



CANADA: AHEAD OF THE HERD IN CUTTING CATTLE CARBON



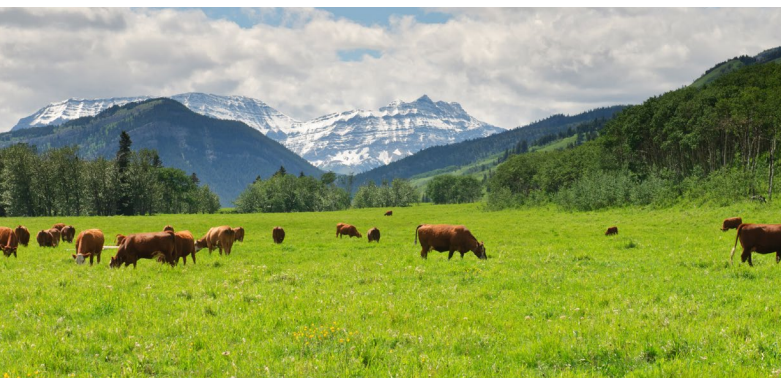
Canada's beef industry is one of the most sustainable in the world, thanks to the commitment and hard work of its ranchers.

Did you know? It now takes 29% fewer breeding cattle and 24% less land than it did in 1981 to produce the same amount of beef in Canada.

FIRST IN THE WORLD TO GENERATE BEEF CARBON CREDITS

Canada's world-class animal tracking and traceability systems, animal health management technology and research investments have made us a world leader in sustainable livestock management. Canadian beef has among the lowest greenhouse gas (GHG) footprints per unit of production in the world at 11.4 kilograms of carbon dioxide emissions per kilogram of live weight,¹ and Canada was the first country to deploy the Global Roundtable on Sustainable Beef's framework for sourcing sustainable beef. It now takes 29% fewer breeding cattle and 24% less land than it did in 1981 to produce the same amount of beef in Canada.²

This leadership has attracted the attention of Brazil, China, Kazakhstan and others. Discover how you can maximize productivity while minimizing environmental impact by working with a Canadian firm.



› Traceability

TRUSTBIX INC. - INNOVATIVE PROJECT DEMONSTRATES HOW SUSTAINABLE BEEF CAN BE TRACED

TrustBIX's cutting-edge traceability technology enables global supply chains to share data and demonstrate their sustainability. TrustBIX assisted McDonald's, Cargill and other corporations to become some of the first companies in the world to source beef from certified sustainable operations in accordance with the Canadian Roundtable on Sustainable Beef's (CRSB) certification framework. This enabled Verified Beef Production Plus-certified producers and supply chain members to receive a market premium paid via TrustBIX. Its technology can enable similar outcomes in the global beef sector and can be adapted to trace the sustainability of other agri-food products.

› trustbix.com

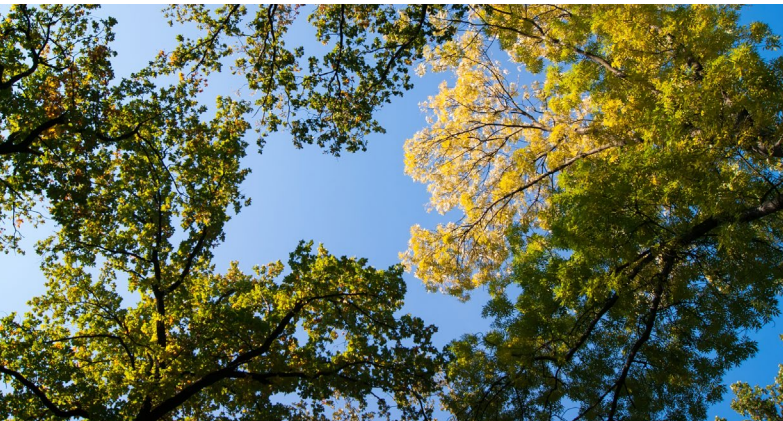
The Certified Sustainable Beef Framework, developed by the CRSB, provides a tool to certify farms, ranches and processing facilities that follow sustainability standards. The framework also supports retail and food service companies to meet sustainable sourcing commitments and provides sustainability messaging for consumers through marketing labels and claims.

¹ Canadian Roundtable for Sustainable Beef, 2016.

² Agriculture and Agri-Food Canada, 2019.



CANADIAN SUCCESSES AROUND THE WORLD



› Validation

NATUREBANK - SUSTAINABLE BEEF PRODUCTION SUCCESSFULLY VALIDATED IN BRAZIL

Under Dow Chemical's GHG reduction framework, NatureBank validated the Araguaia Range and Pasture project in Brazil. This project dramatically increased the accumulation of below-ground biomass by intensifying cattle grazing and applying nitrogen fertilizer more strategically. It also improved cattle feeding practices, maximizing the gains of feed efficiency and minimizing enteric fermentation emissions. The project demonstrates that this model for generating sustainable beef is replicable and scalable in Brazil and around the world.

› naturebank.com



› Demonstration

CARBON CREDIT SOLUTIONS INC. - INTEGRATED CROPPING AND LIVESTOCK SYSTEM PROJECT GENERATES ZERO-DEFORESTATION SOY AND BEEF

The Carbon Credit Solution Inc.'s Bayer-funded Climate Smart Farms Project demonstrates how integrated cropping, livestock and forestry systems can improve climate change resilience, reduce GHG emissions and build sustainable livelihoods in Brazil. Fazenda Tupã, a 4,000 hectare soy farm, is integrating beef cattle with a range of agroforestry products, while Fazenda EcoAraguaia, a 480 hectare cattle farm, is restoring degraded pastureland and introducing agroforestry. In total, 1,450 hectares will be reforested, generating verified carbon credits from soil sequestration and forest restoration. The project will scale to 50 cattle ranches and soy farms, creating a supply of zero-deforestation commodities for global agri-food companies. Participating farmers gain access to a loan program that helps them introduce regenerative agricultural practices with access to technical assistance.

› carboncreditsolutions.com

CANADIAN FIRMS OFFERING SUSTAINABLE LIVESTOCK SOLUTIONS

Traceability

- › TrustBIX Inc.
- › Cowater International
- › FARM-TRACE Technologies Inc.
- › Agriteam Canada Consulting Ltd.
- › Growsafe Systems®

Project development and delivery

- › ALUS Canada
- › Livestock Water Recycling
- › Cowater International
- › Carbon Credit Solutions Inc.
- › NatureBank
- › Agriteam Canada Consulting Ltd.

Greenhouse gas quantification and verification

- › Viresco Solutions
- › Brightspot Climate
- › NatureBank
- › Carbon Credit Solutions Inc.
- › Brinkman & Associates Reforestation Ltd.

Applied research and demonstration

- › Growsafe Systems®
- › Olds College
- › Lakeland College
- › Brinkman & Associates Reforestation Ltd.
- › Viresco Solutions Inc.
- › University of Alberta

Canada's Trade Commissioner Service (TCS) is a government organization that has facilitated trade with Canada since 1895. With offices across Canada and around the world, we are accessible to both Canadian and international companies looking to increase their business and find trusted partners. With an in-depth knowledge of global markets and insight on Canadian industry sector capabilities, we can connect you with strategic procurement, investment, innovation or education partners in Canada. Let our team of professionals help you at trade commissioner.gc.ca! For more information on Climate Finance, please contact us at TCSclimatefinance@international.gc.ca.