The dairy community is proud of our strong foundation of environmental stewardship. Our heritage of dairy farming and processing is one of continuous improvement and persistent effort to become more environmentally sustainable. Over the years, the adoption of modern practices has dramatically reduced the environmental impact of dairy production. Because of innovative dairy practices related to cow comfort, improved feed and genetics, and modern barn design, among others, producing a gallon of milk in 2007 involved 65 percent less water, 90 percent less land, a 63 percent smaller carbon footprint and 76 percent less manure than it did in 1944.

Historically, the dairy industry has made great progress, but we continually strive to be better. With a focus on advancing research and analysis, the Innovation Center for U.S. Dairy brings together experts from academic, government and nonprofit organizations and professionals from the dairy community to measure, improve and communicate dairy sustainability. Our dedication to environmental stewardship involves not only measuring and reducing our environmental impact but also contributing to more holistically sustainable food systems that promote the current and future health and well-being of our cows, our consumers, our communities, our employees, our resources and our planet.

Our Commitment to Sustainability:
We are committed to providing consumers with nutritious dairy products they want in a way that makes the industry, people and the earth economically, environmentally and socially better—now and for future generations.

Our Focus and Our Progress
Innovation Center-led research and stakeholder input help the dairy community identify dairy’s greatest opportunities and challenges and develop management strategies and tools for improvement. For example, the dairy community commissioned a life cycle assessment (LCA) in 2008 that was unprecedented in size and scope to create a rigorous approach to measure and improve the environmental footprint of U.S. dairy from farm to table. LCA studies determined that greenhouse gas (GHG) emissions, energy use and water quality and quantity are the U.S. dairy industry’s initial environmental priorities to address. Based on its research, the Innovation Center has set industrywide goals that will help measure progress, including a goal to reduce GHG emissions by 25 percent by 2020. According to the United Nations (U.N.), milk produced in the U.S. today has the lowest GHG intensity globally—in other words, the lowest amount of CO₂ emitted per gallon produced compared with any other country in the world.

Because the dairy community is committed to advancing the science and understanding of environmental sustainability, Innovation Center staff scientists collaborate with and serve in an advisory capacity to a number of leading governmental, agricultural and scientific organizations, including the U.N. Food and Agricultural Organization, the International Dairy Federation, the United States Department of Agriculture and others. Partnership with organizations such as these has facilitated significant progress and developments, including the creation of the Biogas Opportunities Roadmap, which charts how organic material can be converted into renewable energy, fertilizer and cow bedding.
Key Efforts

To continue to address and monitor progress against our environmental commitments, the Innovation Center champions the following tools and programs, which continue to evolve and grow as we conduct ongoing research.

• **FARM Environmental Stewardship**: The National Dairy Farmers Assuring Responsible Management (FARM) Program has launched the FARM Environmental Stewardship module, which is available to all FARM Program participants. It integrates the methodology and research from Farm Smart™, a program that was built to give dairy cooperatives and milk marketing organizations the ability to address customers’ sustainability inquiries and provide aggregated GHG footprint data for a regional milk supply. This new addition will allow for the collection and dissemination of information on GHG emissions and energy use, help identify potential efficiency gains and cost savings and track progress in a secure, confidential platform. Learn more about the tool at nationaldairyfarm.com/environmental-stewardship.

• **Stewardship and Sustainability Framework**: The Stewardship and Sustainability Framework for U.S. Dairy supports dairy farms’ and companies’ efforts to voluntarily measure, report and communicate progress. The Innovation Center, in partnership with our stakeholders, updates the Framework on a regular basis to reflect the latest research, analysis and best practices. The Framework is the result of an industrywide vision to understand what matters most in dairy sustainability to understand baseline impacts, measure and communicate improvements, and maintain confidence in dairy products among retailers, consumers and other stakeholders. A copy of the Framework can be found at usdairy.com/framework.

• **Dairy Processor Handbook**: The Dairy Processor Handbook is a supplementary resource to the Stewardship and Sustainability Framework that enables processors to consistently report against Framework indicators and metrics. A copy of the handbook can be found at usdairy.com/framework.

• **Cow of the Future**: The Cow of the Future project focuses on the dairy cow’s contribution to sustainable food systems. It provides research and analysis of technologies that have the potential to improve dairy cow feeding and management, with consideration of critical success factors, including environmental and economic impact, as well as social factors, including safety and consumer acceptance. Learn more about the project at usdairy.com/sustainability.

• **Sustainability Report**: Since 2010, the Innovation Center has published sustainability progress reports to update stakeholders on the progress of the U.S. Dairy sustainability commitment. The reports discuss topics most relevant to the industry’s environmental, social and economic sustainability. Copies of past reports can be found at usdairy.com/sustainability.

An Industrywide Team

No one organization or segment within the dairy value chain can build a more sustainable food system alone. That’s why the Innovation Center for U.S. Dairy convenes the Dairy Sustainability Alliance, a collaborative and multi-stakeholder forum to share knowledge and accelerate progress toward common sustainability goals across the dairy community.

Composed of over 100 companies and more than 200 professionals from across the supply chain as well as nonprofits, trade organizations, government and academia, the group promotes and leads sustainability efforts in the industry, including through key partnerships with organizations like Field to Market, World Wildlife Fund and the U.S. Department of Agriculture.

For more information about the dairy industry’s environmental stewardship efforts, please contact Angela Hessinger at angela.hessinger@dairy.org or visit usdairy.com/dairysustainabilityalliance.