CRSB
CANADIAN ROUNDTABLE FOR SUSTAINABLE BEEF

Regional Demonstration of Continued Progress

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Canadian Roundtable for Sustainable Beef

THREE Core Pillars of work

Sustainability Assessment

Farm to fork analysis, key performance indicators and strategy to advance continuous improvement in the Canadian beef sector

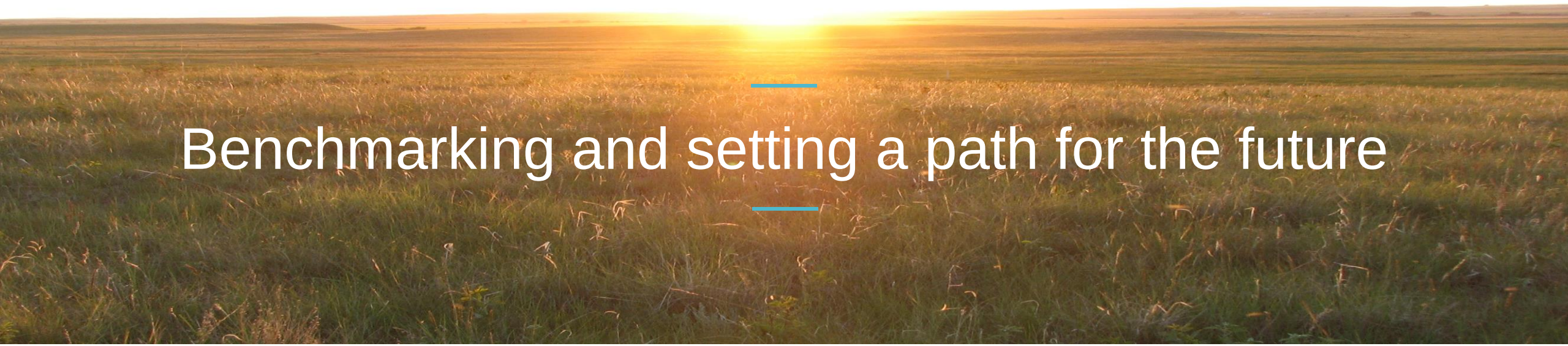
Verification Framework

Verification framework to assess the sustainability of individual operations along the beef value chain

Projects

Projects guided by the Sustainability Strategy to strategically advance sustainability within the Canadian beef sector

National Beef Sustainability Assessment & Strategy



Benchmarking and setting a path for the future

Assessment

A comprehensive assessment of the social, environmental and economic impacts of the beef industry

Strategy

Identifies focus areas and strategies for the CRSB and our membership to continually advance the sustainability of the Canadian beef industry

Sustainability Assessment

There were three main sections to the National Beef Sustainability Assessment

Environmental Assessment

Assessed climate change, fossil fuel use, water use and air and land pollution potentials through the E-LCA and biodiversity, carbon soil sequestration, land use, water use and water risk through the land use assessment

Social Assessment

Assessed the practices and processes that promote the well being of stakeholders including, workers, local communities as well as animals

Economic Assessment

Assessed; long-term profitability, long term cost of production, domestic consumer demand international consumer demand

Sustainability Strategy

Overarching Goal #1: Build a stronger and more united Canadian beef sustainability community

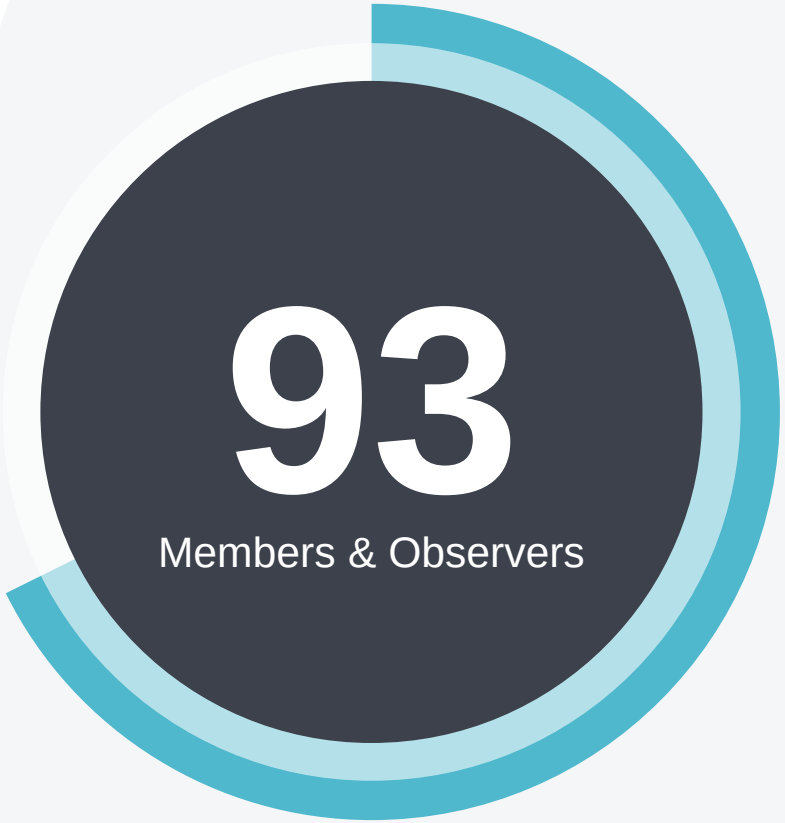
KPI: Number of CRSB members and Observers

Diversity of CRSB membership

Baseline: As of June 30, 2016 CRSB had 53 members and 40 observers

Action Items:

1. Build a trusted go-to forum on sustainable beef in Canada through diversity in membership, leading scientific information and robust frameworks to measure and advance sustainability
2. Enable the further engagement of the scientific community in the CRSBs work and membership
3. Through communications activities, engage, inform and enable information sharing that assists the Canadian beef industry in advancing sustainable practices



Environmental Assessment

Environmental Assessment

E-LCA

- Climate change
- Fossil fuel use
- Water use
- Air pollution
- Water pollution

- Followed ISO and LEAP guidelines

Land-Use Assessment

- Biodiversity
- Soil carbon sequestration
- Water use and risk

Environmental life cycle stages

Functional Unit

kilogram of live weight

refers to just the **farming stage** of the life cycle; and

kilogram of packed boneless beef (delivered and consumed)

includes all stages in the life cycle, from **farming to consumption**

Environment Summary Results

Water **631 L (BB) or 235 L (LW)**

GHG Footprint **30.8 (BB) or 11.4 (LW) $C0_2$ eg./kg**

Soil Carbon Stock **1.5 billion tonnes**

Land Use Total **21 Mha**

Meat Waste **19%**

kilogram of live weight

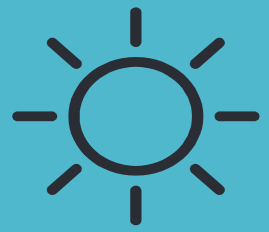
refers to just the farming stage of the life cycle; and

kilogram of packed boneless beef

includes all stages in the life cycle, from farming to consumption

Sustainability Strategy Goals

Environment



Climate Change

Goal #2. Reduce the Greenhouse Gas Footprint of Canadian Beef per unit of product produced (CO_2 eq./kg)

Land Use & Biodiversity

Goal #3: Enhance ecosystem services and biodiversity on lands managed by beef producers

Water

Goal #4: Enhance riparian health and reduce the blue water footprint of beef production

Meat Waste

Goal #5: Reduce post-harvest meat waste

Social Assessment

Social Assessment

Colour	Risk scale level	Definition
	High	High risk of negative social impact
	Moderate	Moderate risk of negative social impact
	Low	Low risk of negative social impact
	Very Low	Very low risk of negative social impact

Survey

The S-LCA utilized the surveys to identify hotspots

Desk Top Assessment

Survey results were further analyzed with a desk top assessment and regulatory review

Assessment Stages

LIFE CYCLE STAGES

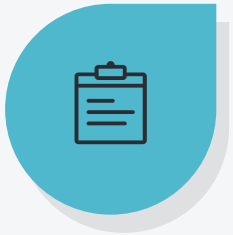
- CATTLE OPERATIONS
- PROCESSORS
- UPSTREAM VALUE CHAIN
- ASSOCIATIONS (of beef producers and processors)
- DOWNSTREAM VALUE CHAIN
- NATIONAL (legal and regulatory environment)

STAKEHOLDERS

- Workers
- Local Communities
- Value Chain Actors
- Society
- Consumers

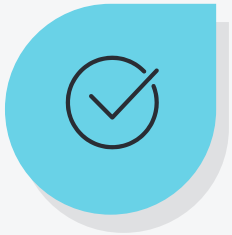
Results Social Assessment

Areas where industry is performing well



Health & Safety

Training and policies in place to ensure health and safety within the workforce

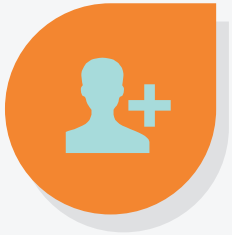


Animal Care

Sickness and disease prevention, health assessment, handling practices, housing and feeding, transport

Working Conditions

Scope of benefits, overtime, unionization, work load

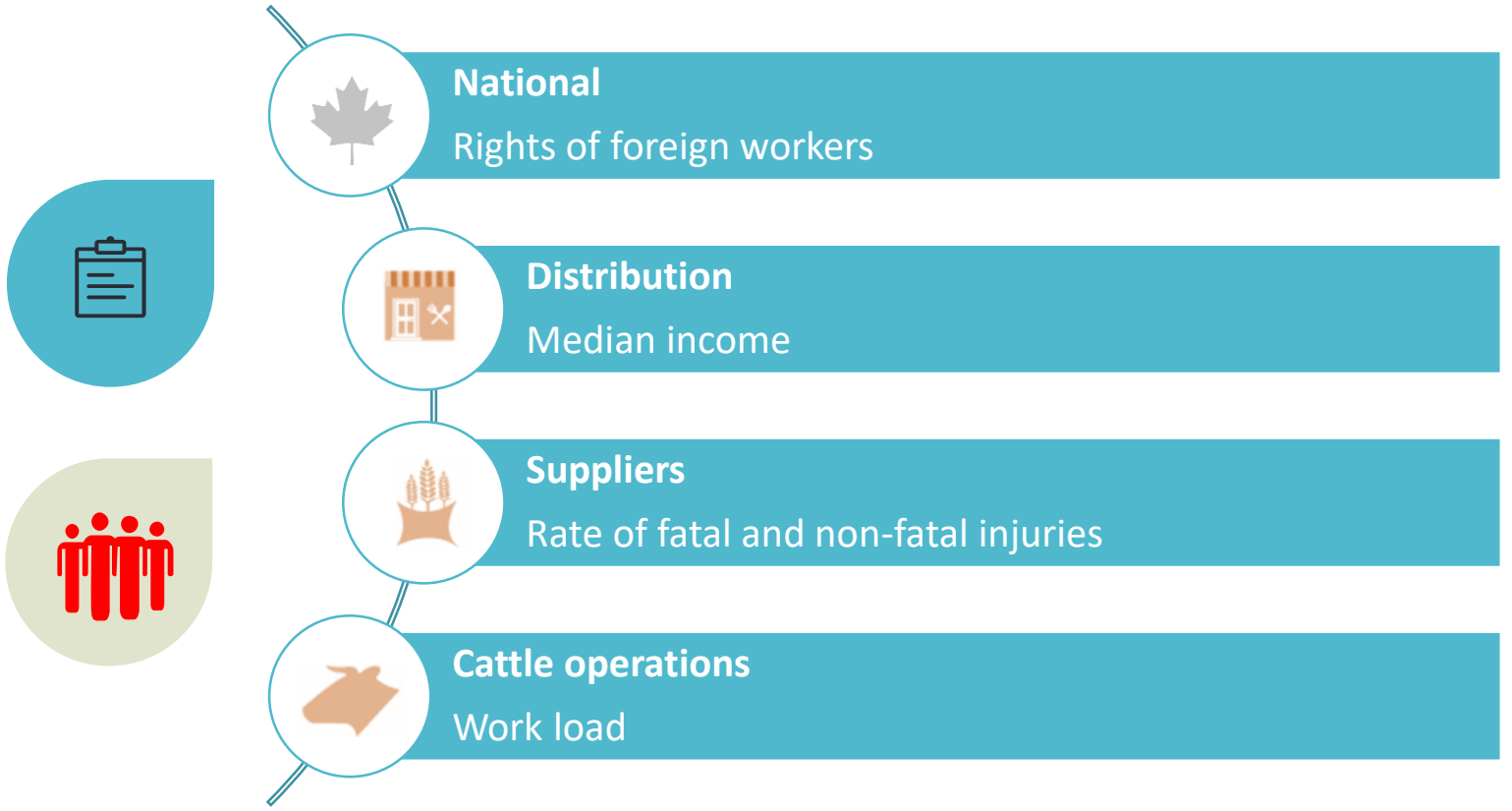


Socio-Economic Commitment

Commitment to sustainability issues (water, biodiversity), local community support, odor reduction, responsible procurement

Results Social Assessment

Four higher risks were identified across the value chain



Sustainability Strategy Social Goals

Farm Safety & Working Conditions

Goal #6: Promote farm safety and responsible working conditions

Animal Care

Goal #7. Promote excellence in animal care

Antimicrobials

Goal #8: Support the further development, monitoring and dissemination of best practices regarding antimicrobial use

Economic Assessment

ECONOMIC SUSTAINABILITY Defn:

Is the ability of a system to maintain productivity in the face of a major disturbance, as well as slow shifts in consumer preferences

Economic Assessment Framework

Four indicators were chosen to benchmark the economic sustainability of the Cdn. Beef industry

Producer Viability

Long Term Profitability

Long Term Cost of Production

Consumer Resilience

Domestic Consumer Demand

International Consumer Demand

Results Producer Viability

Long term cost of production, 2013 baseline (deflated)

- Cow/calf $1.20/one hundred pounds (cwt), or $0.03/kg
- Feedlot $106.67/cwt, or $2.35/kg

Long Term profitability, 2013 baseline (deflated)

- Cow/calf $93.03/cow, $93.03/cow
- Feedlot -$0.09/cwt (cash), or -$0.20/ckg

Consumer Resilience

Results

- **Domestic Demand**
- **International Demand**

DEMAND is a consumer's willingness to pay for a specific quantity and quality of product.

TRENDS are the result of fundamental changes in technology, society and the economy that play out over years or even generations.

FADS are driven by changes in current consumer inclinations; they come and go.

Sustainability Strategy

Economic Goals

Goal #9

Increase financial viability of beef production in Canada

Goal #10

Increase demand for Canadian beef through consumer awareness of sustainable beef production

Thank-You!

A sincere thank-you to everyone who contributed to the success of this project.

Steering Committee

The steering committee consisted of CRSB members and observers, industry experts and scientific advisors.

12

Research Teams

Canfax and Deloitte researchers with expertise spanning across social, environmental and economic sustainability topics.

18

Producers & Processors

Surveys were filled out by producers and packers. We estimate this involved the contribution of well over 120 individuals.

120

External Experts

8 external reviewers and 8 industry experts contributed their expertise.

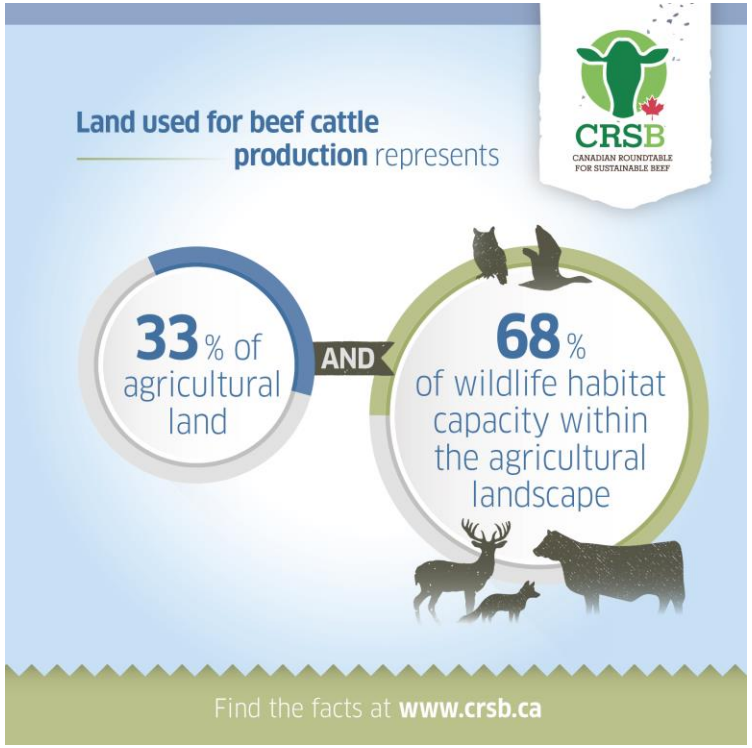
16

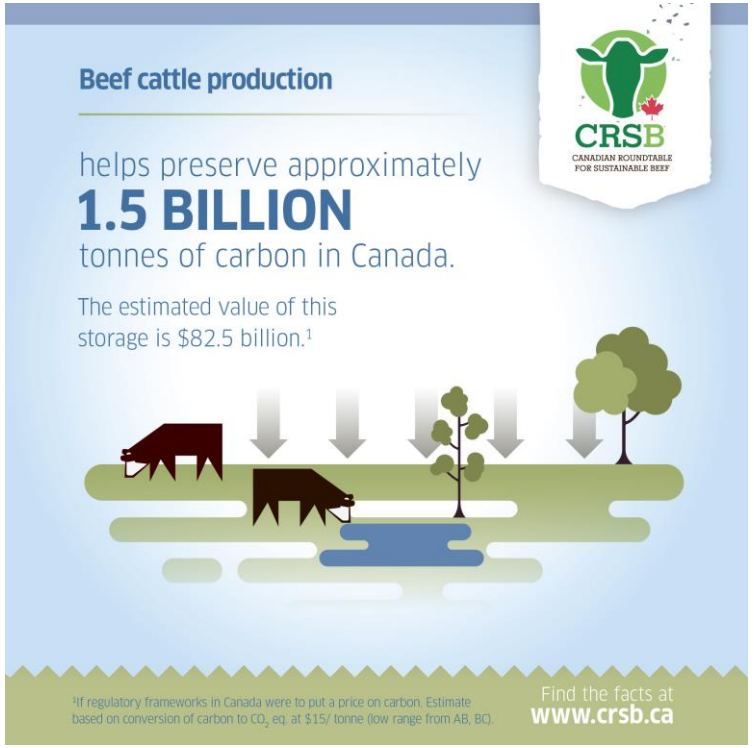
CRSB Stakeholders

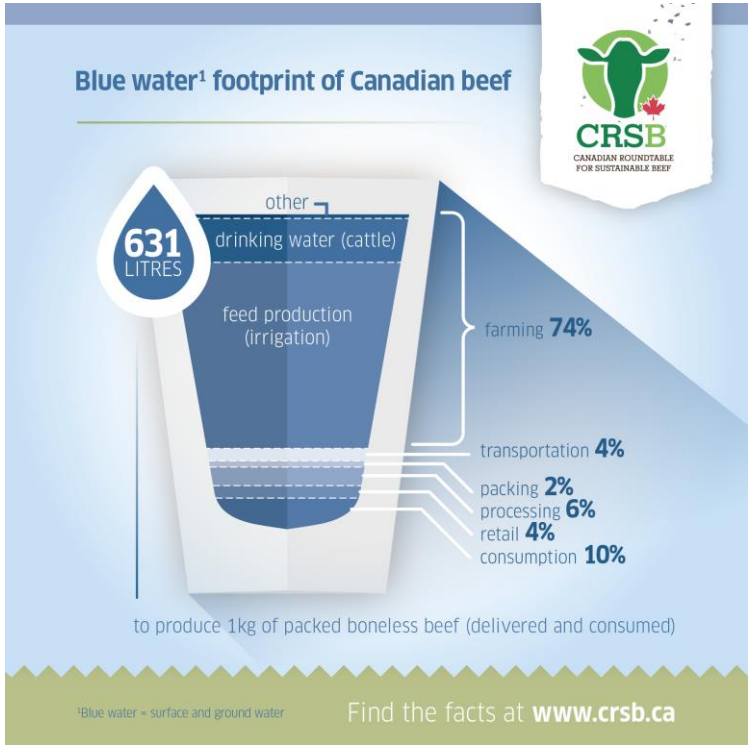
CRSB membership and observers contributed to the development of strategy through priority setting and identification of KPIs

75

Project Funding


Land used for beef cattle production represents
33% of agricultural land
AND
68% of wildlife habitat capacity within the agricultural landscape
Find the facts at www.crsb.ca


Beef cattle production
helps preserve approximately
1.5 BILLION
tonnes of carbon in Canada.
The estimated value of this storage is $82.5 billion.[1]
[1]If regulatory frameworks in Canada were to put a price on carbon. Estimate based on conversion of carbon to CO_2 eq. at $15/ tonne (low range from AB, BC).
Find the facts at www.crsb.ca


Blue water[1] footprint of Canadian beef
631 LITRES
other
drinking water (cattle)
feed production (irrigation)
farming 74%
transportation 4%
packing 2%
processing 6%
retail 4%
consumption 10%
to produce 1kg of packed boneless beef (delivered and consumed)
[1]Blue water = surface and ground water
Find the facts at www.crsb.ca

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Thank you

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