



How to Talk About Sustainability

Sustainability carries different meanings to people.

Think of the concept as a three-legged stool: environmental, social and economic sustainability

Dairy farmers have always practiced environmental stewardship. Conserving natural resources through recycling and improved efficiencies are common-sense practices for dairy farmers. Today, the public not only wants to hear how you care for land, water and air but also how your dairy contributes to the community. Also, it is important to include how you support practices that make economic sense.

There are numerous examples and ways to define sustainable practices. Use this list to take inventory of the practices already in use on your farm.

Once you've finished, let these examples inspire your discussions with neighbors or community members about how your dairy farm provides them with wholesome dairy products in a way that sustains the community, the earth's resources and your business.

Sustainable Practice		Check This Box if You Use This Practice
Improved Nutrition	Feeding cottonseed [<i>insert byproduct</i>] helps to reduce landfill waste by X cubic feet/cow.	
	Adjusting feed rations to make cows more efficient helps us reduce the amount of methane gas released into the atmosphere by XX.	
Improved Manure Management	Using manure as a soil nutrient helps reduce the use of commercial fertilizer by XX.	
	Separating liquids from solids and using drag hose application reduces odors (a social benefit). Spreading nutrients more efficiently accomplishes two things: <ul style="list-style-type: none"> • It reduces the amount of fuel needed to haul and incorporate our nutrients • It decreases the amount of commercial nitrogen needed to grow crops. 	
Crop Production	Adopting minimum/no-till saves XX in fuel costs, reduces the amount of fuel used and conserves the nation's energy supplies.	
	Minimum tillage/no-till practices save XX units of soil from erosion.	



	The use of reduced tillage lowers the amount of carbon dioxide and nitrous oxide released to the atmosphere by XX.	
	Cover crops help preserve XX amount of soil nitrogen and other nutrients.	
Composting manure	Composting manure enables us to provide XX pounds of natural fertilizer for people to use on their gardens.	
Bedding and Byproducts	Using/feeding [<i>insert byproduct, i.e., straw, sawdust, wood pulp</i>] helps reduce the amount of landfill waste by XX.	
Water Conservation and Quality	Recycling water for cooling milk, flushing alleys and irrigating crops saves XX gallons of water each year.	
	The farm team works with local, state, federal, DNR, and independent companies to continually inspect and test our water to protect the quality of the water in the community.	
Irrigation Systems and Techniques	Center pivots offer accurate control over water applications. This practice helps conserve and recycle water.	
	Low-impact, high-performance irrigation techniques help improve water use efficiency, now and for the future.	
Energy Conservation	Switching to ____ lighting conserves energy, reducing XX kilowatt-hours per day and saving energy for the community.	
	Replacing XX gallons of heating fuel with wood from the farm helps heat the farm shop and reduce energy dependence.	
	Switching to a variable speed vacuum pump reduces the number of kilowatts (by XX per ____), saving energy for the community.	
	Installing scroll compressors (more energy efficient) to cool the milk, we reduce the amount of energy used.	
	A water-cooled plate cooler cools milk and saves energy that would otherwise be used to heat water for cleaning.	
	A methane digester not only helps power our farm and home but also generates XX kilowatts of energy for utility companies to use in XX nearby homes. This technology also reduces odors.	



	Using renewable energy (solar, wind, wood, methane digesters) reduces our farm and our country's dependence on fossil fuels and other nonrenewable energy sources.	
	An energy audit helped our farm conserve XX kilowatt-hours per ____, conserving energy independence for our country.	
Recycling	Recycling cardboard and plastic packaging on our dairy allow us to reduce landfill waste by XX units.	
On-farm Technology	On-farm technologies to improve production practices have helped reduce the dairy industry's carbon footprint by more than 63%. Today, more milk is produced by only 9 million dairy cows versus 26 million dairy cows in 1944.	
	The use of on-farm cameras and activity monitors and other technologies allow us to focus on prevention leading to healthier, more comfortable animals.	
Wildlife habitat	Acres of open farmland provide wildlife habitat for deer, cranes, ducks and more for the public to enjoy (social benefit) and hunters to enjoy their sport.	
Volunteer	Farmers serve on [insert boards/committees] because they believe in giving back.	
	Farmers sponsor [insert sporting events/fairs/festivals/non-profits] because they believe everyone needs to support their community.	
Economic	Every glass of milk contributes jobs, income and vitality to the community. This farm purchases trucks, machinery, fuel and more from local companies.	
	Where milk goes, jobs follow. This dairy farm employs ____ people and pays state and local taxes that support schools and roads. It also purchases products and services that sustain community businesses like the local veterinary clinic.	



Key Messages to Share

Social, Environmental and Economic Sustainability

- Dairy farmers have a long-term commitment to environmental care and their communities.
- Dairy farmers support practices that make economic sense, help the environment and are socially responsible to our communities and our world, such as reducing energy, reusing water and recycling manure.
- In recent decades, the dairy community reduced the carbon footprint of milk by 63% due to improvements in animal breeding, animal health programs, cow comfort and overall farm management practices.
- Why is it important for farms to be sustainable?
 - What is a sustainable farm?
 - One that continues in business for many years
 - One that is trusted by the public
 - One that produces products that contribute to the public's wellbeing, serve diverse customers and provide social and economic benefit to those involved in their development
 - A farm that carefully manages its use of natural resources

General Environmental

- Dairy farmers live on or near the land they farm. They understand the importance of protecting natural resources.
- Caring for the land, air and water is a responsibility dairy farmers share with neighbors and other community members.
- Dairy farmers are passionate about leaving the land better than they inherited it
- The latest research shows that the U.S. dairy industry accounts for only about 2% of U.S. greenhouse gas emissions. Dairy farmers are working on ways to reduce that figure even more.
 - All food production comes with an environmental footprint. Responsible food production works to minimize that footprint. Dairy farmers constantly innovate to produce the same amount of food using fewer natural resources. Producing a gallon of milk in 2017 involved 30% less water, 21% less land, a 19% smaller carbon footprint and 20% less manure than it did in 2007. Yet, it still provides all the same great nutrients. This advancement is due to improvements in animal breeding, animal health programs, cow comfort and overall farm management practices.
- Dairy cows can get nutrients from parts of plants people cannot digest or don't often want to eat (i.e., grass, leaves/stems of plants, almond hulls and citrus pulp/orange peels). A cow's unique, four-chambered stomach can unlock nutrition from these foods and transform it into nutrient-rich milk to nourish people. Natural fertilizer made from cow manure is used to grow new crops, completing the nutrient cycle.
- People can feel good about enjoying cheese because of all of the sustainable practices farmers embrace.
 - For example, cheese comes from milk, milk comes from cows, and cows can eat foods indigestible by humans to create creamy, delicious products.



Manure Management

- Dairy manure is a valuable resource. It can be used as a natural fertilizer on crops or gardens to grow more food, reducing synthetic chemical fertilizer use.
- Dairy farmers are adopting new ways to manage cow manure to help improve air and water quality and public health. By investing in new technologies, farmers work to continually improve the land they farm.
- Farmers have a stake in following regulations and best management practices to protect the health of their family, their community, their cows and the environment.
- By law, manure must be stored in secure on-farm facilities to help reduce odor and hasten decomposition.
- Farmers often recycle the cow manure and use it as fertilizer for crops. Federal, state and local clean water laws regulate how manure is applied on cropland, so crops, not groundwater, absorb nutrients.
- For local authorities to approve an expansion, a dairy farm must show adequate manure storage and recycling systems to handle more cows.
- Some dairy farms are using anaerobic digester systems that convert manure into clean, renewable electricity, which can power their farms, their homes and their community.

Odor and Air Quality

- Dairy farmers care about air quality. Their families live and work on their farms and breathe the air, too. They understand the importance of clean air for future generations.
- Naturally, there are odors associated with livestock farming. More and more dairy farmers recycle manure by injecting it right below the surface to help control odor in the community.
- Dairy farmers help protect air quality by following proper manure storage practices and by maintaining clean farms.
- Dairy farmers invest in new technologies to protect and improve air quality: *[Insert specific examples]*.

Water Quality

- Quality water is essential to a dairy farm. Dairy farmers provide their cows with clean water, which contributes to high-quality milk.
- State and local government agencies regularly inspect and test the water on dairy farms.
- The federal government also helps dairy farmers protect the water supply. For example, many farmers receive technical assistance when they upgrade their irrigation systems and manure storage facilities.
- Dairy farmers continually look for innovative ways to protect and conserve the water supply. They often partner with government agencies and university experts to develop better management practices and adopt the latest technologies.
- Dairy farmers, working with government agencies, environmental organizations and experts, have started initiatives to advance new ideas and technology to improve soil and water quality, such as installing grass waterways or planting cover crops.



Water Use

- Food is a human necessity. All foods, whether plant- or animal-based, require water to bring them to the table.
- Understandably, communities want to protect their water supply. Dairy farmers feel the same way. Dairy farmers continue to find new ways to conserve water: *[Insert specific examples]*.
- Dairy farmers use water responsibly and often recycle it to use on their crops or clean their milking parlors and barns.
- Dairy farmers work with industry organizations, government and local civic groups to address water-use issues and solutions.
- Reducing or eliminating milk and dairy consumption doesn't "save" water, as it would still be used to produce other foods people need to meet nutrition requirements.

Climate Change – if asked

- Every source of food and every human activity has an environmental impact.
- Dairy farmers have been experiencing and adjusting to droughts, heatwaves, floods, and other short- and long-term climate issues for many generations.
- Dairy cows are able to convert a variety of feed crops into nutritious milk. For example, farmers can plant less-water-intensive crops to feed their cows when water is scarce.

What sustainable practices do you use on your farm?

Be prepared to talk about your farm's sustainability with the public. Why is sustainability important to you? Include your WHY statement (see "Start with the Why" worksheet). Write specific examples for your farm by using the topics that you checked above.
