



ENVIRONMENTAL LIFE CYCLE ASSESSMENT OF CANADIAN MILK PRODUCTION



The main objective of the life cycle assessment (LCA) is to quantify the environmental impact of milk production in Canada.¹ Two LCAs were conducted in 2011 and 2016 by an independent team of life cycle analysis professionals.

3

MAIN ENVIRONMENTAL FOOTPRINTS WERE ASSESSED:



Carbon footprint



Water consumption



Land use

ASSESSING THE COMPLETE LIFE CYCLE

The study takes a comprehensive look at all the stages and inputs of milk production.



Equipment production



Feed production



Growing crops



Resource /energy extraction and usage



Milk production



Farm operations



Transport



Processor's gate

IMPROVED ENVIRONMENTAL IMPACT OF DAIRY 2011-2016¹



7% LOWER
CARBON FOOTPRINT



6% LOWER
WATER CONSUMPTION



11% LOWER
LAND USE



DAIRY IN CANADA - 2016¹



1%

of Canada's total GHG emissions



0.02%

of southern Canada's fresh water supply*



2.9%

of Canada's total agricultural land

*Most of Canada's renewable freshwater supply is located in the southern portion of the country.

IMPROVING ENVIRONMENTAL OUTCOMES THROUGH INVESTMENT IN RESEARCH AND TECHNOLOGY



Improvements in manure management and feed production helped reduce carbon footprint of dairy farms.



New approaches to reducing water consumption, increased water recycling, plus enhanced soil quality to retain more water led to less water needed.



Better crop management and precision agriculture helped increase crop yields and reduce land needed.

2021



To keep advising farmers on the best strategies to further accelerate improvement of our environmental footprint, Dairy Farmers of Canada is conducting life cycle assessments every five years.



1- Groupe AGEFO. 2018. Environmental life cycle assessment of Canadian milk production. 2016 data and results update. Executive Summary. https://www.dairyfarmers.ca/content/download/6327/56092/version/2/file/LCA_ExecutiveSummary.pdf. Accessed September 21, 2021.