



CANADA BEEF

 PREMIUM QUALITY
 GRAIN-FED
 CANADIAN BEEF

CANADA'S BEEF SUSTAINABILITY

BEEF WATCH REPORT FOR JANUARY 2024

CANADA'S NATIONAL BEEF SUSTAINABILITY ASSESSMENT ⁽¹⁾

The National Beef Sustainability Assessment (NBSA) occurs every seven years to update the results for the continuous sustainability improvements of Canadian beef. The second NBSA report announced by the CRSB in January 2024⁽²⁾ provides science-based performance measures for the three intersecting pillars of sustainability: environmental, economic and social, for the Canadian beef production system between 2014 and 2021.

- The first pillar - the Environmental Assessment has two important components: the Environmental Life Cycle Assessment (E-LCA), including carbon footprint and resource use (water, land and fuel), potential water and air pollution; and Land Use Assessment (LUA) to assess the ecosystem services provided through Canadian beef cattle production, including biodiversity.⁽³⁾
- The second pillar - the Social Assessment evaluates the practices of beef production with four priority areas: Labour Management, People's Health and Safety, Animal Care and Antimicrobial Use. The Social Life Cycle Assessment Methodology (S-LCA) of the United Nations helped to guide the methodological framework.⁽³⁾
- The third pillar - the Economic Assessment focuses on the resilience of the Canadian cattle and beef supply chain with four key indicators: long-term profitability, long-term unitary cost of production, domestic and international consumer demand.⁽⁴⁾

Key Results:

Compared to the measures of 2014, the results confirm the following results:

Environmental Assessment ⁽³⁾

- A 15% reduction of greenhouse gases (GHG) per kilogram of boneless beef consumed, on track to meet the beef industry's goal of 33% GHG reduction by the year 2030.
- A reduction of 177 Liters of water per kilogram of boneless beef produced and consumed in Canada.
- Land used for beef production has a high Wildlife Habitat Capacity Index (AAFC)⁽⁵⁾, demonstrating the important role of Canadian beef producers' in preserving grasslands and pasturelands.
- Beef production utilizes 40% of agricultural land of which 84% is pasture, 8% for hay and 8% for crops (including barley and other feed crops).
- Canadian land used for beef production stores an estimated 1.9 billion tonnes of soil organic carbon, equivalent to the annual CO₂ emissions of 58 passenger vehicles per Canadian.
- Land used for beef production (pastureland and crop) provides the habitat where Canadian biodiversity thrives, supporting wildlife reproduction (74%) and feeding (55%) needs.

Social Assessment ⁽³⁾

- The S-LCA identified labour management opportunities to mitigate stress, support worker retention, safe animal welfare practices and gain public trust.
- Canadian beef industry's labour management practices promote the professional development of the workers with specific efforts to improve their health and safety conditions as well as better communication between managers and employees.

Economic Assessment ⁽⁴⁾

- For every worker in the Canadian meat industry, another 3.4 workers are employed, including direct and indirect employment.
- The profitability per head of the beef sector has increased although the input cost are higher. A cowherd of 200 head provides a total income close to the Canadian median after tax income. Higher calf prices are reducing the number of cows needed to support a family of producers.
- Domestic and international consumer demand has increased 5% and 16% respectively.
- The contribution of the beef industry to the Canadian economy is remarkable with production of good and services for an estimated \$51.6 billion, a contribution of \$21.8 billion to the Gross Domestic Product (GDP) and labour income of \$11.7 billion.

Conclusion ⁽⁶⁾

Data captured in the assessment of the environmental impacts of traditional beef cattle production in Canada provide a benchmark for future assessments and evaluation of the potential benefits of mitigation strategies. This also provides information to support the future development of a more comprehensive and descriptive LCA of Canadian beef.



Sources:

- (1) Canadian Roundtable for Sustainable Beef (CRSB), **NBSA Summary report: National Beef Sustainability Assessment and Strategy summary report**, 2024.
- (2) CRSB, **NBSA Summary report: National Beef Sustainability Assessment and Strategy summary report**, 2024.
- (3) CRSB, **Full NBSA report: National Beef Sustainability Assessment, Environmental and Social Assessment**, Calgary, AB. Groupe AGECCO, 2024 (a)
- (4) CRSB, **Full NBSA report: National Beef Sustainability Assessment, Economic Assessment**, Calgary, AB. Canfax Research Services, 2024 (b)
- (5) AAFC, **Wildlife habitat Availability on Farmland - Technical report - agriculture**. [canada.ca](https://www.canada.ca), December 19, 2023
- (6) Aboagye I. A., et al., **An Assessment of the Environmental Sustainability of Beef Production in Canada**, Canadian Journal of Animal Science., 2024 (doi. org/10.1139/CJAS-2023-0077)