SUSTAINED PROGRESS: ENVIRONMENTAL EFFICIENCY OF CANADIAN MILK PRODUCTION

Preserving the environment is a central value for Canadian dairy farmers. To build on this longstanding commitment, DFC conducted two life cycle assessments (LCA) to measure their environmental impact and identify areas for improvement.

A LIFE-CYCLE ASSESSMENT (LCA) OF THE SECTOR ENVIRONMENTAL PROFILE

This study includes all life-cycle stages that contribute to the environmental footprint of dairy farming, from inputs up to and including transportation of milk from the farm to the processor.

CANADIAN DAIRY FARMERS CONTINUOUSLY IMPROVE PRODUCTION PRACTICES

Dairy farms are efficient. Since 2011, the average annual milk production per cow has increased by 13% as a result of improvements in animal nutrition, genetics and housing.

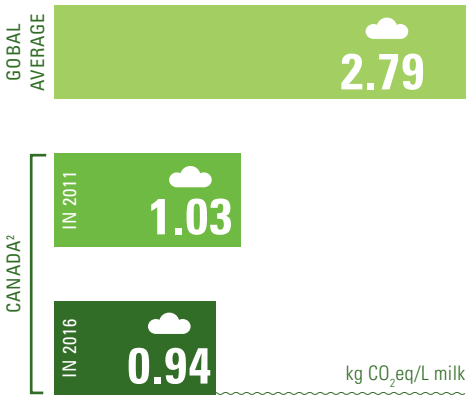
INFORMED BY SCIENCE, FARMERS CONTINUE TO ADOPT PRACTICES THAT BENEFIT THE ENVIRONMENT, SUCH AS:

ACTION	IMPACT
FARMERS EMPTY MANURE STORAGE MORE FREQUENTLY	GHG EMISSIONS (nitrous oxide, methane)
MORE FARMS ADOPT CROP ROTATIONS	LAND USED & WATER CONSUMPTION
INCREASED USE OF PRECISION AGRICULTURE TECHNOLOGIES	YIELD INCREASES

IMPROVED ENVIRONMENTAL IMPACT

AMONG THE LOWEST CARBON FOOTPRINTS FOR DAIRY IN THE WORLD

Producing one litre of milk in Canada emits only **1/3 the greenhouse gas** (GHG) emissions as compared to the global average[1].



Consumers can enjoy their daily dairy products knowing that the footprint of milk produced in Canada has decreased over time. In the past 5 years:

- **7% LOWER** CARBON FOOTPRINT
- **6% LOWER** WATER CONSUMPTION
- **11% LOWER** LAND USE

In 2016, Canadian milk production was responsible for generating or using:

- **1.3%** OF CANADA'S TOTAL GHG EMISSIONS[3]
- **0.02%** OF SOUTHERN CANADA'S FRESHWATER SUPPLY[4]
- **2.9%** OF CANADA'S TOTAL AGRICULTURAL LAND USE[5]

A STUDY CONDUCTED IN 2018 BY

GROUPE AGÉCO

1 FAO (2013). Greenhouse gas emissions from ruminant supply chain – a global life cycle assessment. Available at: http://www.fao.org/docrep/018/i3461e/i3461e.pdf

2 The 2012 report covered milk production in 2011 while the 2018 report covered milk production in 2016.

3 Environment and Climate Change Canada (2016). National Inventory Report 1990-2016: Greenhouse Gas Sources and Sinks in Canada. Available at: https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/national-inventory-submissions-2018

4 Water Canada (2017). Statistics Canada Reports on Canada's Renewable Freshwater and Water Use. Available at: https://www.watercanada.net/statistics-canada-reports-on-canadas-renewable-freshwater-and-water-use/

5 Statistics Canada (2018). Land Use-Table 32-10-0406-01 (formerly CANSIM 004-0203). Available at: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210040601

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