

NATIONAL BEEF SUSTAINABILITY Strategy

2024-2030





CRSB[®]

Canadian Roundtable
for Sustainable Beef



Advancing, measuring and
communicating continuous
improvement in the sustainability of
the Canadian beef value chain.

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Introduction

The CRSB's National Beef Sustainability Assessment (NBSA) measures the Canadian beef value chain's environmental, social and economic sustainability performance and progress against an initial baseline of indicators and metrics approximately every seven years.

The first NBSA was published in 2016 utilizing data from 2014, which provided a baseline for evaluating progress and improvements over time. This second study is the first to measure changes against that baseline, utilizing data from 2021, and serves as a benchmark and a half-way point as the industry works towards its 2030 goals.

Key Highlights of the National Beef Sustainability Assessment are outlined below. View the summary and full reports for details at crsb.ca/benchmarks.

This strategy document outlines the strategic goals that the Canadian beef industry has set, with key performance indicators (KPIs), current beef value system performance and priority actions identified through consultation with CRSB members.

Executive Summary

Environment

In the interval of 2014 to 2021, there have been improvements in most environmental indicators (carbon footprint, fossil fuel depletion, water consumption, and freshwater eutrophication). These improvements are driven by increased efficiency in beef production signaled by higher cattle end-weights and shorter production periods. This ultimately means that more beef is now being produced from the same number of animals, while requiring fewer resources. Greenhouse gas (GHG) emissions intensity reduced by 15% (per kg boneless beef, consumed) since 2014, and with the 2030 beef industry goal of a 33% reduction in GHG emissions intensity, we are on track towards achieving that goal. The total soil organic carbon (SOC) is estimated at 1.9 billion tonnes in land used for beef production in Canada, with a large proportion (84%) attributed to pastureland, showcasing the importance of preserving that land as it has the highest capacity to store carbon and promote biodiversity in agricultural areas. While the overall habitat capacity on cropland and pastureland has decreased due to land use change (LUC), the contribution of habitat capacity attributed to land used for beef production increased since 2016. Maintaining these native grasslands and pasture for grazing animals such as beef cattle is vital to supporting biodiversity and storing SOC.

Within each region, eastern and western beef production both decreased their [blue] water consumption since 2014. The proportion of national beef production has grown in western Canada since 2014. When accounting for this shift, the national [blue] water consumption value has increased slightly (0.4% or 7L), as more irrigation is used in this region.

Social

The social assessment made key observations in the life cycle of Canadian beef production, identifying strengths and how to manage the weaknesses and challenges in regard to Labour Management, People's Health and Safety, Animal Care and Antimicrobial Use (AMU). The assessment indicated that labour availability, recruitment and retention are increasing workload levels with potential negative repercussions on people working in the industry. However, it is recognized that there is broad awareness and efforts being made across sectors to address workload levels and integrate innovative approaches to reduce risk. Health and safety is also



identified as an area that can be overlooked and where more dedicated efforts are needed. Producers are experiencing high levels of physical and mental stress; on a positive note, awareness and the stigma around mental health are improving.

Animal care is a success story in Canada, and many federal regulations and industry standards (e.g. Code of Practice for the Care and Handling of Beef Cattle) play a role; increased coordination and communication across areas within the beef supply chain are areas for improvement to fully secure animal care throughout the cattle life cycle. Antimicrobial use is important to the industry and its stakeholders. There are good practices currently being utilized by producers to ensure responsible use. Further training would be beneficial to drive continuous improvement. Room for improvement also exists with respect to the adoption of management practices associated with AMU, including further reduction of stressors and increased access to veterinarians in some regions.

Economic

The economic sustainability of the Canadian beef industry has undergone many supply and demand shocks including the COVID-19 pandemic and widespread severe drought in 2021. The resilience and ability to shift according to market conditions resulted in increased off-farm income and a growing feedlot sector despite high feed prices. Inflationary pressures have increased the cost of inputs faster than cost of outputs, but consumer demand here in Canada and globally for protein remains strong with a preference for high quality beef.



Message from the Chair

Canada's agri-food system is respected world-wide, and I am proud of the outstanding leadership the Canadian beef industry has demonstrated in advancing sustainability - regionally, nationally and on the international stage. As a beef producer, I know that we raise our beef in a responsible, sustainable way in Canada, and I am immensely proud of the improvements the industry has accomplished by working together. The CRSB's National Beef Sustainability Assessment is a key tool in demonstrating performance and progress on our sustainability journey.



The sustainability of the agri-food system continues to be of growing importance, and we know that Canadian consumers are looking for safe, affordable, nutritious, high-quality food that is raised in an environmentally sound and socially responsible way, based on sound science. At the same time, we also need to support the economic viability and resilience of the farmers, ranchers, workers, value chain actors and all those involved in bringing food to the table.

The Canadian Roundtable for Sustainable Beef published its first National Beef Sustainability Assessment in 2016, which provided a baseline from which to measure progress. The sustainability performance baseline and outcomes from that study have been incredibly valuable for the whole Canadian beef industry to build trust, inform policy, and communicate our sustainability stories from across Canada. A Sustainability Strategy accompanied the assessment and identified areas for the Canadian beef value chain to make improvements. This second assessment highlights many areas where significant progress has been made, and key areas where there is more work to do.

The CRSB's 2016 Sustainability Strategy set 10 key goals, which formed a strong basis from which the industry came together to establish a suite of robust, ambitious 2030 goals across diverse priority areas of focus. These goals highlight the role of the Canadian beef sector as integral for climate change mitigation, conserving biodiversity and our natural ecosystems, supporting people and communities, embracing innovation, and our contribution to a sustainable food system. This assessment marks the mid-way point towards those goals, and the urgency to work together is more important than ever.

We see sustainability as a continuous journey - not a destination. Our strategy's key priorities and actions highlighted throughout this report are intricately linked with the Canadian beef industry's 2030 goals and outline the path on our journey of improvement. We are lucky to have such a dedicated and diverse group of members and partners working with us on this journey, and I look forward to working together and achieving these goals in the years to come.

Sincerely,

A handwritten signature in black ink that reads "Ryan Beierbach". The signature is written in a cursive, flowing style.

Ryan Beierbach, CRSB Chair



About the CRSB

Formed in 2014, the Canadian Roundtable for Sustainable Beef (CRSB) has created a collaborative community to make continual progress in the sustainability of the Canadian beef value chain, rooted in science, with contribution from all aspects of the supply chain and beyond.

Mission

To advance, measure and communicate the continuous improvement in sustainability of the Canadian beef value chain.

Vision

That the Canadian beef value chain is a global leader in environmental, social and economic sustainability and part of a trusted, thriving food system.

The CRSB is a membership based, not-for-profit organization spanning the whole beef value chain and beyond. The CRSB delivers on its mission through its four pillars of work:



Measuring and benchmarking the Canadian beef industry's sustainability performance.



Collaborating with members, stakeholders and partners on key projects and initiatives.



Developing a world class 3rd party audited Certification program – first of its kind for beef sustainability in world.



Communicating our continual progress encompassing all five guiding principles of beef sustainability - with industry stakeholders and to the Canadian public. Central to that message is that cattle are a key tool and integral as a climate solution.



Definition, principles and criteria

The CRSB has adopted the definition and guiding principles and criteria for sustainable beef as developed by the Global Roundtable for Sustainable Beef (GRSB), and is an active member of its committees and working groups.

Principles of Beef Sustainability

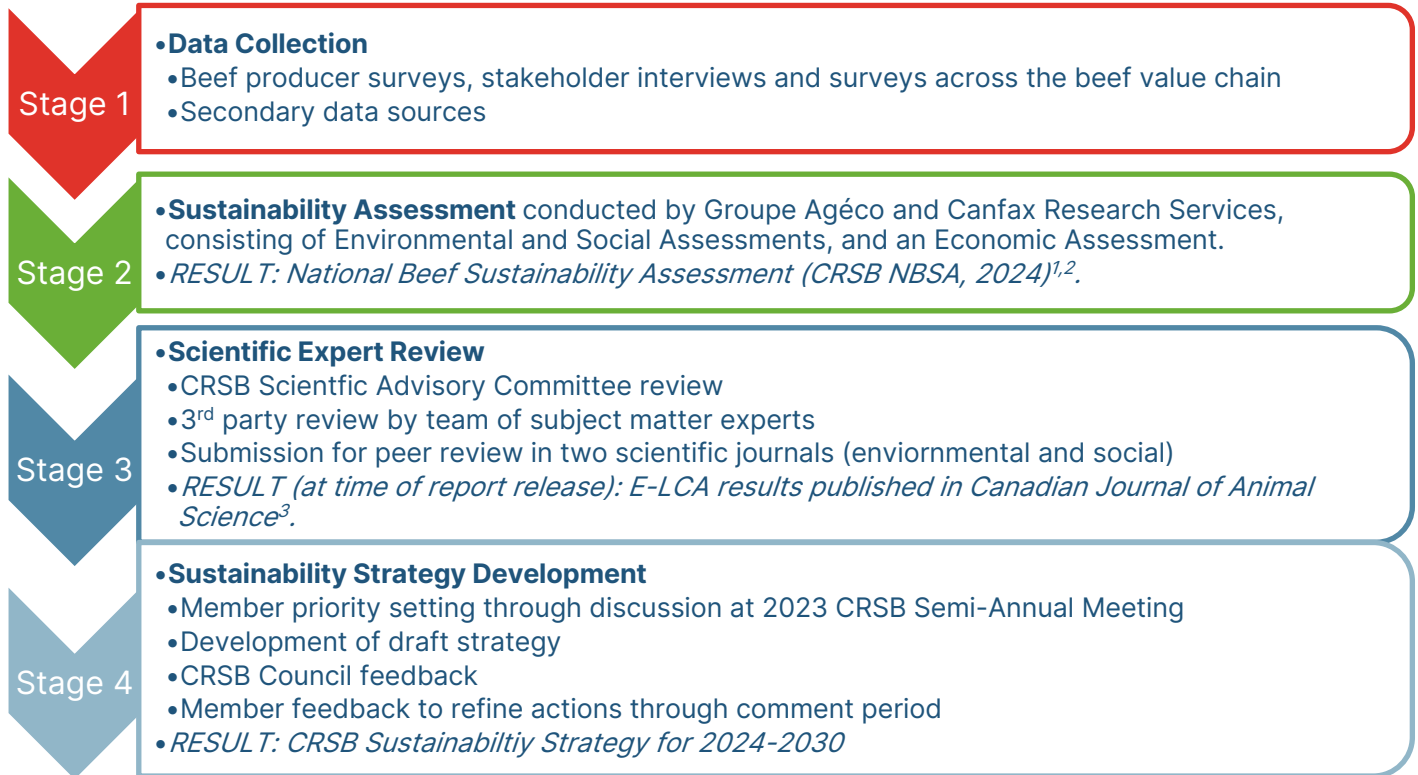
While economic viability is not identified as a specific guiding principle, it is rather a triple bottom line approach, underpinned within all of these areas, necessary to achieve true sustainability in the Canadian beef system.

Sustainable Beef
a socially responsible, environmentally sound, economically viable product that prioritize the Planet, People, Animals and Progress.



Sustainability Strategy Development Process

The National Beef Sustainability Assessment process began in 2021, including data collection, analysis, scientific expert and peer-review, culminating in a comprehensive report, summary, member and industry dissemination materials. Member engagement and feedback informed the development of this strategy for continuing momentum on our continuous improvement journey.



Scope

This Sustainability Strategy document outlines key focus areas that align with the current National Beef Sustainability Assessment and are based on progress from the baseline Sustainability Strategy published in 2016, a 2020 Interim Report, the development of the Canadian Beef Industry's 2030 Goals, and CRSB member priority setting and consultation.

For each of the focus areas throughout this report, key performance indicators and current industry performance are highlighted, and actions have been identified to foster continuous improvement. Specific measures of progress for each action and sub-action have been developed and will be used internally to engage CRSB members and collaborations. The goals

¹ Canadian Roundtable for Sustainable Beef. (2024a). [National Beef Sustainability Assessment: Environmental and Social Assessments](#). Calgary, AB.: Groupe AGÉCO.

² Canadian Roundtable for Sustainable Beef. (2024b). [National Beef Sustainability Assessment: Economic Assessment](#). Calgary, AB.: Canfax Research Services.

³ Aboagye I. A., Valappil, G., Dutta, B., Imbeault-Tétreault, H., Ominski, K. H., Cordeiro, M. R. C., Kröbel, R., Pogue, S. J., McAllister, T. A. 2023. [An Assessment of the Environmental Sustainability of Beef Production in Canada](#). Canadian Journal of Animal Science. doi.org/10.1139/CJAS-2023-0077



outlined in each section throughout the strategy align with the Canadian beef industry's 2030 goals. Sustainability community and economic goals have also been included.

The CRSB is a collaborative community committed to a common vision of continual improvement in the Canadian beef value chain. We most certainly don't do this work alone, and it doesn't happen overnight. There are many opportunities for partnerships, collaboration and projects as we work together, and we look forward to these opportunities in the coming months and years, and in collaboration with already-established working groups and initiatives.



The National Beef Sustainability Strategy

- ✓ Key Performance Indicators
- ✓ 2021 Performance and Progress
- ✓ Detailed Strategic Action Items



The strategy is separated into four key sections, aligned with the National Beef Sustainability Assessment: our beef sustainability community, environmental, social and economics. Within each section, there are sub-categories and key priority areas of focus as identified by CRSB members. Each focus area summarizes the goal(s), key performance by which we measure progress, highlights of current performance identified in the current National Beef Sustainability Assessment (CRSB NBSA, 2024) and key progress since our baseline assessment (CRSB, 2016). Strategic action items, with high level actions and sub-actions that were identified through CRSB member engagement and consultation are also outlined. These actions will guide the CRSB's strategy, projects and collaborations over the next several years, and will be overseen by the Scientific Advisory Committee.

During the consultation period, members were asked to identify the ONE key priority area in each key topic area – those are identified with this icon (🏠) in each action items list throughout this strategy document.

Through the member consultation, we appreciate those who identified where they or their organizations could play a role in collaborating on these actions; we know there are many others, and strategic engagement will continue as we move forward. We encourage all members and stakeholders to join us on this journey.

**NOTE: Neither goals nor action items identified throughout this strategy document are listed in any order of importance.*



Section 1: Sustainability Community


Since 2014, the CRSB has created a collaborative community that is aligned in our commitment to our mission, vision and principles. The goal in this second iteration of our sustainability strategy is to build on the strong foundation that we have already built, and work together for continued growth, progress and a sustainable food system in Canada.



Canada has demonstrated strong leadership in beef sustainability globally and is a model for many regional initiatives around the world, through the network of the Global Roundtable for Sustainable Beef. The CRSB is also a guiding example of sustainability leadership here in Canada and is often used as a successful example and key player within the agri-food system.

GOAL:

Build on a collaborative, credible and aligned sustainability community in Canada.

Key Performance Indicators	Performance
# of CRSB members Diversity of CRSB membership representation on committees.	<ul style="list-style-type: none"> ✓ CRSB has 73 voting members, 4 academic institutions (non-voting), many scientific researchers and subject matter experts, government representatives, and other supporters. ✓ Over 50% of members serve on CRSB committees. ✓ 30% of CRSB Council members are women; the CRSB was chaired by women for its first 8 years. ✓ Average 50/50 gender representation on CRSB committees
 Progress	30% increase in CRSB voting membership since 2016.

Strategic Action items

-  **1. Strengthen CRSB's reputation as the trusted organization for beef sustainability in Canada.**
- a) Facilitate strategic relationships, ensure meaningful engagement opportunities, and deliver robust, transparent, credible, science-based programs to collaborate, measure and advance sustainability in the beef industry and beyond.
 - b) Provide a forum to discuss value chain topics and support members' efforts to create programs and initiatives that have a meaningful and measurable impact on beef sustainability.
 - c) Develop and coordinate simple, science-based messaging on continuous improvement in Canadian beef sustainability.
 - d) Promote acknowledgement and use of CRSB National Beef Sustainability Assessment report as a credible Canadian beef-specific source for data and metrics in national and international reports.



2. Build shared understanding of the balanced health of people, animals and the environment.

- a) Build a common vision through relationships with relevant sectors, disciplines, and communities to collaboratively foster the well-being of animal, human, and ecosystem health through Canadian beef production.

3. Establish and maintain strong relationships, partnerships and communication with the scientific community.

- a) Encourage and ensure alignment in research priorities and data needs with partners, CRSB membership and the scientific community.

4. Further engage youth leaders in CRSB's work.

- a) Collaborate with and support the beef industry's youth development programs.
- b) Support knowledge transfer in partnership with beef industry supporters and other agriculture-based programs.

5. Inform and support information-sharing that advances the sustainability of the Canadian beef value chain.

- a) Facilitate increased collaboration and communication to encourage data and information sharing across the Canadian beef value chain.
- b) Actively participate in the Canadian Beef Advisors and support achievement of the 2030 Canadian Beef Goals.
- c) Take a leadership role in sustainable agriculture initiatives in Canada, and actively support and encourage multi-stakeholder collaborative approaches.
- d) Maintain active leadership roles within GRSB.
- e) Support knowledge transfer and facilitate practical adoption of sustainable practices, based on scientific research, including financial incentives, risk reduction mechanisms and importance for the reputation of the industry.



Environmental Strategies

- ✓ Key Performance Indicators
- ✓ 2021 Performance and Progress
- ✓ Detailed Strategic Action Items

Section 2: Environment

In the interval of 2014 to 2021, there have been improvements in most environmental indicators (carbon footprint, fossil fuel depletion, water consumption and freshwater eutrophication). These improvements have been driven by increased efficiency in beef production signaled by higher cattle end-weights and shorter production periods. This ultimately means that more beef is now being produced from the same number of animals, while requiring fewer resources.

There has been a strong focus on the role that Canadian beef producers play in improving and conserving land used for grazing cattle, and the critical habitat for wildlife and species at risk that these lands, particularly Canada's native grasslands, play – much of which are managed by Canadian beef producers.

We are all working to collaborate on initiatives that support producers, to incentivize and reward their conservation efforts that provide key nature-based solutions to climate change mitigation, and to build trust through sharing these stories importance with the public.

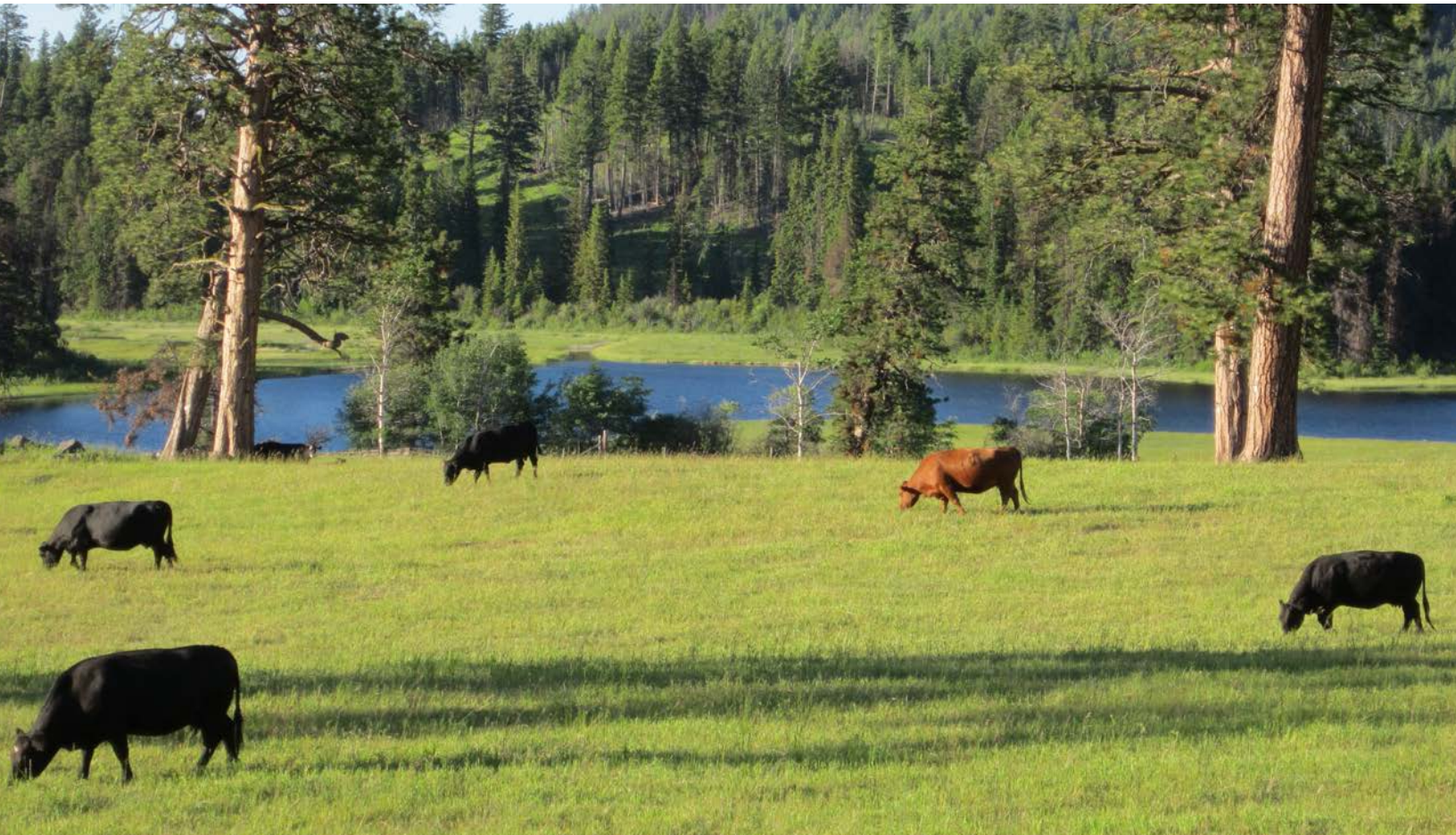
The Environment section of the strategy is divided into three key areas:

1) Climate Actions

- a) Greenhouse Gases
- b) Carbon sequestration
- c) Food loss & waste and carcass utilization

2) Land Use and Biodiversity

3) Water



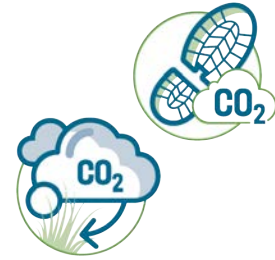
Climate Actions – Greenhouse gases (GHG) and carbon sequestration


GOALS:

Reduce primary production GHG emissions intensity 33% by 2030.



Safeguard 1.5 billion tonnes of carbon stored on land managed by beef producers.

Sequester an additional 3.4 million tonnes of carbon every year.



Key Performance Indicators	2021 Performance
Carbon footprint intensity of Canadian beef (CO ₂ eq./kg). Soil organic carbon (Mt) on land used for Canadian beef production.	✓ 32.84 kg of CO ₂ eq./kg boneless beef, consumed ✓ 1.9 billion tonnes soil organic carbon stored on land used for beef production
 Progress	Producing 1 kg of Canadian beef (boneless and consumed) now creates 15% <u>LESS</u> greenhouse gases than in 2014.

Strategic Action items

-  **1. Encourage research and collaboration to optimize cattle diets.**
 - Collaborate with stakeholders to understand and identify rations, feed additives, approved alternative ingredients, methods and technologies on a regional basis, that minimize enteric and manure related emissions while maintaining/enhancing animal productivity and health.
 - Collaborate with organizations that deliver producer extension and adoption to encourage uptake of rations feed additives, approved alternative ingredients, methods and technologies that minimize enteric and manure related emissions while maintaining/enhancing animal productivity and health.
 - Encourage research to explore the potential for lower emission feedstuffs and use of by-products in cattle diets.
-  **2. Promote implementation of practices to enhance manure management.**
 - Support further development and uptake of manure management practices and handling systems to limit manure related emissions and impacts.
 - Collaborate to understand and identify the most effective means of managing manure and minimizing manure-related emissions.
 - Promote subsequent producer extension.
- 3. Collaborate with initiatives that work to safeguard carbon storage and increase carbon sequestration.**
 - Identify the business case and enhance understanding and adoption of grazing management practices that measure, monitor and increase carbon stock and sequestration.



- b) Encourage and support programs, policies, partnerships and communication strategies that maintain and restore native grassland, pasture and rangeland acres.
- c) Support research and encourage development of tools to enhance/enable measurement of carbon storage/sequestration on land managed by beef producers at a more granular level.
- d) Support knowledge transfer and extension activities (eg. workshops) and tools to provide producers with the most up to date beneficial management practices.

4. Collaborate with initiatives that support improvements in feed and forage production.

- a) Share research and build awareness and understanding of best management practices that reduce the greenhouse gas (GHG) footprint of feed and forage production while ensuring producer economic sustainability.
- b) Provide support to projects that seek to develop technologies that improve feed and forage production.

5. Collaborate with initiatives that develop genetic selection tools that reduce GHG emissions.

- a) Advocate for the advancement of data-driven genetic decisions across the entire beef production chain.
- b) Collaborate with organizations that quantify the impact of genetic selection and improved animal efficiency on GHGs.
- c) Encourage and collaborate with organizations that deliver extension to increase adoption of genetic selection tools that reduce GHG emissions.

6. Measure and disseminate the Canadian beef industry's GHG footprint and carbon stock.

- a) Help drive scaled adoption of on-farm data collection methods and data sharing to enhance future Life Cycle Analysis (LCAs).

7. Promote communication and knowledge transfer between the research community and producers to increase uptake of practices that reduce GHG emissions and improve carbon sequestration.



Climate Actions – Food Loss & Waste and Carcass Utilization

GOALS:

Reduce food loss and waste (from secondary processing to consumer) by 50% by 2030.

Increase the value of AAA and Prime carcasses, to be equivalent with the US, by building demand for all cuts on the carcass.


Support the development, regulatory approval and adoption of improved food safety interventions and technologies throughout the supply chain.



Key Performance Indicators	2021 Performance
Overall loss and waste (% of edible bone-free meat).	<p>Post-harvest losses:</p> <ul style="list-style-type: none">• Approx. 5% loss of boneless beef, consumed during trimming.• Between 1 and 20% loss in packaging materials. <p>Retail / Consumer Waste:</p> <ul style="list-style-type: none">• Up to 1% across all impact categories, except freshwater eutrophication:<ul style="list-style-type: none">▪ 9-13%, depending on region

 **Progress** Food loss and waste is a key priority for sustainability initiatives in many companies across the supply chain; access to aggregated data will improve ability to track progress.

Strategic Action Items

-  **1. Encourage programs and projects that help food diversion efforts and reduce barriers to implementation.**
 - a) Support initiatives that reduce food loss and waste throughout the supply chain
- 2. Further enhance understanding of food loss and waste in the Canadian beef value chain.**
 - a) Encourage collaboration and coordination across agricultural sectors to ensure information sharing regarding policies, rules & regulations for upcycling by-products and utilizing food waste.
 - b) Promote data collection regarding meat loss and waste throughout the supply chain.
- 3. Encourage research and adoption of packaging that enhances product life, and reduces food waste and environmental impact while aligning with ongoing national and global initiatives.**
- 4. Support initiatives to improve carcass quality and utilization.**



- a) Support dialogue on Specified Risk Material (SRM) regulations regarding reducing waste at packing plants.
- b) Continue knowledge transfer activities targeted at producers to improve carcass quality through nutritional management, genetic selection, breeding, carcass grading and sorting.
- c) Encourage continued investments in research and promotion aimed at developing new beef cuts aimed at better carcass utilization and finding markets for them.



Land Use & Biodiversity Actions

GOALS:

Maintain the 35 million acres of native grassland in the care of beef producers by focusing on economic viability of producers and supporting programs that incentivize conservation in collaboration with Canadian crop groups.



Maintain a network of natural landscapes and healthy functioning ecosystems through well-managed grazing systems that maintain sustainable plant communities and healthy rangelands:



- ✓ Maintain and enhance the 68% of wildlife habitat capacity.
- ✓ Enhance ecosystem services.
- ✓ Encourage practices that build soil organic matter and enhance soil biodiversity.

Key Performance Indicators	2021 Performance
<p>Agricultural land area used by the beef industry.</p> <p>Soil carbon stock on land used for beef production.</p> <p>Wildlife habitat capacity index.</p>	<p>Land used for beef cattle production:</p> <ul style="list-style-type: none"> ✓ represents 40% of total agricultural land in Canada, of which 84% is pasture. ✓ stores approximately 1.9 billion tonnes of carbon ✓ provides 74% of the wildlife habitat capacity needed for reproduction and 55% needed for feeding on crop and pastureland.



Progress

Despite 2% decrease in overall habitat capacity on cropland and pastureland in Canada, beef's share (reproduction) of that capacity has increased approximately 3% over the past 5 years.

Strategic Action Items



- 1. Support the creation and adoption of ecosystem services payments, markets and producer incentives.**
 - a) Support the development and dissemination of tools that monitor and measure environmental deliverables from beef production.
 - b) Promote coordination and streamlining of funding programs for producers.
 - c) Share science-based information and facilitate collaboration in this area.
- 2. Facilitate collaboration across stakeholder groups to develop a shared understanding of the challenges and potential solutions to promote biodiversity.**
- 3. Support work that builds understanding and enhances or restores habitat quality and quantity on beef [production] operations.**
 - a) Encourage mechanisms that enable farmers and ranchers to provide production systems that are beneficial to both wildlife and the operation.
- 4. Build further awareness and use of range health assessments by producers.**



- a) Support work of organizations enhancing awareness and adoption of tools to improve rangeland health.
- b) Collaborate to build more awareness of the benefits of a healthy landscape to the ranch business.

Water Actions

GOALS:

Promote practices that maximize water quality and retention, to deliver healthier landscapes, resilience to drought and flood events, and groundwater recharge as appropriate to the region's precipitation.



Improve water use efficiency in the beef value chain.

Build recognition by the public and policymakers of the benefits provided by grassland ecosystems, including:

- ✓ Protection of wetlands
- ✓ The role of wetlands as important carbon sinks
- ✓ Filtration of nutrients that protect water quality and reduce non-point source pollution
- ✓ Resilience to drought and flood events
- ✓ Support groundwater recharge and future water supplies

Key Performance Indicators	2021 Performance
Blue water footprint intensity.	Water footprint: <ul style="list-style-type: none"> ✓ 1912 L blue water/kg boneless beef, consumed ✓ 657 L blue water/kg live weight Water quality: <ul style="list-style-type: none"> ✓ 3.9 g P eq./kg boneless beef, consumed



Progress

Producing 1 kg of Canadian beef (boneless and consumed) uses 177 L less blue water in both eastern and western Canada than in 2014.

Strategic Action Items

1. **Build further beef producer understanding, awareness and use of riparian health assessments by supporting organizations that are enhancing awareness and promoting adoption of tools.**
2. **Collaborate with stakeholders to further measure the relationship between beef production and wetland conservation, and the associated ecosystem services being provided.**
3. **Partner with organizations that deliver producer extension to encourage uptake of practices to preserve wetlands.**
4. **Build awareness about the limitations in water risk assessments and the importance of local context when interpreting the results, both nationally and internationally.**



- a) Support further research to improve capability of tools to assess cattle-specific factors.
- b) Promote further understanding of how on-farm practices affect water quality, taking into account regional variability.

5. Support innovation that increases water use efficiency within the processing and packaging sectors.

- a) Encourage government investments in research and technology related to water use efficiency within the processing and packaging sectors.

 **6. Support improvement in feed yields/productivity, drought resistance and irrigation practices to reduce the blue water footprint of feed.**

- a) Encourage investments in research and technology related to improving feed yields/productivity, drought resistance and irrigation practices.
- b) Encourage and collaborate with organizations that deliver producer extension to support the adoption of practices aimed at improving feed yields/productivity, drought resistance and irrigation practices.



A close-up, low-angle shot of two chefs in a kitchen. The chef in the foreground is wearing a light blue chef's coat and is looking down with a focused expression. The chef in the background is also wearing a light blue chef's coat and is working at a station. The lighting is warm and dramatic, highlighting the textures of the chef's coats and the metallic surfaces of the kitchen equipment.

Social Strategies

- ✓ Key Performance Indicators
- ✓ 2021 Performance and Progress
- ✓ Detailed Strategic Action Items

Section 3: Social

The social assessment made key observations in the life cycle of Canadian beef production, identifying strengths and how to manage the weaknesses and challenges in regard to Labour Management, People's Health and Safety, Animal Care and Antimicrobial Use (AMU).

The assessment indicated that labour availability, recruitment and retention are increasing workload levels, with recognition of broad awareness and efforts being made to address these workload levels and integrate innovative approaches to reduce risk.

Health and safety were also identified as an area where more dedicated efforts are needed. While producers are experiencing high levels of physical and mental stress, awareness and the stigma around mental health are improving.

Animal care is a success story in Canada, and many federal regulations and industry standards (e.g. Code of Practice for the Care and Handling of Beef Cattle) play a role; increased coordination and communication across areas within the beef supply chain are areas for improvement to fully secure animal care throughout the cattle life cycle.

Antimicrobial use is important to the industry and its stakeholders. There are good practices currently being utilized by producers to ensure responsible use. Further training would be beneficial to drive continuous improvement. Room for improvement exists with respect to the adoption of management practices associated with AMU, including further reduction of stressors and increased access to veterinarians in some regions.



Labour Management Actions

GOAL:

Support innovation, research, refinement and commercialization of technologies throughout the supply chain that support economic viability and worker conditions.



Key Performance Indicators	2021 Performance
<i>*new KPI and action area</i> Labour gap	✓ 250% increase in labour gap since 2017 (4,196 workers).

Strategic Action Items

- 1. Support initiatives that increase labour availability, training, recruitment and retention.**
- 2. Promote implementation of practices to enhance labour management.**
 - a) Support initiatives to increase communications skills and dispute resolution.
 - b) Promote professional development of employees and employers.
- 3. Support adoption of best management practices, business tools and new technology to reduce workloads across the beef supply chain, focusing particularly on family farm businesses, while considering the practicality of implementation.**



People's Health and Safety Actions

GOALS:

Create a culture of health and safety across the beef industry supply chain.

Reduce serious, fatal and fatigue-related incidents by 1.5% per year up to 2030, by supporting education, awareness and improvements in farm and ranch safety.



Key Performance Indicators	2021 Performance ⁴
Percentage of farms/ranches reporting injuries / fatalities.	<ul style="list-style-type: none">✓ Average agriculture-related fatality rate per 100,000 farm population: 10.7✓ Average annual decrease in agriculture-related fatalities: 1.4% (1990-2020 time period)✓ About 50% of participants working on-farm indicated a large amount of stress leading to impacts on health such as sleep loss, changes in appetite and body/headaches.✓ About 75% of producers feel some degree of disturbing stress.



Progress

Average annual agricultural fatality rate decreased 1.4% each year (compared to 1.1% each year in 2002-2012 time period).

Strategic Action Items



1. Collaborate regarding on-farm health and safety awareness and best practices implementation.

- a) Support farm safety capacity and adoption of best practices through knowledge-sharing and training promotion.
- b) Encourage development and implementation of farm safety plans on beef operations.
- c) Promote and encourage initiatives that build awareness and provide supports related to workload, labour and stress implications for physical and mental health and farm safety.
- d) Encourage identification and removal of economic barriers to implementation of new on-farm technologies.

2. Enable dialogues regarding health and safety, including mental well-being, for all beef value chain participants.

- a) Encourage safety awareness, access to training and adoption of best practices to prevent safety-related incidents across the beef supply chain.
- b) Encourage considerations around health and safety as part of business planning and risk management.

⁴ Canadian Agriculture Injury Reporting (CAIR): Agriculture-related fatalities in Canada 1990-2020; Canadian Agricultural Safety Association (2023).



- c) Support continued engagement with government and policy makers regarding the development and implementation of [practical] policies and regulations related to farm safety.

3. Promote a culture of diversity, equity, inclusion and transparency for all people within the beef supply chain.

- a) Support protection of rights of all workers, and a culture of safety, particularly for those who may be at increased risk.

Animal Care Actions


GOALS:

Ensure the five freedoms of animal well-being by increasing adoption of on-farm management practices:



- ✓ Attain 92% reproductive efficiency in Canadian beef production (85% in 2018)
- ✓ Adopt management and breeding choices that support animal welfare (e.g. calving ease, polled genes, pain relief)

Establish and maintain a surveillance system to monitor cattle production practices across Canada.

Key Performance Indicators	2021 Performance
<ul style="list-style-type: none"> ✓ Uptake and implementation of the Code of Practice for the Care and Handling of Beef Cattle. 	<ul style="list-style-type: none"> ✓ 81% declared having a Veterinarian/Client/Patient Relationship.
 Progress	<p>97% of beef farmers surveyed supported animal welfare with low-stress training for handlers.</p> <p>88% of beef farmers surveyed have taken measures over the last three year to support cattle through extreme weather events.</p>

Strategic Action Items

1. Increase communication and coordination between all stakeholders to ensure animal health and welfare at every stage of the beef cattle life cycle.

- a) Support tools to share animal health records/information throughout the supply chain to improve performance, animal welfare, quality and sustainability.
- b) Encourage the continued adoption of animal management record-keeping tools and the information they can provide to producers to help inform future decision-making about their herds.

2. Promote animal care awareness and implementation of practices through the dissemination of the Code of Practice for the Care and Handling of Beef Cattle.

- a) Collaborate on the update of the Code of Practice for the Care and Handling of Beef Cattle.



- b) Encourage adoption of management practices that improve the health and welfare of animals, using the Code as a reference.
- c) Encourage added veterinarian (and veterinary technician) capacity with large animal expertise.

3. Promote awareness of best practices for animal handling with respect to transport.

- a) Support and promote training related to all aspects of animal transportation.
- b) Support strategies to enhance animal welfare during the transport process.

4. Support research, innovation and knowledge transfer regarding animal care protocols and products.

- a) Pain control products and protocols
- b) Technology for early detection of animal disease and health issues
- c) Animal welfare related to transport.

5. Communicate the importance of adoption of pain control protocols and products.

6. Improve genetic selection tools that support animal welfare, while considering environmental or productivity benefits.

- a) Support data-driven genetic decisions throughout the beef production chain.


Antimicrobial Actions

GOAL:

Ensure the effectiveness of existing and future antimicrobials is preserved to support human and animal health and welfare.



Key Performance Indicators	2021 Performance
<p>The proportion (%) of isolates in beef cattle resistant to Category I (Very High Importance in human medicine).</p> <p>The proportion (%) of isolates in retail beef resistant to Category I (Very High Importance in human medicine).</p>	<ul style="list-style-type: none"> ✓ Most producers have adopted practices supporting the optimal management of AMU, including the establishment of a VCPR. ✓ 79% of producers report to systematically use veterinary advice.

 **Progress** Government of Canada’s Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS) is now collecting on-farm antimicrobial use and resistance data, in addition to retail meat.



Strategic Action Items

1. Build shared understanding for the importance of balanced health for people, animals and the environment in regard to antimicrobial use in beef cattle.

- a) Support the development of a database for robust measuring and monitoring of antimicrobial use and resistance, aligned with the National Beef Antimicrobial Research Strategy.
- b) Support the further development, dissemination and implementation of best practices regarding antimicrobial use.

2. Promote the importance of veterinarian-client-patient relationship (VCPR) regarding responsible antimicrobial use.

3. Support understanding of the importance of antimicrobials as a proven science-based tool in the beef industry to ensure animal care.

- a) Support continued research related to antimicrobials and livestock production, including potential ways to reduce their usage, including novel alternatives.
- b) Evaluate perceptions and support producer understanding and best practices with respect to antimicrobial use.
- c) Promote policy maker and public understanding, and measure changing perceptions related to the importance of antimicrobial use in Canadian beef production.





Economic Strategies

- ✓ Key Performance Indicators
- ✓ 2021 Performance and Progress
- ✓ Detailed Strategic Action Items

Section 4: Economic

The economic sustainability of the Canadian beef industry has undergone many supply and demand shocks including the COVID-19 pandemic and widespread severe drought in 2021. The resilience and ability to shift according to market conditions has resulted in increased off-farm income and a growing feedlot sector despite high feed prices. Inflationary pressures have increased the cost of inputs faster than cost of outputs, but consumer demand here in Canada and globally for protein remains strong, with a preference for high quality beef.

We continue to work with our industry and value chain partners to create practical, valuable programs that reward sustainable practices and the ecosystems goods and services that beef producers provide for all of society. It is also important to support development of technology and innovations that benefit participants across the beef supply chain, which at the same time building public trust for the sustainability and continuous improvement that the Canadian beef industry embraces every day.

Producer Viability Actions

GOAL:

To increase the financial viability of beef production in Canada.



Key Performance Indicators	2021 Performance
Long-term cost of production	✓ Cost of living and cost of production have increased.
Long-term profitability	<ul style="list-style-type: none"> ✓ A 200 head cow herd provided a total income (\$90,954), close to the Canadian median after-tax income for all families. ✓ Additional 19 feedlots with one-time capacity over 1,000 head from 2015 through 2022. ✓ For every worker employed in the Canadian meat packing industry, another 3.4 workers are employed, including direct and indirect employment.



Progress

Bunk capacity in Alberta and Saskatchewan increased by 19% or 271,500.

A 200 head cow herd provided a total income close to the Canadian median after-tax income for all families.



Strategic Action Items

1. Support increasing producer financial literacy and viability.

- a) Encourage initiatives that support the development of business plans and business risk management for farm businesses.

2. Encourage financial incentives for beef producers related to ecosystems goods and services provided by the beef industry.

- a) Collaborate with producers, supply chain partners and policy-makers to develop programs that are credible, deliver economic value to producers for sustainable practices, and support continuous improvement in ecosystem benefits.

3. Support innovation, research, refinement and commercialization of technologies throughout the supply chain that support economic viability and worker conditions.

Consumer Resilience Actions

GOAL:

To increase demand for Canadian beef by building awareness and trust in sustainable beef production in Canada.



Key Performance Indicators	2021 Performance
Canadian beef retail demand	✓ Canadian beef Retail Demand Index: 118 (2000=100) - 5% increase
International demand for Canadian beef	✓ International Demand Index: 141 (2000=100) - 16% increase since 2013



Progress

Despite global events, climate impacts and market disruptions, an overall 5% increase in Canadian retail beef demand, and 16% increase in international demand since 2013.

Strategic Action Items

1. Support increased capacity of the beef supply chain to respond to market demands.

2. Support responsible communication of production practices that are of interest and concern to consumers.

3. Promote knowledge transfer and acceptance of sustainable and safe beef production technologies by producers, customers, and policymakers, in both domestic and international markets.





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