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 **livestock management** practices in the guide.

Building greater sustainability in

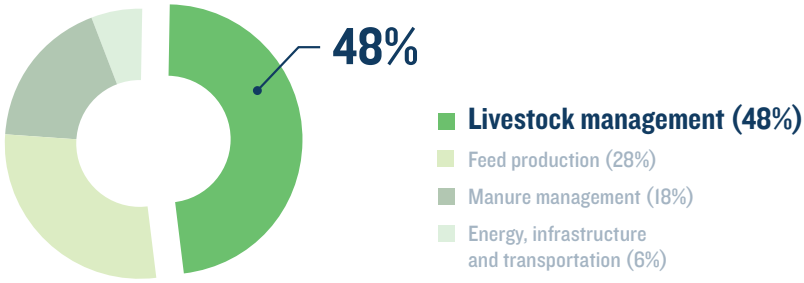
LIVESTOCK MANAGEMENT

Improvements in cow health and comfort, enhanced diets and genetics, and advances in technology, means fewer cows are needed to produce the same amount of milk. Fewer cows generally means fewer GHG emissions. Optimizing dairy health, genetics and diet can further reduce methane emission and lower production costs.

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.

Livestock management accounts for 48% 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.



ACTIONS TO REDUCE & REMOVE EMISSIONS

Adopting one or more of these Livestock Management BMPs on your farm will reduce GHG emissions, improve production efficiency and deliver a high return on investment. 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.

OPTIMIZING ANIMAL HEALTH

to optimize milk production over time

- Regular herd health checks
- Biosecurity protocols
- Disease and treatment protocols
- Track reproductive management performance
- Reduce metabolic problems
- Focus on colostrum management to boost calf immunity

ENHANCING HERD GENETICS

to further optimize milk production by selecting for specific traits

- Focus genetics for milk production, fertility, health, longevity, feed efficiency and reduced enteric methane production
- Conduct genomic sampling
- Work with technical advisors to create genetic plan
- Consider a genomic program

IMPROVING FEED EFFICIENCY

as higher-producing cows typically emit less methane per unit of milk than lower-producing cows

- Work with a dairy nutrition advisor
- Harvest quality forages and ensure proper storage
- Use distiller's grains
- Work with a genotype program
- Monitor herd progress on a monthly basis

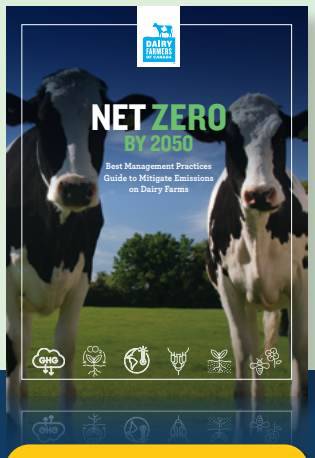
OPTIMIZING ANIMAL DIETS

to reduce methane emissions from enteric fermentation

- Consult a dairy nutrition advisor to adapt herd's diet
- Work with a forage specialist
- Focus on improving forage quality
- Process forage (e.g., chopping, grinding, pelleting)
- Consider adding legumes and pulses to diet

"Herd genetics and animal health are priorities on our farm. We do genomic tests to select replacement animals. This leads to an increase in the cows' longevity and thus a decrease in the number of replacement animals needed. In addition, our cows wear collars with movement and chewing detection, which helps in health monitoring and heat detection."

— Gabriel, a dairy farmer in Quebec



DOWNLOAD

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