



2021 EARTH DAY COMMUNICATIONS

Earth Day is April 22, and to celebrate, the dairy community is spotlighting its efforts and goals in conversations about climate, the environment and sustainability throughout the month. The FARM Program's communications will focus on highlighting the FARM Environmental Stewardship program area and how farmers are prioritizing on-farm sustainability.

NMPF communications will complement these efforts by drawing attention to recent House and Senate Agriculture Committee <u>testimony</u> about the industry's proactive sustainability work and how Congress can support these efforts, as well as the organization's role in the <u>Food and Agriculture Climate Alliance</u>. The FARM Program and NMPF will also jointly promote U.S. dairy as part of a sustainable, equitable and secure food system to UN Food Systems Summit audiences.

Timeline:

- April 12: <u>Dairy Defined podcast with Nicole Ayache</u>, <u>Senior Director of Sustainability</u> Initiatives at NMPF
- April 19: Dairy Defined essay and Hoard's article on dairy's sustainability story
- April 21: FARM Program Quick Convos: Net Zero for Dairy Farmers
- April 22: Earth Day
- April 26: Dairy Defined podcast with Krysta Harden, President and CEO of the U.S. Dairy Export Council

Suggested Social Media Posts:

- FARM Environmental Stewardship promotes sustainable solutions that make business sense. Improving herd productivity and feed efficiency can reduce a dairy farm's GHG footprint, while also benefiting the farm's bottom line #FARMes #EarthDay bit.ly/3d0Rdup
- #EarthDay is around the corner, and we are proud to be part of the conversation. U.S.
 #dairy farmers have been environmental stewards for decades, tending with great care to their land and water and valuing a proactive approach to sustainability.
 bit.ly/31WXW2d
- For dairy farmers, taking care of the land is an everyday part of life. Through beneficial practices, technologies, and innovations, dairy farms Restore Our Earth. #EarthDay bit.ly/3d0Rdup
- Dairy is already part of agriculture's climate solution, but U.S. #dairy is going even further. Our Net Zero Initiative will make U.S. dairy production carbon-neutral by 2050.
 Visit bit.ly/2Q6iLFP to learn more. #UNFSS2021 #EarthDay (+ graphic)
- Dairy farmers know that animal health, nutrition and cow comfort all contribute to achieving gains in productivity and feed efficiency. But did you know they also mean improvements in the farm's environmental footprint? Learn more by checking out the

- FARM Environmental Stewardship Reference Manual https://bit.ly/39VJXyc #FARMes #EarthDay
- U.S. dairy has set ambitious goals to become carbon neutral or better, optimize water use while maximizing recycling, and improve water quality by 2050. FARM Environmental Stewardship will help us get there. #FARMes #EarthDay bit.ly/3d0Rdup
- Through commitments like the Net Zero Initiative and efforts like the @FARMProgram, U.S. dairy farmers are well-positioned to be agricultural leaders in mitigating climate change. Check out a recent episode of @nmpf's #DairyDefined to learn more. #EarthDay bit.ly/3uxrRtX
- Dairy farmers are on the frontlines of climate change and have an important role to play in developing solutions. The dairy community is proud to join others in agriculture and beyond to advance #AgClimateSolutions as part of the Food & Ag Climate Alliance. #EarthDay
- Real progress on emissions. Innovative practices adaptable to all regions, on farms of all sizes, with proper incentives. Ambitious goals backed by data. We in #dairy know how effective we are in sustainably producing food that nourishes the world. #UNFSS2021 #EarthDay (+ video)

General Messaging:

- U.S. dairy is part of an environmental solution.
 - Producing a gallon of milk has 19% less greenhouse gas emissions than it did in 2007.¹ That's equivalent to the amount of carbon dioxide removed from the atmosphere by half a million acres of U.S. forest every year.
 - Today, there are dairy farms across the country that are using new technologies to turn manure into biogas that powers local communities while helping to eliminate food waste from local businesses. For example [refer to U.S. Dairy Sustainability Award winners]
- In 2008, the U.S. dairy industry was the first in the food agricultural sector to conduct a full life cycle assessment at a national scale. That LCA, which focused on fluid milk, showed that U.S. dairy accounts for just 2% of total GHG emissions, 5.1% of water use and 3.7% of U.S. farmland.²

¹ Capper, Judith L, and Roger A Cady. "Effects of Improved Performance in the U.S. Dairy Cattle Industry on Environmental Impacts between 2007 and 2017." OUP Academic, Oxford University Press, 17 Oct. 2019, academic.oup.com/jas/article/98/1/skz291/5581976

² Thoma, Greg, et al. "Greenhouse gas emissions from milk production and consumption in the United States: A cradle-to-grave life cycle assessment circa 2008." International Dairy Journal 31 (2013): S3-S14. https://www.sciencedirect.com/science/article/pii/S0958694612001975

- Due to innovative farming and feed production practices, the environmental impact of producing a gallon of milk in 2017 required 30% less water, 21% less land and a 19% smaller carbon footprint than it did in 2007.³ That is equivalent to:
 - The amount of carbon dioxide removed from the atmosphere by half a million acres of U.S. forest.
 - Eliminating the average water consumption of approximately 29 million U.S. households.
- Recent modeling published in the <u>Journal of Dairy Science</u> assessed the impacts of completely removing dairy cows from the U.S., thus removing dairy from all American diets. The results showed a lack of presumed environmental benefits but a notable threat to human health.
 - Specifically, greenhouse gas emissions would not materially decrease, yet the availability of essential nutrients for people's health would significantly decrease, as nutrients provided by dairy are not easily replaced by fruits, vegetables, nuts and pulses (beans, lentils, peas).
- In 2020, the Innovation Center for U.S. Dairy set aggressive new environmental sustainability goals to achieve carbon neutrality or better, optimize water usage and improve water quality by 2050.

To reach these goals, the U.S. dairy supply chain is working together to spur new technology and increase science-based research and data collection while expanding practices, resources and tools for more farmers, cooperatives and processors. This requires partnerships across the dairy value chain, with partners in agriculture and research and with global, multilateral companies and organizations.

- The Net Zero Initiative (NZI) is an industry-wide effort that will help U.S. dairy farms
 of all sizes and geographies continue to implement new technologies and adopt
 economically-viable practices in feed production, cow care, energy efficiency and
 manure management making progress toward GHG emissions reductions and
 significant improvements in water quality and quantity and farmer livelihood, from
 field to farmgate.
 - Dairy farms across the country are increasingly adopting conservation tillage, diverse crop rotations, and cover crops to improve soil health; precision feed management to achieve cow health and production efficiencies; and innovative manure management technologies to produce energy and reduce air and water quality impacts.
- The U.S. Dairy Stewardship Commitment is a social responsibility pledge through which the U.S. dairy community demonstrates progress in important areas like animal care, environmental stewardship, food safety/traceability, and community contributions.
 - As of December 2020, 32 dairy companies representing 74% of the nation's milk production voluntarily adopted the U.S. Dairy Stewardship Commitment

³ Capper, Judith L, and Roger A Cady. "Effects of Improved Performance in the U.S. Dairy Cattle Industry on Environmental Impacts between 2007 and 2017." OUP Academic, Oxford University Press, 17 Oct. 2019, academic.oup.com/jas/article/98/1/skz291/5581976

and contribute to U.S. dairy's ability to track, aggregate and report on progress.

Resources:

- U.S. Dairy Advances Journey to Net Zero Carbon Emissions By 2050, DMI
- FARM Environmental Stewardship, FARM Program
- FARM Environmental Stewardship Evaluation Preparation Guide, FARM Program
- NMPF Shares Climate and Sustainability Priorities with Agriculture Committees, NMPF
- Dairy Leadership Crucial in U.S., Global Climate Debate, NMPF
- Dairy Playing its Part As a Climate Solution, NMPF's Jonker Says, NMPF
- Dairy Defined: To Reduce Greenhouse Gases, Dairy Has Solutions for All Sizes, NMPF
- U.S. Dairy Builds Sustainable Food Systems, NMPF
- Land O'Lakes, Inc. unveils Dairy 2025 commitments, Land O'Lakes Inc.
- Food and Agriculture Climate Alliance