



NET ZERO BY 2050

A sustainable future
for your farm and
our planet.



Canadian dairy farmers have a long history as stewards of our natural resources. Your collective focus on sustainable practices contributes to the continued, long-term success of your farm and ensures that Canadians continue to have access to nutritious, locally produced dairy products made with 100% Canadian milk. Your commitment to efficiency and stewardship is why Dairy Farmers of Canada has set a goal to achieve net zero greenhouse gas (GHG) emissions by 2050 on Canadian dairy farms.

[Net Zero by 2050: Best Management Practices Guide to Mitigate Emissions on Dairy Farms](#) provides an overview of the practices that will help reach this target. Every farm is unique, and that means that different strategies will work for different operations. Every farm has the opportunity to contribute to reaching net zero by adopting further best management practices (BMPs) to reduce emissions and increase carbon sequestration in a voluntary way. This factsheet highlights the **energy, infrastructure and transportation** practices in the guide.

Building greater
sustainability in

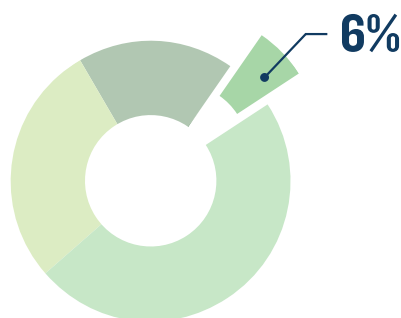
ENERGY, INFRASTRUCTURE AND TRANSPORTATION

There are many green energy innovations that offer effective ways to offset energy use and consumption costs, and sometimes provide new on-farm revenue streams – from reducing overall energy use to producing and/or purchasing renewable energy. Responsibly managing plastics is another way you can contribute to a clean and healthy environment.

LOWERING THE CARBON FOOTPRINT OF CANADIAN MILK PRODUCTION

Dairy Farmers of Canada conducts life cycle assessments every 5 years to measure the carbon footprint of milk production and identify areas for continuous improvement. In 2016, emissions came from four key areas.

Energy, infrastructure and transportation account for 6% of GHG emissions produced on Canadian dairy farms. This represents a significant opportunity for dairy farmers to implement and enhance on-farm practices to lower their carbon footprint.



- Livestock management (48%)
- Feed production (28%)
- Manure management (18%)
- Energy, infrastructure and transportation (6%)**



ACTIONS TO REDUCE & REMOVE EMISSIONS

Adopting one or more of these Energy, Infrastructure and Transportation BMPs will reduce GHG emissions and increase your farm’s overall resilience to the effects of climate change, while generating cost savings and reducing waste. For more specific information on adopting these practices, refer to the full [Net Zero by 2050: Best Management Practices Guide to Mitigate Emissions on Dairy Farms](#).

▶ IMPROVING ENERGY EFFICIENCY

to reduce on-farm energy demand

- Conduct an energy audit
- Install energy-efficient lighting, ventilation and milking equipment
- Minimize tillage to reduce fuel usage

▶ CONVERTING TO ALTERNATIVELY POWERED MACHINES

where feasible to reduce emissions

- Consult your equipment dealer about alternatively powered (e.g., electric, hydrogen) farm equipment options that will meet your farm management needs.

▶ PRODUCING WIND ENERGY

from on-farm turbines

- Consider available wind resources, zoning and aesthetic issues
- Ensure the scale of wind turbines aligns with energy use on the farm

▶ PRODUCING SOLAR ENERGY

for a renewable option

- Get quotes from different solar contractors to ensure you choose the right setup for your farm
- Choose the location for solar panels to determine the type of system – tracking vs. stationary
- Know the voltage needs and consult with solar and electricity providers to choose the correct setup

▶ PURCHASING RENEWABLE ENERGY

when producing it is not an option

- Consult a green energy provider to determine energy sources that will meet the needs of your farm
- Contact your utility provider to find out if renewable options are available in your area
- Use websites such as energyrates.ca to help determine what options are available in your province
- Explore financial incentives or programs offered by your province to assist with costs

▶ MANAGING PLASTICS RESPONSIBLY

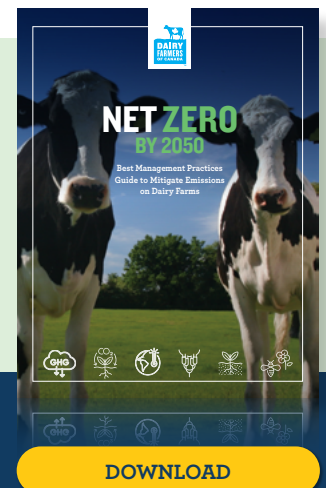
to contribute to a healthy environment

- Choose compostable products or biodegradable materials
- Look for products with less plastic packaging
- Divert waste by reusing or repurposing plastics
- Use take-back programs to return plastics
- Recycle plastics
- Dispose of plastic waste at landfill when no other options are available
- Check to see what Cleanfarms recycling programs are available in your area at cleanfarms.ca

“We had the opportunity to install a solar system. For the price of a pickup truck, I was able to put this on the roof of my barn. It returns income to me every day and runs flawlessly. Not only did we see a huge reduction in the bill, but we also are making power out of the sun, and it’s awesome.”

– Jordan, a dairy farmer in Alberta

For full details and resources to support the adoption of these and other BMPs, download the guide at dairyfarmersofcanada.ca/en/farmer-resources



DOWNLOAD