



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 **land management** practices in the guide.



Building greater sustainability in

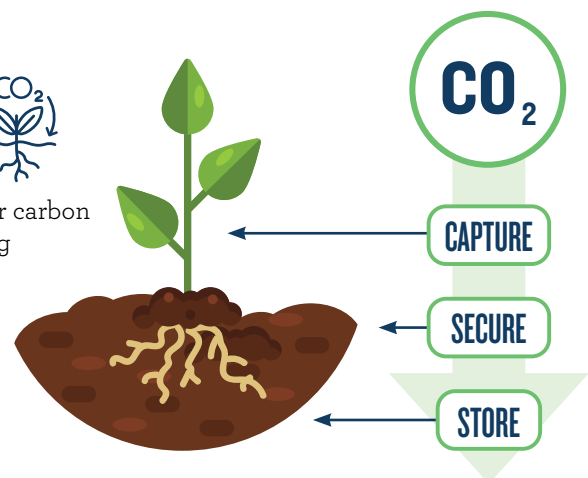
LAND MANAGEMENT

Managing your land with a focus on soil health and biodiversity helps create more resiliency to the effects of climate change, such as heatwaves. By preserving, protecting and enhancing natural systems such as grasslands, wetlands, tame pastureland, forests, riparian buffer zones, shelterbelts and hedgerows, you can provide carbon storage and improve soil health as well as watercourse and groundwater quality.

LOWERING THE CARBON FOOTPRINT OF CANADIAN MILK PRODUCTION

CARBON SEQUESTRATION

contributes to a lower carbon footprint by removing atmospheric carbon dioxide (CO₂) from the air and storing it in plants, roots and soil.





ACTIONS TO REDUCE & REMOVE EMISSIONS

Adopting one or more of these Land Management BMPs will increase opportunities for carbon sequestration, providing habitat for a diverse range of species and reduce your susceptibility to overall environmental risks. 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](#).

▶ ROTATIONAL GRAZING

to improve pasture management

- Manage nutritional requirements with an appropriate rate of cattle to pasture acres
- Develop a rotation schedule that maintains pasture, plant and soil health
- Consult your dairy nutrition advisor for any mineral supplements needed with forage grazing diet

▶ PROTECTING RIPARIAN BUFFER ZONES

to conserve ecosystems and water quality

- Create naturalized areas by planting trees, wildflowers, grasses and other natural species
- Maintain wildlife habitat – rock piles for reptiles, standing dead trees for birds
- Protect or create riparian strips between water and land environments
- Create transitional riparian zones between water and land environments
- Create a grassed waterway
- Sign a stewardship agreement that sets aside parts of your farm for wildlife habitat
- Avoid removing vegetation to plant annual or forage crops
- Allow a rest period from grazing

▶ PRACTICING SILVOPASTURE (AGROFORESTRY)

for healthier soil and greater biodiversity

- Convert a small forested area into a silvopasture that combines trees/shrubs on the same land as crops/animals
- Conduct a site assessment that includes soil type and tree species
- Consult a woodlot specialist for best practices under local conditions
- Talk to an agronomist for forage seeding recommendations

▶ MAINTAINING GRASSLANDS

to sequester and store carbon

- Establish a rotational grazing system
- Re-establish or restore on-farm pasture areas
- Manage stock rates so pastures are lightly to moderately grazed in spring and early summer
- Leave one pasture to rest each year
- Control invasive plant species
- Identify grassland birds and support them with a management plan

▶ CONSERVING WETLANDS

for natural carbon storage and a cooling effect on the atmosphere

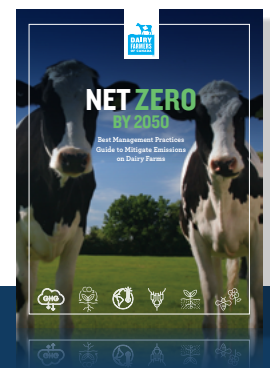
- Avoid draining wetlands
- Restore or enhance existing on-farm wetlands
- Increase native plant diversity around wetland areas
- Partner with conservation organizations for assistance on wetland restoration
- Improve habitat features to attract species and increase biodiversity in wetland areas

▶ PLANTING TREES, HEDGEROWS, SHELTERBELTS

to naturally protect soil, air and water quality while sequestering carbon and providing habitat for wildlife

- Conduct a site assessment to determine your goals
- Locate the high waterline and plant above this line
- Examine above ground competition to new seedlings
- Leave a 5-metre buffer between trees and cropland
- Consult a woodlot advisor on planting design and maintenance

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



DOWNLOAD