changes in market access efforts are necessary to capitalize upon opportunities for success and markets that are deemed to be of heightened consequence.

Approach

The Canadian beef industry has regained at least partial access into all of its key export markets following BSE and current efforts are focused on reaching full access in the next few years.

Canada has been undertaking the most ambitious trade agenda in the world. Canadian beef has been identified as a priority export product in almost all of these negotiations. Trade Agreements such as the Canada EU Trade Agreement (CETA) and Canada Korea agreement require more work to get adopted and to ensure any technical constraints are removed. Industry must also actively participate in ongoing negotiations such as the Trans Pacific Partnership and the Canada Japan Economic Partnership Agreement, which offer huge opportunities to Canada's red meat industries if implemented in a meaningful manner. All of these agreements are essential to ensure Canada has equivalent and/or preferential access vs other major beef exporters.

Maintaining market access is just as important as gaining it. Unfortunately as tariff walls come down, we are seeing increasing use of non-tariff trade barriers (like ractopamine) to impede market access. It requires constant vigilance by industry and government and strong responses to deal with these problems. Increased investment in deterring this new form of protectionism through the promotion of science base international guidelines and effective disciplines and responses will be required by export dependent industries such as the Canadian beef industry. U.S. Mandatory Country of Origin Labelling (COOL) is a prime example of how existing market access can be threatened at great cost to the industry.

KEY OUTCOMES & OBJECTIVES

1. Reduce non-tariff and tariff barriers in our export markets for beef, live cattle, and beef cattle genetics
 - a. Implement Canada-Korea Free Trade Agreement by early 2015 to keep pace with Korea-US Free Trade Agreement and eventually eliminate Korea's 40% tariff on Canadian beef
 - b. Achieve either a Canada-Japan Free Trade Agreement or successful implementation of the Trans Pacific Partnership agreement to eliminate Japan's 38.5% tariff on Canadian beef
 - c. Eliminate discrimination of Canadian livestock in the United States market caused by mandatory Country of Origin Labelling (mCOOL)
2. Gain equal or preferential access in key exports markets for Canadian beef, live cattle, and beef cattle genetics
 - a. Implement the Canada EU Trade Agreement (CETA) and achieve recognition of equivalency of Canadian and EU meat inspection systems

- b. Improve market access to Russia through addressing the ban on the use of ractopamine, approval of Canadian facilities and expansion of access for Canadian beef to include bone-in over 30 month (OTM) product
 - c. Establish minimum residue limits (MRLs) for ractopamine in China and achieve the resolution of other technical issues including the definition of chilled/frozen product
3. Eliminate remaining BSE market access restrictions
- a. Achieve access for OTM beef in Mexico
 - b. Achieve access for UTM bone-in product in China and obtain comprehensive approval of Canada's meat inspection system.

FOCUS AREA C: Validate and enhance the Canadian Beef Advantage

Context

The Canadian Beef Advantage (CBA) consists of functional and emotional attributes of the supply chain and its products that create the value proposition for Canadian beef. Core attributes of the CBA help define the Canadian beef brand in domestic and global markets and provide a foundation for brands developed by stakeholders in the Canadian industry. The attributes of the CBA are often created by a significant investment of time and other resources by stakeholders that make up the supply chain. This investment is best justified with an understanding of how core CBA attributes can influence sales volume and value in markets for Canadian beef. Beyond validating the CBA and identifying what we need to be doing it is imperative that the industry is able to verify the CBA and confirm how well the industry is doing.

The Canadian beef industry has an incentive to continue to enhance and improve upon the Canadian Beef Advantage so it can position itself competitively within the domestic market and international markets. The enhancement of the CBA relies upon achieving a level of consensus around the core attributes of the CBA and also the ways in which they can be enhanced. The Canadian industry is uniquely positioned in this regard because of its smaller size and the widely held perspective that the industry is best served by targeting high quality beef opportunities as opposed to low cost production.

Approach

A significant amount of work has been done on the CBA but that work needs to continue with emphasis on validating the importance of existing attributes to domestic and international customers through the use of market research and surveys. Results of the validation process will help to guide investments in the supply chain, market activities and research.

Verification of how well the industry is doing involves national benchmarking initiatives including a beef quality and food safety audit where performance is measured over time and compared to our global competitors. Ultimately the continued development of the CBA; supported by ongoing investments to benchmark and improve quality, drive increased customer commitment and brand loyalty.

In addition to the commitment to complete a national Beef Quality Audit on a five year basis, Canada's beef industry is focused on making strategic investments in research to drive continued improvements in beef quality and food safety, thus positively influencing consumer satisfaction and beef demand and supporting the Canadian Beef Advantage. Specific research outcomes are identified in the National Beef Research Strategy that will contribute to achieving this objective.

KEY OUTCOMES & OBJECTIVES

1. Validate the Canadian Beef Advantage to determine if the attributes which are currently prioritized by the Canadian industry are those that are most likely to impact carcass value and

- beef demand in global markets.
- a. Market research in domestic and global markets to validate the CBA with the trade sector (trade professionals in retail, food service and further processing sectors), consumers, and supply chain stakeholders
 - b. Complete review of existing published academic market research completed in Canada and key international markets to identify key opportunities for enhancing the CBA and marketing Canadian beef
2. Verify the Canadian Beef Advantage to assess the effectiveness of efforts to improve the product attributes with the greatest impact on carcass value and beef demand.
- a. Verify Canadian beef quality through National Beef Quality Audit (NBQA) benchmarking of Canadian consumer satisfaction and laboratory measurements of tenderness and quality attributes at a retail level
 - b. Verify Canadian beef quality through NBQA benchmarking of carcass quality related attributes as measured at Canadian beef slaughter plants
 - c. Complete a NBQA imported beef benchmark study comparison of Canadian and imported beef quality and microbiological indicators as measured in the NBQA; focusing on existing and emerging import suppliers
 - d. Complete an a retail meat case audit to benchmark attributes related to value and merchandising of Canadian beef including carcass utilization, grade, specification, composition, production methods, packaging, production claims, origin, counter space allocation, protein market share, and other important attributes
 - e. Measure and compare Canadian beef quality and specifications to other major beef exporters through the completion of a NBQA Export Beef Benchmark Study
3. Develop of a National Total Quality Management System to enhance the Canadian Beef Advantage
- a. Develop technological systems capable of assessing quality parameters in live animals and beef carcasses in real-time.
 - b. Develop national standards and methods related to quality verification and measurement to facilitate sharing and usage of information
 - c. Complete quality verification assessments at a supply chain level
 - d. Develop Total Quality Management System reporting systems and educational materials for supply chain stakeholders
4. Develop new and enhanced tools to communicate the financial contribution of the quality and yield of Canadian beef cattle
- a. Complete a National Supply Chain Report on the Canadian Beef Advantage communicating and benchmarking national indicators related to core attributes including animal care and health, food safety, beef quality, and environmental sustainability
 - b. Provision of support of industry stakeholders to develop nationally recognized and science based claims relating to live cattle or finished beef products
 - c. Development of financial tools for meat professionals to support the communication of the financial value of Canadian beef products
 - d. Creation of resources to communicate developments in food safety to supply chain participants to support the Beef Safety Enhancement Program (CMC)
5. Further enhance the Canadian Beef Advantage through the development of a Supply Chain Strategy to Enhance the Canadian Beef Advantage
- a. Conduct a bi-annual workshop providing information on developments in research and technology which can enhance the CBA as well as benchmarking information related to the CBA
6. Research and development to improve consumer satisfaction with Canadian beef and validate the Canadian Beef Advantage
- a. Validate the effectiveness and value of genetic markers for tenderness in commercial cattle
 - b. Re-evaluate electrical stimulation recommendations to reflect increased carcass weights

- c. Validate objective in-plant measures of tenderness
- d. Identify potential interactions between tenderness genotype and animal management practices, and develop appropriate breeding and management recommendations
- e. Packaging and other technologies to improve shelf life for export developed.
- f. Canada's beef carcass quality and yield benchmarked relative to international competitors.
- g. Beef InfoXchange System data integrated with research analysis in order to monitor changes in industry practices and identify emerging issues.
- h. Improved algorithms for prediction of lean meat yield and/or retail product percentage.
- i. Genomic and grading technologies that allow for market segmentation according to carcass quality implemented.

FOCUS AREA D: Consumer confidence

Context

Consumers have more choice than ever on what they spend their food dollars on. In general, when people feel good and are confident about our product they will buy our products more often. The opposite also applies. Consumer confidence is impacted by food safety and quality, questions about production practices; particularly in the areas of environment and animal welfare.

Approach

Consumer confidence in Canadian beef is essential to maintain current customers and attract new ones. Consumers and trade partners need to be confident that Canadian beef is a safe, high quality, nutritious product that is produced in a sustainable manner. It is essential that all industry stakeholders communicate consistent, clear, accurate and transparent messages regarding Canadian beef. Furthermore it is essential that industry focus on food safety through continued investment in research and extension efforts that focus on the targeted reduction of food safety incidents and improved food safety in the beef supply chain.

KEY OUTCOMES & OBJECTIVES

1. Enhance consumer confidence in Canadian beef across all markets through a focus on enabling industry advocates, leadership in issues management, and partnerships with influencers
 - a. Increase participation in the Beef Advocacy Canada program to ensure industry leaders are informed and prepared to communicate consistent key messaging, as identified in the Competitiveness Pillar under Industry Communications
 - b. Establish an Issues Management Resource position, as identified in the Connectivity Pillar under Industry Communications
 - c. 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. Provide global social media support for all Canada Beef led and partnered activities
 - b. Produce a seasonal kit for provincial/national cattle associations and partner organizations to use for seasonal promotions, key consumer events and include coaching on the development of promotional assets
 - c. Conduct targeted promotional brand initiatives in priority markets through brand licence 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
3. Promote the health and nutritional benefits of beef to consumers

- a. Support communication of beef's premium quality by development of culinary and nutrition-related 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 IMS, Nutrient Rich Alliance, etc) in order to connect and collaborate on key health and nutrition issues that impact beef
 - f. Complete a systematic literature review on the nutritional attributes of beef to address consumer concerns, inform consumer education programs, and identify appropriate research directions and applications
4. Support consumer food safety education initiatives that demonstrate the effectiveness of our science based food safety system.
 5. Research and extension to drive the reduction of food safety incidences and improve food safety along the beef supply chain
 - a. Technologies targeting multiple pathogens in cattle and beef production and processing facilities developed and implemented
 - b. Objective approaches for verifying the effectiveness of packing equipment cleaning processes developed and adopted for 85% of processed cattle
 - c. Increased surveillance to detect, characterize and quantify the relative human health risk of (re) emerging pathogens
 - d. Effective probiotic intervention to eliminate pathogens for beef developed
 - e. Enhanced processor education to encourage the consistent adoption of known best practices to minimize the risk of pathogen contamination in beef processing plants

FOCUS AREA E: Social license

Context

Social license issues, which pertain to the public's perception of industry, are determined by overall societal perceptions, not only the attitudes and opinions of consumers. These perceptions can influence consumer preferences, government regulations and policies that impact producers ability to operate, and in some extremes on basic property rights. The social license to operate in agriculture is becoming increasingly visible in the media and continues to generate interest in the minds of the general public. Specific to the beef industry there is increased attention being paid to animal welfare, antimicrobial resistance, and environmental impact.

Approach

We know that Canadian beef is an exceptional product that is world-renowned for its production systems and environment. Our industry recognizes the quality of our processing facilities, the assurance systems in place, the strength of our regulatory and inspections system, and the quality and commitment of the people that make up the Canadian beef industry. In order to convey the Canadian beef industry's science-based approach and overall benefits to the general public, the industry must implement communication strategies and other methods to ensure the public perception is that the Canadian beef industry is transparent, trustworthy, and has an important role in our society.

KEY OUTCOMES & OBJECTIVES

1. 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.
 - a. Actively participate in the Canadian Roundtable for Sustainable Beef
 - b. Produce and launch consumer directed print/downloadable resources featuring factual insights around Canada's beef production systems and standards that convey transparency and confidence to global consumers
 - c. Develop broad-based Canadian beef industry promotional videos (i.e. Through the Fence project)
 - d. Participate in strategic partnerships and networking opportunities to positively influence attitudes regarding beef's role in a healthy, sustainable diet
 - e. Encourage public figures to promote the image of Canadian beef producers and beef production systems and seek other publicity opportunities that promote the Canadian beef industry in a positive and proactive manner
 - f. Support and enhance the Ag in the classroom program and work towards influencing curriculum changes that accurately depict the methods of producing beef in Canada
2. Increase public recognition of the beef industry's direct and indirect contributions to the Canadian economy and society.
3. Increase public recognition of the contribution of beef production to sustainability
 - a. Speak on the beef industry's contribution to sustainability in partnership with CBI and other stakeholders; utilizing appropriate publications, video vignettes, social media, and other forums to reach end users, consumers, and the public
 - b. Move forward with the implementation of the Canadian Roundtable for Sustainable Beef to grow awareness and promote sustainability to a broader audience
4. Increase public understanding of beef industry animal husbandry practices and how they are held up by the Beef Code of Practice
 - a. Communicate the role of responsible antimicrobial stewardship in maintaining the effectiveness of human health products
 - b. Maintain public and other stakeholder support of beef cattle production practices through support of the National Farmed Animal Care Council (NFACC) and regular review and renewal of the Code of Practice or the Care and Handling of Beef Cattle

PILLAR 2: COMPETITIVENESS

The goal of this pillar is to reduce production cost disadvantages compared our main competitors by 7% over the next 5 years.

FOCUS AREA A: Supportive regulatory environment

Context

Canadian cattle producers have demonstrated their economic competitiveness with other high quality beef producing nations around the world. In order for the Canadian beef industry to be competitive, it is necessary to have a regulatory system that supports the industry, encourages innovation and efficiency, and doesn't add unnecessary costs. The current governments focus on regulatory reform is positive for industry. 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.

Approach

The Government of Canada's current focus on regulatory reform is viewed very positively by industry and a significant step to supporting industry competitiveness moving forward. Industry is also

advocating for a new regulatory approach that defines the desired outcomes in regulation, while allowing for flexible approaches to achieving the outcome, rather than inflexible prescriptive regulations. If an agreed upon regulatory outcome can be defined, the industry/market place can determine the most effective means to achieving it. The Government has started to move in this direction and further changes are encouraged by industry.

Regulatory cooperation with major trading partners is also essential to the future competitiveness of the Canadian beef industry. The Canadian and US industries are highly integrated with approximately \$5-6 billion of trade in beef and pork products as well as live animal shipments between the two countries. The reduction of regulatory barriers would not only have direct benefits for the cost of production but it could also result in enhanced food safety and animal health in the North American marketplace.

OUTCOMES & OBJECTIVES

1. Advocate and uphold a scientific risk based regulatory system
 - a. 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 the government policy of one for one removing a policy/regulation for every new one introduced)
 - c. Proactively address and influence domestic and global food production standards, codes of practices, potential regulations, and consumer and public communications. 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.
2. 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 but allow for flexible approaches to achieving outcome rather than point by point prescriptive regulations
 - b. Pursue the move to a short list SRM, in harmony with the US and in accordance with scientific research on the effectiveness to eradicate BSE in Canada
 - c. Pursue the implementation of e-Certification for both exports and imports to streamline regulatory and management processes and facilitate the provision of real time information and speedy flow of goods.
3. 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
 - b. Actively participate through the Five Nations 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
 - c. Advocate adoption of provisions in the Trans Pacific Partnership (TPP) and other trade agreements for member countries to follow international guidelines such as CODEX for Maximum Residual Limits (MRL's) and Limited Liability Partnership's (LLP's) along with timely and effective remediation or disciplines to enforce compliance
4. Advocate that traceability expand based upon real benefits and fairly allocated costs through a national industry-led cattle identification systems, with emphasis on three pillars that include animal identification, premise identification, and animal movement
 - a. Implement the use of electronic manifests for traceability

FOCUS AREA B: Access to competitively priced inputs

Context

Decisions as to the number of cattle raised in Canada, where Canadian feeder cattle are fed, Canadian fed cattle are marketed, and Canadian beef is sold are all dependent on the cost of production along the entire supply chain. If costs are too high at any one point feeder or fed cattle may be exported to the US, Canadian processors may not be able to compete to procure animals, and Canadian beef products may be too expensive compared to competitors' products.

This is really about the relative costs of our inputs and ensuring the prices we pay are not artificially inflated by our regulations, or a cumbersome approval process, or lack of access to new and more innovative products, or a lack of arbitrage that can result in a pricing to market policy that make us less competitive.

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. This is particularly important as Canada is a relatively small market in terms of population and industry size, which can in itself be a disincentive for companies to pursue commerce in Canada and register new products.

The beef industry needs much better access to affordable skilled labour. There is a shortage of skilled labour, particularly in western Canada, that has skills attuned to the needs of the agriculture and processing sectors. Our production methods and systems, starting with animal handling, are amongst the most sophisticated in the world. Finding properly skilled employees that want to work and live in rural Canada is a large challenge. There is a very large need to see changes to the temporary foreign worker program and immigration processes to make them more efficient, timely, and to facilitate permanent immigration status.

OUTCOMES & OBJECTIVES

1. Improve access to affordable skilled labour; most particularly improving processing times
 - a. Establish a clear and mutually agreed upon definition of skilled labour between industry and government, recognizing that jobs in agriculture do not fit the current definition of "skilled", nor are they unskilled and suitable for anyone without proper experience in the handling of livestock, equipment operation, and other areas.
 - b. Actively pursue improvements in the Labour Market Opinion process and Temporary Foreign Worker (TFW) program including a more streamlined process, improved coordination between foreign embassies, reduced processing time, and increased communication of the processing stages and any processing changes
 - c. Pursue the amendment of immigration law to create a more streamlined process for current TFWs to reapply, facilitate longer stays, and allow more immigrant nominees from the pool of TFWs to facilitate the continued employment of suitable employees
2. 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 (i.e. Environment Canada, Health Canada, Agriculture and Agri-Food Canada, and the Canadian Food Inspection Agency) and acceptance of new biotechnology by all levels of government

- c. Advocate change of the current 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 producer 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 US
- e. Advocate for the harmonization of withdrawal periods and minimum residue levels for products between countries
- f. Advocate for price equivalency of products between countries

FOCUS AREA C: Maintain and enhance key research capacity (expertise and facilities)

Context

Achieving the strategic outcomes identified in the National Beef Research Strategy (2012) is reliant on adequate scientific expertise and infrastructure. In addition, maintaining government scientific expertise to assist with market access discussions and completing technical negotiations on trade agreements is critical. Overall research funding, infrastructure, and human capital have declined significantly in recent decades. A significant number of our existing researchers are also expected to retire over the next five years, while at the same time very little investment has been made into hiring new research capacity to facilitate the transition of research programs and corporate memory. Outside of Canada beef research capacity has also been declining. Canada has the opportunity to gain a competitive advantage by investing in its researcher capacity and fostering innovative applied research and development initiatives, as well as technology adoption. The fire station analogy is apt here. Fostering innovation and maintaining core researchers ensures that we have the scientific capacity to respond to issues as they emerge, not after they become emergencies.

Approach

Key areas of focus for enhancing research capacity include establishing an internship program to mentor new scientists with industry collaborators. Increasingly research scientists do not have an agricultural background. In order to be attuned to industry's needs and ensure research is both relevant and practical, mentorship of researchers within industry is of great value to connect them with industry leaders, commercial partners, and end users of research.

With reference to specific research program areas, meat science research capacity is of high priority. There is no formal meat science program in Canada and expertise in this area is critical to focus on beef quality, food safety, and train expertise that can work within industry. Capacity in the areas of forage and feed grain breeding and agronomy are also of priority. Government programs in this area have been substantially reduced, while at the same time industry has grappled with rising grain prices and limited improvements in both forage and feed grain yields. Maintaining feed efficiency research capacity will also be critical moving forward to ensure continued advances can be made in reducing the amount of inputs required to produce beef.

Research capacity also extends into the delivery of surveillance programs, such as those being developed and implemented to monitor food safety, antimicrobial resistance and animal diseases, which are integral to the identification of emerging issues before they pose a widespread risk to animal health, industry productivity, and social license.

OUTCOMES & OBJECTIVES

1. Establish an internship program to mentor new scientists with industry collaborators in

- partnership with the Cattlemen’s Young Leaders program
- a. Have 10 scientists complete the program by 2019
2. Increase research capacity and programming available to the Canadian industry to focus on beef quality, food safety, and related attributes of the Canadian Beef Advantage
 - a. Establish an industry meat science research chair to address issues facing the beef packing and processing sectors, and reinvigorate beef quality and food safety research program capacity
 - b. Initiate the development of a formal meat science program to facilitate the training of highly qualified personnel for the beef industry
 3. Increase research capacity and programming focused on the breeding and production of feed sources
 - a. Establish industry research chairs focused on tame grass and legume breeding and management/grazing to serve Central and Eastern Canada and in the Prairies and B.C. to address declines in forage productivity and improved marginal returns to forage production to be more competitive with annual crops
 - b. Strategic investments in technology transfer efforts to encourage increased commercialization of new varieties and adoption of production research results
 - c. Advocate for enhanced public investment in forage and grassland productivity research to support the public interest in biodiversity, watershed health, wildlife habitat, soil conservation, and carbon sequestration
 - d. Reinvigorate feed grain breeding expertise to enhance productivity per acre building through the enhancement of Alberta Agriculture and Rural Development feed barley breeding program and development of linkages with the University of Saskatchewan’s Crop Development Center
 4. Maintain feed efficiency research capacity to continue to drive innovations in feed efficiency to support both cow-calf and feedlot production.
 - a. Advocate for the hiring of new researchers into existing vacant beef nutrition roles and transitional planning to fill roles where retirements are expected in the next five years
 5. 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. Establish an effective proactive surveillance system to identify (re)emerging animal disease issues before they pose a widespread risk to animal health and industry productivity

FOCUS AREA D: Economic, social and environmental sustainability

Context

The Canadian beef industry needs to continue to be a global leader in the continuous improvement and sustainability of the beef value chain. Consumers are increasingly demanding food that is produced in a sustainable manner. The definition of ‘sustainable beef’ is something that still needs to be determined in the Canadian context, as sustainability can mean very different things to different people. The Global Roundtable for Sustainable Beef (GRSB) is developing a definition and it is imperative that Canada be involved in these discussions as the environmental, social, and economic sustainability priorities can vary significantly among the world’s major beef producing regions.

Approach

The newly established Canadian Roundtable for Sustainable Beef (CRSB) is focused on developing and advancing sustainability efforts within the industry. The CRSB has committed to completing a sustainability assessment to establish a baseline of the environmental and socioeconomic impacts of Canadian beef production and identifies key strengths and weaknesses that should be the focus of future research and communication efforts.

Within Canada significant emphasis is also being placed on encouraging the adoption of environmental best management practices by industry. This will be done through supporting existing technology transfer strategies, the enhancement of the VBP program to include a new environmental module, and advocating for continued government investment into important agri-environmental programs such as Cows and Fish. These programs strive to foster a better understanding of how improvements in the management of grazing and riparian areas can enhance both landscape health and productivity.

Sustainability often brings to mind the physical environment, but economic and social sustainability are also important. Outcomes under economic sustainability are focused on improving the return on investment and long term profitability of the beef industry. Key areas of focus include improved business risk management for producers, attraction of young talent to the beef industry, increased investment in the Canadian processing sector, and protecting and enhancing property rights. Outcomes under social sustainability are focused on providing the research and information needed for communication to be factual and science based.

OUTCOMES & OBJECTIVES

1. Support the activities of the Global and Canadian Roundtables for Sustainable Beef
 - a. Engage industry stakeholders across the entire value chain and encourage their membership in the CRSB and/or support of and participation in its communication efforts and other initiatives
 - b. Complete the “Assessment of the economic, environmental, and social sustainability of the Canadian beef industry” including a life cycle assessment, identification of key performance indicators and a comprehensive action plan.
 - c. Support the development and implementation of VBP+, with the addition of new modules for animal care, environment and biosecurity to enable producers to effectively demonstrate responsible on-farm production practices to the marketplace
2. Economic – Improve return on investment and long term profitability of the beef industry (see also competitiveness & productivity)
 - a. Improve Business Risk Management programs for producers to reduce the exposure associated with market volatility, varying climatic conditions, and other unforeseen events
 - b. Attract young talent to the beef industry through the further development and implementation of initiatives such as the Young Cattlemen’s Council, Cattlemen’s Young Leaders, and Breed Association youth development programs.
 - c. Advocate for ongoing investment in Canadian processing sector, including ongoing plant modernization that ensures Canada’s competitiveness with international counterparts
 - d. Protect and enhance property rights by advocating on behalf of producers during the creation or amendment of government Acts and policies
3. Continually improving environmental sustainability through improved natural resource use, validating the impacts of beef production and supporting verifiable supply chains.
 - a. Advocate for the continued and/or enhanced collection of important agriculture and environmental data to assist in establishing sustainability benchmarks and measure how agriculture is changing and improving over time
 - b. Actively participate through the International Meat Secretariat (IMS) in international environmental research and collaborative initiatives
 - c. Increase industry adoption of Best Management Practices supporting environmental sustainability and resource conservation through the support of existing technology transfer programs and advocating for the continued support of and participation in important stewardship programs
 - d. Encourage the creation of Ecosystem Service Programs to conserve natural resources
4. Maintain the Canadian beef industry’s social license to operate through validating production practices and identifying opportunities for continuous improvement in areas of public concern

- a. Validate impacts of beef production and support verifiable supply chains
- b. Improve uptake and understanding of the Beef Code of Practice through the development and producer uptake of the Verified Beef Production Program and National Cattle Feeders Feedlot Assessment Tool
- c. Initiate the five year review of the Code of Practice for the Care and Handling of Beef Cattle with consideration for advances in science, production practices, availability of new technologies, and public expectations
- d. Active participation in international forums (ISO, OIE) on animal care and handling to ensure Canadian beef production practices are appropriately represented and understood as new international standards are developed.

PILLAR 3: PRODUCTIVITY

The goal of this pillar is to increase production efficiencies by 15% over the next five years.

FOCUS AREA A: Genetic selection

Context

Most methods of improving agricultural productivity require regular and repeated inputs (e.g. herbicides, fertilizer, implants, antimicrobials, vaccines). In contrast, effective genetic selection allows much more permanent improvements in crop and animal efficiency and productivity. Genetic improvement of beef cattle has been slower than in poultry or pork because of long generation times and lower reproductive rates, and slower than in dairy cattle 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 (e.g. feed efficiency) or impossible to measure in live breeding stock (e.g. tenderness).

Genetic improvement will be an important area of focus to position the industry competitively with other global exporters who are making their own advancements in genetic improvement.

Approach

New technology, expanding knowledge and understanding, advanced individual animal information systems, and improved management tools offer the opportunity to make more rapid advancement in the area of genetic improvements in the beef industry. Investments to improve cattle performance through genetic selection and encouraging the adoption of new genetics will contribute to both improvements in production efficiency and quality.

Societal concerns may also encourage identification and selection of superior genetics rather than traditional growth enhancing technologies and animal health practices. It is important that continued investments in research and technology transfer are made to improve cattle performance through genetic selection with an emphasis on animal growth, maternal traits, and beef quality and to encourage increased industry uptake of new technology in this area.

OUTCOMES & OBJECTIVES

1. Improve cattle performance for desired traits; transitioning research into information tools and technologies that can be applied within the seedstock sector

- a. Work with seedstock organizations to identify areas of priority for improvement, ensure accurate data management, and support genetic improvement programs
 - b. Identify cattle genetics for efficient growth with minimal negative impacts on other economically important traits and develop methods to combine genetic markers and seedstock information to practically select for those traits
 - c. Identify cattle genetics that demonstrate favorable maternal traits and develop methods to combine genetic markers and seedstock information to practically select for those traits
 - d. Identify cattle genetics with desired carcass yield and quality characteristics and develop methods to combine genetic markers and seedstock information to practically select for those traits
 - e. Facilitate the transfer of information between seedstock producers and packers to allow breeders access to carcass data to inform their genetic selection and commercial customer service programs
 - f. Encourage greater technology adoption to facilitate genetic improvement
 - g. Increase producer knowledge regarding genetics and how to effectively apply that information in commercial operations
2. Improve Genetic Selection for Non-Traditional Traits (structural soundness, udders, temperament, longevity)
 - a. Encourage the use of available tests to identify and eliminate undesirable genetic conditions from the breeding population
 - b. Encourage the development and adoption of genetic evaluations for additional economically relevant traits (e.g. structural soundness, conformation, udder structure, longevity)
 3. Encourage adoption of superior genetics in commercial herds
 - a. Develop and deliver artificial insemination training / information programs for commercial producers
 - b. Develop and deliver Information sessions on evaluating cattle with EPDs and genomics
 - c. Develop breeding program templates based on cross-breeding

FOCUS AREA B: Research and development

Context

Research and development will be imperative to generating the innovative technologies and knowledge to ensure the continued competitiveness and sustainability of Canada's beef industry. A growing global population and strong demand from emerging economies and renewable fuel mandates are expected to contribute to continued upward pressure on grain, oilseed and feed prices. This will have two main impacts. First, high grain and oilseed prices will drive land costs up and encourage conversion of forage acres to annual crop production. Second, increased feed costs will challenge the Canadian beef industry's ability to maintain domestic and international market share relative to competing proteins. Research will be important to generating the innovative technologies and knowledge to ensure the continued competitiveness and sustainability of Canada's beef industry.

Approach

Maintaining current levels of beef production in this scenario will require improved forage productivity on less productive lands, access to feed grain sources with improved yields, and increased utilization of alternative and new feed sources. Improved animal production efficiencies through genetic improvements, advances in feeding strategies, and continued improvements in animal health and welfare will also be imperative. All of these advancements will require research specific target research outcomes as were established through the National Beef Research Strategy (2012).

OUTCOMES & OBJECTIVES

1. Improved forage and grassland productivity

- a. Increase the yields and nutritional quality of tame and native annual and perennial forages by 33% through improved pasture, hay and grazing management, plant breeding and variety selection recommendations.
 - b. Quantify the ability of different grass, legume, and annual forage varieties and species to maintain nutritional quality throughout the grazing season and in extended stockpiled or swath grazing systems to help inform producers' seed selection decisions
 - c. Quantify the environmental footprint and socio-economic impact of Canada's forage-beef sector, considering the effects of optimal environmental production practices.
2. Improved feed grain productivity and feed efficiency
- a. Genetic selection to improve the feed efficiency of commercial cattle, considering impacts on other economically relevant beef production traits and potential interactions between feed efficiency genotype and animal management.
 - b. Improve feed supply and utilization through plant breeding, variety testing, improved agronomics, evaluating alternative feeds, and developing feeding and production systems that improve feed efficiency.
 - c. Develop nutrient management decision tools that consider diet nutrient composition, manure handling and transport costs, value of manure nutrients and organic matter, manure management systems, soil types, and nutrient uptake by crops
3. Improved animal health and welfare
- a. Improve the surveillance of production limiting disease and welfare issues by developing improved diagnostic tests, conducting a nation-wide cattle health and welfare benchmarking survey, and developing a national production limiting disease surveillance program.
 - b. Develop cost-effective methods to objectively quantify and mitigate pain and stress in beef cattle under production conditions, benchmarks to understand the additive effects of production practices on pain, stress, immunity and health, and a scientifically valid beef cattle welfare audit program
 - c. Identify and develop strategies to improve the effectiveness of vaccination and parasite control programs and reduce the incidence of reproductive failure, neonatal loss, metabolic diseases in feedlot cattle and the need for antimicrobial drugs to prevent or treat disease.

FOCUS AREA C: Technology development and adoption

Context

Knowledge dissemination and technology transfer are critical to realize the economic, environmental and social benefits of investments in beef research. Historically, provincial governments and universities employed extension specialists and supported field days, seminars and other initiatives. However, these activities have significantly declined over the past twenty years. This has resulted in significant shortfalls in industry adoption of new knowledge and technology, and lost opportunities to positively impact the profitability and sustainability of the industry through improved production efficiencies and beef demand.

Approach

Industry efforts to take a leadership role in Canada to renew knowledge and technology transfer among stakeholders in the beef cattle industry are critical and need to continue. Improved communication, collaboration and understanding between researchers and industry, and dissemination of meaningful research results to stakeholders along the production chain are all priorities. The focus on increasing technology transfer and adoption will assist to inform management decisions concerning beef production and improve beef products for all customer segments and markets. Effective extension also supports science-based regulation and public education.

Industry has developed a 10 year Knowledge Dissemination and Technology Transfer Plan that includes a full-range of technology transfer activities with a clear focus on accelerating the uptake of research results and outcomes by industry.

OUTCOMES & OBJECTIVES

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 understand industry needs for innovation and translate it into research
 - b. Achieve industry-wide support for the National Beef Research Strategy ensuring industry's research priorities are adequately addressed and maximizing the value of research investments
 - c. Mentorship opportunities for young or new researchers with established, industry-respected researchers and other industry experts
1. Ongoing industry surveillance of international and domestic research and technology transfer activities, which are aligned with the National Beef Research Strategy, to identify potential technologies and innovations that could be adapted and/or adopted within the Canadian beef industry
2. 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 technology
 - e. Communicate the benefits of increased focus on technology transfer to encourage funding and best practice
 - f. Require and review technology transfer plans and budgets in project proposals, with release of funds contingent on appropriate implementation of transfer efforts
 - g. Continually improve knowledge dissemination and technology transfer effectiveness
 - h. Achieve adoption of best technology transfer practices industry-wide; collaborating with other organizations and researchers to share resources and improve adoption

FOCUS AREA D: Enhance information flow

Context

Breeding and management decisions made by seedstock and cow-calf producers can impact animal performance in the feedlot, carcass weight, yield and quality grade at the packing plant, and consumer eating experience. However, information about the ultimate consequences of these decisions (or the economic incentives to modify these selection or production decisions) rarely filter back through to the primary producer. The beef industry's traditional lack of vertical coordination among the cow-calf, feeding, packing and retail sectors has limited the effective communication of customer preference and price signals from fork-to-farm.

Approach

A mechanism such as the Beef InfoXchange System (BIXS) to transfer individual-animal management information up and down the production chain would help to overcome this long-standing challenge. BIXS couples the mandatory Canadian Cattle Identification Agency tag with a web-based data repository to allow breeders, cow-calf producers, feedlot operators and packers to share production and carcass information on an individual animal basis. BIXS allows the entire supply chain to share production and carcass information on an individual animal basis. This system will help buyers identify animals or herds that have the attributes desired for different feeding, grid pricing or branded beef marketing programs.

The goal is for BIXS 2.0 to be the industry's common repository database with a minimum of 2 million calves per year being entered. Enhancements over the next five years include developing regular reporting mechanisms; facilitating genetic improvement through the linking of genetic, genomic, and branded beef program information; and research into areas that can facilitate an automated ongoing beef quality audit and the sorting of cattle and products by quality.

OUTCOMES & OBJECTIVES

1. Effectively communicate the market demands of end users and customers through the production chain utilizing information technology systems and verification programs
 - a. Continued development and implementation of the Beef InfoXchange System (BIXS), with a focus on continuing to increase industry participation at the producer and processor level
 - b. Develop and implement additional auditable Verified Beef Production modules in the areas of sustainability, biosecurity, while continuing to increase producer participation of the VBP on-farm food safety program
2. Facilitate genetic improvement with the link to genetic, genomic and branded beef program information
 - a. Develop and implement the Beef Records Universal Translator (BRUT) software to facilitate the interfacing of a multitude of existing and emerging software programs with BIXS 2.0.
 - b. Enable phenotypic information to flow from commercial to seedstock producers so that it can be combined with genomic information, thereby enhancing the accuracy of genetic evaluations for feedlot and carcass traits and lifetime profitability indexes.
 - c. Based on industry feedback and available resources, continuously improve the BIXS 2.0 data fields to encompass value data of economic benefit across supply chain segments (e.g. ID, birthdate, breed/cross/gender, diet/ration, weights; move in/out; VBP, branded beef, breed program attributes; vaccination and health treatments and other specific management practices; genetic test results; weights) based on sound business logic to do so.
3. BIXS 2.0 will be the industry's common repository database, and actions will be taken to ensure a minimum of 2 million calves per year are entered in the database
 - a. Focus design specification and development on quicker/easier registration, improved import/export functionality; and emphasize only data points of economic significance across segments to foster improved uptake of BIXS 2.0
 - b. Leverage BIXS data and target direct benefits for industry participants including: verification/validation services, aggregate data analysis, benchmarking, genomics data warehousing, real-time data for sales, and enabling downstream distributors (e.g. retail) access to animals with characteristics specific to a target market
 - c. Address key issues pertaining to Benefits Validation and Evolution; Financial Sustainability; BIXS 2.0/CCIA Relationship; Developer Relationships; and, Inter-Operability with current and emerging beef industry web applications
 - d. Fully automate the initial version of the Sourcer Utility (SU) functionality to enable users to query the BIXS 2.0 database and connect with suppliers
4. Develop regular reporting mechanisms, improve collaboration and services provided

- a. Starting in the fall/winter 2014 retailers and foodservice will be approached to determine the feasibility of developing a more formal, regular, and forward-looking retailer/consumer trend report
 - b. Continued collaboration with associations, packers and retailers in the development and integration of value chain programs with BIXS. The primary focus initially will be on the potential for sourcing based on specific attributes.
 - c. Help existing value chains (e.g. the BC Beef Quality Information System, and an Ontario packer's breed-based grid pricing program to direct premium paybacks to primary producers fully integrated with BIXS 2.0)
 - d. Ensure detailed carcass data continues to move from major packing facilities across Canada into BIXS 2.0 linked to the CCIA Tag ID
5. Research technologies to enhance the ability to sort cattle, carcasses at line speed in packing plants, and product by quality.

PILLAR 4: CONNECTIVITY

The Connectivity pillar is unique in its objective of enhancing industry synergies; connecting positively with consumers, the public, government and partner industries by actively addressing industry issues, challenges and opportunities with a unified industry voice.

FOCUS AREA A: Industry communication

Communication is an essential underlying aspect of all policy, marketing, and research activities within the Canadian beef industry. Communication is integral to engaging producers, processors, retailers, consumers, industry partners, government, the public, consumers, and global trading partners.

Communications need to be transparent and consistent, with industry speaking with a common voice across all organizations. This is especially imperative in times of industry crisis. It is also important to maintain and enhance consumer confidence on an ongoing basis and increase the public's understanding of the contribution the beef industry makes to the economy and sustainability. Communication of customers' demands throughout the supply chain from end users to primary producers is also important in order to clearly understand market needs and align production accordingly.

Through the continued advancement of programs including the Young Cattlemen's Council (YCC), Cattlemen's Young Leaders (CYL), and Beef Advocacy Canada efforts are focused on mentorship and enabling interested individuals to speak in an accurate, consistent, and confident manner about the Canadian beef industry.

OUTCOMES

1. Timely concise, and effective delivery of crisis communications within industry
 - a. Ensure coordination of communication between national organizations (CCA, CBI, CMC, NCFA, other commodities, etc.)
 - i. Informal issues and reputation management through media/issues monitoring, sharing of information, discussing and coordinating strategies and determining the most appropriate course of action for communication and information procurement; including the identification of responsible organizations.
 - ii. Formal regular strategy discussions between national organizations on issues management to clearly define industry priorities and organizational strategies.
 - iii. 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 understand.
 - b. Ensure the timely transfer of information to provincial associations and other industry organizations

- to ensure they are prepared to handle media inquiries
2. Development of a **Reputation Management Strategy** including the creation of an Issues Management position (also mentioned under Demand Pillar – Consumer Confidence)
 - a. Proactive cross organization plan that facilitates the management of issues related to industry reputation through strategic response to issues
 - b. Ensure the continuous monitoring of polling data and issues, while developing appropriate resources and messages to enable industry to speak consistently.
 - c. Make information easily understood and readily accessible to assist producers in being industry advocates.
 3. Enhance industry's ability to speak with a common voice
 - a. As part of the Reputation Management Strategy develop messaging appropriate for each sector's territory to enable industry to speak with one voice
 - b. Provide ongoing development of approved key messages for use on Twitter and social media for youth (CYL, YCC, BAC, etc.) and industry program alumni to utilize
 - c. Successfully train through the Beef Advocacy Canada (BAC) program 1,000 in level one, 750 in level two, and reach 200 graduates with media training by 2019
 - d. Encourage provincial associations and their members to engage in social media using approved messaging providing resources and social media policies for adaptation
 4. Increase the number of future leaders that are able to speak and advocate on behalf of Canada's beef and agricultural industry
 - a. Beef industry organizations increase coordination with the Young Cattlemen's Council (YCC) in the implementation of approved advocacy projects and social media efforts
 - b. Empower the YCC and its members to provide input into CCA policy direction and actively work towards a more coordinated communication effort on key issues facing the Canadian beef industry
 - c. Establish international networks and relationships through participation in the Five Nations Beef Alliance Young Leaders program
 - d. Provide industry specific training and mentorship through the Cattlemen's Young Leaders (CYL) program to 88 beef enthusiasts by 2019, providing participants with a chance to explore a potential career choice or involvement in provincial/national producer groups, while gaining industry knowledge and contacts
 - e. Development and implementation of the CYL Step 2 initiative to develop and deliver beef industry leadership training; including training to young beef leaders in governance, business skills development, succession and farm planning, and advocacy
 - f. Expanding young leader advocacy efforts through the creation of videos promoting industry and providing face to face experiences with beef producers (i.e. Ag More Than Ever campaign, Through the Fence, Behind the Beef, and CBI).

FOCUS AREA B: Engage industry partners

All stakeholders share a common goal of taking steps to enhance the productivity, profitability and competitiveness of the various sectors within our industry. This goal can be achieved with the participation of all sectors including: cow-calf producers, feeders, packers, retailers and food service working together to develop new strategies to build a solid plan from which we can all uphold our respective business plans.

OUTCOMES

1. Continue to engage the National Beef Strategic Planning Group (NBSPG), a broad group of representative stakeholders, to oversee the creation of a National Strategic plan for the beef and cattle industry
 - a. Gain consensus and buy-in from stakeholders regarding the Strategic Plan

- b. Pursue alignment of the operational plans of industry’s marketing, research, and policy organizations to ensure all outcomes are achieved
 - c. Facilitate ongoing discussions and engagement of the NBSPG on a formal and informal basis to identify industry priorities, determine the most appropriate allocation of resources, and encourage increased collaboration across organizations on an ongoing basis
 - d. Engage additional stakeholders in consultations for the Strategic Plan through the use of webinars, social media tools, and if appropriate an industry forum to gain feedback
2. Move towards the creation of an annual national industry event that sees multiple industry organizations conduct their annual or semi-annual meetings (i.e. CCA, NCFA, CBBC, CBI, and other willing groups).
 - a. Bring together a large audience of producers to engage in multiple meetings and place continued focus on the Strategic Plan, 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. Expand cross organizational learning and stakeholder engagement opportunities through the expansion of current programs such as Town Halls, webinars, lunch and learns, Beef Advocacy Canada, and other opportunities.
 4. Encourage greater stakeholder engagement in the Young Cattlemen’s Council, Cattlemen’s Young Leaders, and other programs including direct participation, being a mentor, or networking with participants

FOCUS AREA C: Engage government and other industry/global partners

In addition to strengthening the level of communication and engagement within and between industry stakeholders, there is significant value in investment on an ongoing basis in building long-term relationships with government, regulatory agencies, the public and consumers, partner industries, and other stakeholders. On-going investment in long-term relationships with government and regulatory agencies are necessary to establish trust, transparency and build credibility that enables industry to effectively address issues that arise related to marketing, competitiveness and productivity. The Canadian beef industry also needs to place significant emphasis on engaging producers and industry partners to communication directly with consumers and the general public; building trust and confidence in the Canadian beef industry. There are also synergies and opportunities for the Canadian beef industry to leverage common messaging, problem solving and information from like-minded domestic and international partners in areas such as research, domestic and trade policy, and marketing.

OUTCOMES

1. 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 in order to encourage open dialogue and communication channels that are available in times of crisis and normalcy.
 - b. Encourage industry to speak with one voice when engaging government to ensure clarity of priority and direction.
 - c. Active participation in government/forums such as the national Beef Value Chain Roundtable, Beef Cattle Trade Advisory Group, and others to ensure continued progress is made on files of priority to the industry.
2. Participate in consumer discussions and forums to obtain feedback and provide information regarding the Canadian beef industry

- a. Producer participation in retail/end user marketing initiatives
 - b. Participation in end user consumer forums (i.e. McDonald's Mom's Quality program)
 - c. Conduct proactive communications to educate consumers and the public about the Canadian beef industry and work to create an ongoing relationship where they turn to industry for their information
3. Invest in developing long-term relationships with other domestic and international organizations encouraging collaboration on priorities of mutual interest (i.e. trade agreements, animal health and care, government policy and programming, research and marketing) and open discussion when differences arise.