



Canadian Dairy Farmers Adopt Ambitious Environmental Targets



Ray Gourlay

Solar energy is just one way to begin the journey to 'net-zero' carbon emissions.

At the annual Policy Conference in February 2022, Dairy Farmers of Canada announced their plan to lead the Canadian dairy industry to achieve net-zero carbon emissions by 2050. This ambitious goal aligns the dairy industry with the federal government's national target on the same timeline.

What is the Problem?

Agriculture, including dairy, has come under increased scrutiny in recent years based on its greenhouse gas (GHG) emissions and contribution to climate change. According to the ministry of environment and climate change, in 2020, the agriculture sector was the fifth largest source of GHG emissions in Canada, accounting for 10% of total national emissions. The calculation is based on three main factors: animal production, crop production, and on farm fuel use.

The good news is that in Canada, between 1990 and 2019, the carbon footprint of one litre of milk has gone down 24%, making it less than half of the global average.

Why take this step?

Farmers truly "live off the land" and are motivated by a long-term vision to care for their farms so that future generations

can carry on farming. Farmers are also keenly aware of the effects of climate change; events like wildfires, droughts, and flooding are extreme examples that farmers

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need not be reminded of. By making this commitment to reduce GHG emissions, dairy farmers demonstrate that they take climate change seriously and are committed to being part of the solution. A recent survey confirmed that 85% of consumers want dairy farmers to reduce their GHG emissions. As governments of all levels are making targets and plans to reduce emissions and aligning with the federal government's targets, it demonstrates a willingness to partner with them and increases the likelihood of their support (financial) to industry stakeholders when pursuing these goals.

Understanding the goal

Unlike a "zero-emissions" target, the term "net-zero" refers to all the GHG emitted, minus the GHG that is absorbed and sequestered by plant matter on farms or captured before it enters the atmosphere.

Certain data has been recorded to determine the dairy sector's emissions but much less investigation has been done to determine its carbon sequestration potential.

To gain an accurate understanding of where we are now and to track progress, much more study is needed.

What is the strategy?

There is no "one size fits all" solution to reducing GHG emissions on all dairy farms. Various methods are better suited to different size farms and different regions. DFC has formed a Farmer Sustainability Advisory Group to learn what tools farmers are already using to reduce emissions and sequester carbon. Environmental Consulting firm, Viresco Solutions, has also been enlisted to aid in creating goals, developing strategies, and helping with implementation as the initiative enters its next phase. With all this input, DFC will create a list of best practices to be implemented on farms and develop mentorship and training opportunities and assist with funding avenues to facilitate

larger capital projects.

When it comes to reducing GHG emissions, strategies may include heat re-capture technology, biodigesters, building and equipment upgrades, plastic recycling, manure management, feed improvements and amendments (seaweed supplements have been shown to reduce methane emissions from cows), more productive genetics, and investments in wind and solar power. On the carbon-capture (sequestration) side of the equation, practices like maintaining forest and wetland areas, tree planting, reduced tillage, cover crops, crop-rotations, perennial grass crops, and promoting biodiversity are all part of the solution.

In an interview with Sarah Sache and Andrew Campbell on their podcast, *The Pod-Cow*, Ontario dairy farmer and DFC board member, Korb Whale, shared thoughts on collective efforts: "If we can aggregate all the projects we do and be able to measure them efficiently and report them efficiently, then we can make a major impact on our environment." A broad range of tools will be needed to reach this goal and some farms will be able to take it farther than others. Whale clarified the goal is for the dairy industry collectively to reach net-zero by 2050, not for every farm to do so. He also pointed out that farms are family businesses that need to succeed financially and any improvements and innovations toward net-zero GHG must also have a return on investment to be adopted broadly.

DFC is expected to release much more information in the coming months regarding the specifics of this plan and more can be found on their designated website, www.herefortomorrow.ca.



A Peek into the Past

SALT SPRING ISLAND DAIRY HISTORY

— Mike Yusko, BC Dairy Historical Society
www.bcdairyhistory.ca —

In the 1800s, dairy farming was a natural fit for Salt Spring Island as cattle would thrive with the lush grass fields and mild climate. Grain, hay and root crops grown for winter cattle feed flourished. By 1860, virtually every Salt Spring Island farm raised dairy cattle. Dairy production became a necessity for survival. Louis Stark and his mother Sylvia, ex-slaves from America, are credited with importing the first dairy cattle in 1860, farming north of Vesuvius Harbour. By the 1880s, farm families were selling butter off the Island. The Island dairy farmers became very sophisticated. By 1911, most dairy farms arranged to have their cows in full milk during the autumn and winter months when the price of cream was highest. In 1892, butter was sold for between 25 cents and 40 cents per pound. Mr. Conery developed a model dairy farm and in 1895 was marketing 1000 pounds of butter per year. In 1913, there were about 500 dairy cows on the Island and dairying was reported to be the most important industry. In the early years, dairy farming was centered mainly on the north of the island. Jerseys were the predominate breed with some Guernsey, Holstein and Ayrshire cattle.

Before 1900, a few farmers tried operating creameries, but they failed. In June 1903, the Salt Spring Island Creamery Association was organized. A creamery building was constructed in Vesuvius, which still stands today at the foot of Ganges Hill. The local Church Monthly wrote in 1904: "The new stone creamery looks very picturesque at the foot of the long mountain road and will soon be in operation."



References for this article are:

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