Canadian Beef Advisors – Industry Goals to 2030

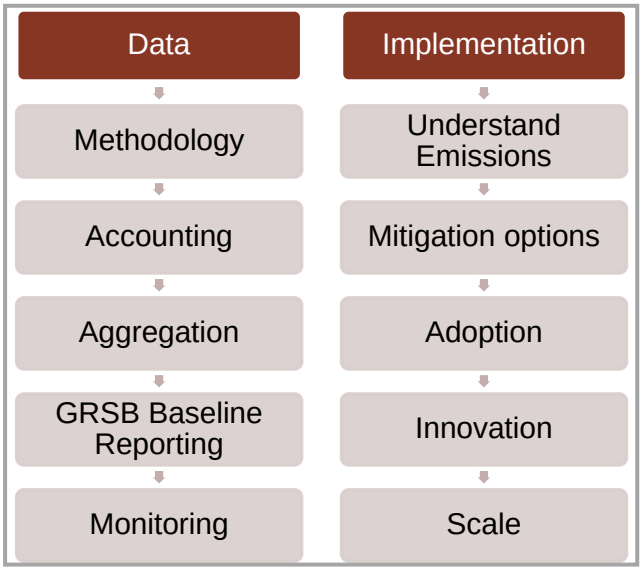
Greenhouse Gas and Carbon Sequestration Goal

July 13, 2023

The Canadian beef industry goal on greenhouse gases is aligned with efforts underway at the Global Roundtable for Sustainable Beef (GRSB). There are two main streams of work to achieving the global and regional climate goals.

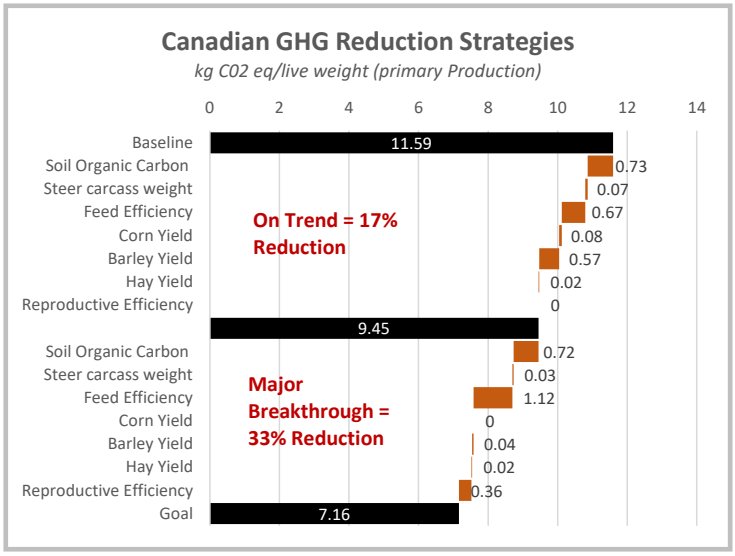
1. Data related to goal tracking (GRSB)
2. Implementation of strategies to help successfully meet the goals (regional efforts)

Regional efforts are focused on implementation.



Understand Emissions

This starts with understanding emissions profiles for local conditions, which vary with production system (e.g. grass-finished, silage-finished or grain-finished). In Canada, this understanding is informed by the National Beef Sustainability Assessment (NBSA) published by the Canadian Roundtable for Sustainable Beef (CRSB). Canadian beef emissions are 51.5% enteric methane, 28% manure management and 19% feed production (CRSB, 2016)



Mitigation Options

When the 2030 greenhouse gas goal was developed, scenarios were developed. Using the historical trend for continuous improvement in research provided a 17% reduction in GHGs from the 2013/14 baseline. A major breakthrough in adoption levels of known practices or technology provided an estimated 33% reduction.

Adoption

Research from the University of Manitoba identified five practices that reduce emissions. While a beneficial management practices (BMP), by definition benefit the environment, it says nothing about its economic viability. Therefore, producers are encouraged to consider the following BMPs for their production context, specifically in situations where a positive economic cost:benefit is present. Practices include:

1. Inclusion of legumes on pasture (carbon sequestration/emissions)
2. Rotational grazing to extend grazing and reduce feeding days (carbon sequestration/emissions)
3. Keep cattle on pasture vs. confined in winter (manure management)
4. Precision feeding (ration balancing, food upcycling) (emissions)
5. Productivity enhancing technology (PETs) (emissions)

Innovation

Continued investment in research is needed to realize a 17% reduction. Between 2013/14 and 2021 reductions were driven by higher carcass weights, steady feed efficiency and incremental improvements in numerous areas that all contributed to being on track for the 2030 goal. Any new practices or technologies will need industry and consumer acceptance. There are barriers to adoption of feed additives (e.g. *3NOP, red/brown algae, dietary nitrate*) that need to be addressed.

Scale

Canada has a role to play as a supplier of low emission beef to a growing global population. There needs to be more, not less, beef production from countries with the lowest emissions intensity (to avoid shifting the burden to countries with higher emissions intensity). Demonstration of low emission beef production globally and how to scale it could showcase to the world that it is possible.

Monitoring Progress

The CRSB is currently updating the NBSA from the 2014 baseline data to 2021 data. This is almost halfway to the 2030 goal.[1] Expected to be published in the second half of 2023, this will show how producers have been making critical progress toward the 2030 goals. That progress should be celebrated, but efforts need to continue as there are only six calf crops left until 2030.

Learn more about the 2030 Goals at www.beefstrategy.com.

The National Beef Strategy and 2030 Goals are a collaborative effort by Canada's national beef sector organizations including the Beef Cattle Research Council, Canadian Beef Breeds Council, Canada Beef, Canadian Cattle Association (and its provincial member associations), Canadian Meat Council, Canadian Roundtable for Sustainable Beef, and the National Cattle Feeders' Association.

The National Beef Strategy promotes a united approach to best position Canada's beef industry to compete for a larger share of the world market and to produce the high-quality beef product of choice in the world.

[1] 2014 to 2021 = 7 years (43.75%) and 2021 to 2030 is 9 years (56.25%) for a total of 16 years.