

# U.S. Dairy Demonstration Farms Illustrate Opportunities for Scaling Sustainable Practices

Industry effort will help **remove barriers** to scale sustainable practices and technologies for U.S. dairy farms of all sizes and geographies.

The pilot farms are seeking to identify, demonstrate and de-risk new sustainable practices and technologies that increase on-farm profitability while reducing greenhouse gases, reduce water use and improve water quality. These farms represent a diversity of management styles, geographies and infrastructure to close the gap between scientific research and on farm application across the industry. Approximately five pilot farms in total will be funded by partners, grants and the participating farms themselves as part of this initiative.

Progress is reported every five years and collectively, these efforts will:



Lead with science and data to advance research, measurement and reporting to demonstrate environmental progress and impact.



Develop models of sustainable practices and technologies that can be scaled commercially.



Provide mechanisms and tools to increase knowledge sharing and adoption across farms of all sizes, styles and locations.

## Demonstration farms in **action.**



### TRINKLER FARM

Trinkler Dairy Farm, a supplier to Carnation in Modesto, CA, was announced as the first demonstration in June 2021. In partnership with the Innovation Center for U.S. Dairy, Trinkler Dairy is pursuing its environmental sustainability journey by upgrading infrastructure and better managing manure. These efforts will convert manure into usable by-products, explore feed ingredients that reduce methane emissions, and capture carbon from the atmosphere through regenerative practices that protect and restore soil.



### ALLIANCE DAIRIES

The Alliance Dairies in Trenton, Florida was selected as the second pilot farm, announced in November 2021. Building on their strong record of sustainable practices, they are exploring new technologies to illustrate how farms can recover nutrients, become a source of renewable and organic fertilizer and improve water use while significantly reducing GHG emissions.



Farms hold **extraordinary potential** that is not yet realized. These pilot farms will **unlock unique opportunities** that can be tailored to each farm's personalized business plan. They will:

1

**IMPLEMENT A  
COMPREHENSIVE  
SET OF TECHNOLOGY  
AND PRACTICES**

**Advancing case studies and testing innovative technologies and practices including:**

- Improving feed quality, delivering a more balanced diet, or introducing new feed ingredients that can significantly improve digestibility and redirect production pathways of enteric methane emissions.
- Applying manure management for nutrient recovery via coarse fiber separation which converts manure into organic fertilizer. This technology aims to limit methane emissions through its creation of renewable products.

2

**CREATE A FINANCIAL  
FRAMEWORK THAT  
WILL REDUCE BARRIERS  
TO ENTRY**

**Providing financial data to illustrate pathway to economic viability, showing how others can:**

- Recover nutrients to use more efficiently on farms or sell to other farms
- Generate revenue in renewable energy markets (RNG and electricity)
- Incorporate new revenue streams in ecosystem services markets through changes in management practices
- Reduce capital and operational costs and de-risking investment required for adoption

3

**INFORM THE  
DEVELOPMENT  
AND ADOPTION OF  
NEW OPPORTUNITIES  
IN ECOSYSTEM  
SERVICES MARKETS**

**Identifying environmentally-driven markets that farmers can efficiently engage in and exploring dairy's ability to engage in markets through ecosystem services such as:**

- Carbon credits
- Feed and forage avoided emission and sequestration credits
- Water quality trading markets

**Demonstration Farm Outcomes:**

These efforts will provide full-scale proof of concept on operating commercial dairies to other farmers. They will also utilize data gathered across all efforts and learnings from partnerships developed to:

- Expand on-farm revenue streams.
- De-risk farmer investment in technology and practice change.
- Drive widespread adoption to help U.S. dairy reach its sustainability goals.