



U.S. Dairy
Sustainability Awards
Innovation Center for U.S. Dairy®

2021 WINNERS

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The strength of the U.S. Dairy Sustainability Awards has been the unprecedented collaboration with leaders and experts from within and outside the dairy industry. The Innovation Center for U.S. Dairy® is pleased to recognize the following organizations for their support of the 2021 Awards program:



CHANGING THE EQUATION FOR GOOD BUSINESS

The U.S. Dairy Sustainability Awards program – celebrating its 10-year anniversary – has a new class of winners who demonstrate excellence in sustainability, including progress toward the collective 2050 environmental stewardship goals and positive efforts in communities.

Winners are recognized in the following categories:

- Outstanding Dairy Farm Sustainability
- Outstanding Supply Chain Collaboration
- Outstanding Community Impact
- Outstanding Dairy Processing and Manufacturing

This year, U.S. dairy's response to the COVID-19 pandemic and its associated market disruptions and food security issues led to a special award for pandemic response.

- Outstanding Community Impact – Pandemic Response

An independent panel of judges, which included leading experts on the economic and environmental issues and opportunities of today's dairy industry, evaluated nominations on the following criteria:

- Program or project results as measured by triple bottom line success: economic, environmental and social
- Evidence of shared learning, innovation and improvement
- Potential for adoption by other dairy farms and businesses

For more information, visit USDairy.com/Awards

OUTSTANDING COMMUNITY IMPACT — PANDEMIC RESPONSE

DAIRY WEST

Idaho and Utah



Collaboration From the Farm to the Front Line Delivers a Million Pounds of Dairy

When the COVID-19 pandemic first hit, the dairy supply chain across the country suffered from a sudden shift in demand. With schools and restaurants shuttered and exports temporarily halted, a significant portion of the milk supply in Utah and Idaho was left without a home.

Dairy West – which represents dairy farm families in the region and promotes the dairy industry and dairy products locally, nationally and globally – jumped into action.

Much of the region's dairy production goes into cheese and powder, which is either sold for foodservice use or sent internationally. In early May, many farms in the region were forced to dispose of milk that could not be processed. Simultaneously, with unemployment rising and demand at local food banks skyrocketing, an increasing number of people were facing food insecurity.

Dairy West convened 15 dairy-related companies in the region and spearheaded the Curds + Kindness initiative. It quickly relieved the COVID-19-related supply chain pressures and delivered dairy products to hungry people in communities throughout Idaho and Utah. The industry-wide effort demonstrated incredible collaboration from the farm gate through processing and distribution channels to save nutritious dairy foods from being wasted.

By matching excess milk supply with available regional processing, Dairy West was able to purchase, at cost, and donate more than one million pounds of product, which helped more than 500,000 families across the region. In addition to donating butter, cheese, yogurt and fluid milk through food banks, food pantries and schools, Dairy West shared the joy and goodness of dairy with front-line workers, people in shelters and youth in need through community activations in June and December.

This effort shows that, with some organization, the supply chain can come together quickly and put competition aside to serve common goals and the good of the community.



- 42 million people, including 13 million children, in the U.S. may face food insecurity in 2021 (Source: Feeding America)
- Curds + Kindness rescued more than two million pounds of milk
- More than one million pounds of dairy foods donated, serving more than 500,000 families
- 42,000 dairy-related items delivered to regional front-line workers

OUTSTANDING COMMUNITY IMPACT

CALGREN DAIRY FUELS, LLC, MAAS ENERGY WORKS, INC. AND 15 CALIFORNIA FAMILY DAIRIES

California



Climate-Smart Dairy Partnership Helps Cool the Planet

This unique partnership of 15 California family dairy farms and two forward-thinking companies created the first dairy digester pipeline in California – and the largest in the country. It's a game-changer and a model for others, delivering new jobs, economic activity and cleaner air to Tulare County, the heart of California's dairy community.

In 2017, Calgren Dairy Fuels broke ground on Phase I of a dairy digester pipeline cluster. It efficiently collects dairy biogas that is then upgraded and injected into a utility pipeline owned by Southern California Gas Company (SoCalGas). SoCalGas makes the compressed natural gas (CNG) available to customers as fuel for heavy duty trucks.

Calgren has laid more than 22 miles of underground low-pressure pipeline, linking 12 dairies that send biogas via pipeline – and two further dairies hauling biomethane via tube trailers – with Calgren's centralized conditioning facility in Pixley. An additional dairy supplies manure slurry to a digester at the conditioning facility for biogas production.

With Phase I complete, more than 150,000 tons of carbon dioxide equivalent (CO₂e) is now captured from the manure of 70,000+ cows and heifers annually. And more than three million gallons of fossil fuel-based transportation fuel has been replaced with near-zero emissions from CNG engines.

It's a win for the environment, food value chain, consumers, local economy and economic health of family dairy farmers. Farms receive monthly payments for the manure they supply to their on-farm digester, providing diversification and a consistent new revenue stream.

With the success of Phase I, Calgren is moving forward with Phases II and III. An additional ten dairies have on-farm digesters under construction that will link into Calgren's biogas gathering lines. Completion of Phase III is anticipated later this year, and it is estimated that an additional 70 percent of CO₂e will be captured. Calgren will be able to supply approximately one million MMBtu as vehicle fuel in California during 2022 – replacing 7.2 million gallons of diesel.



- The collaboration generated nearly \$100 million of new economic activity for disadvantaged communities
- Supported more than 75 full-time jobs annually since 2017
- Captures 150,000+ tons of CO₂e emissions annually, equal to removing 32,000+ passenger vehicles from the road each year
- Fuels R-CNG engines that can emit up to 90% less pollution compared to diesel motors

OUTSTANDING DAIRY PROCESSING AND MANUFACTURING

ROGUE CREAMERY

Central Point, Oregon



Small Creamery Has Big Impact on Sustainability and their Community

Rogue Creamery has a clear mission: *People Dedicated to Sustainability, Service, and the Art and Tradition of Creating the World's Finest Handmade Cheese.*

That mission has earned the small creamery in southwest Oregon an international reputation for quality, sustainability and service.

In 2019, their blue cheese, Rogue River Blue, was selected as Grand Champion at the World Cheese Awards in Bergamo, Italy and became the first American cheese in the history of the competition to win top honors.

Since then, Rogue Creamery has been recognized by Oregon Business on the "100 Best Green" list, and they became Oregon's very first public benefit corporation – known as B Corp – which requires a rigorous third-party assessment of governance policies and the company's impact on environment, its workforce and the community.

Solar panels were installed at the cheesemaking facility ten years ago for a cumulative savings of 1.2 million pounds of carbon dioxide equivalent (CO₂e). Packaging changes include the elimination of a non-recyclable paper and reformulation of its shipping cases to further reduce waste.

The company's Nellie Green Pedal Power Program encourages employees to carpool, use public transportation, bike to work or use other 'green' transportation methods on their daily commute, saving more than 7,000 gallons of gas in 2019 alone.

And a very recent example of the company's impact on the community is their response to the 2020 wildfires, which were devastating for many in southwest Oregon. Thousands of people, including some of Rogue Creamery's employees, lost their homes. To help, Rogue Creamery donated thousands of pounds of cheese to local foodbanks. To sustain the program and keep up with demand, they turned the effort into the "Cheese is Love" campaign, in which every pound of cheddar purchased equals a pound donated. Donations have been flowing to local food banks and nonprofit companies in partnership with ACCESS (a community service agency) and Rogue Food Unites.

Rogue Creamery's commitment to ethics and sustainability is its north star, and its dedication and willingness to share templates and metrics encourages and inspires others to continuous improvement.



Rogue Creamery's dedication to sustainability has resulted in:

- 11,838 sustainable commute miles logged by employees in 2019
- More than 3,500 pounds of cheese donated to those impacted by wildfires in 2020
- 137,884 pounds of CO₂e offset by solar panels, which provide 41% of the cheesemaking facility's energy needs
- 10 years on the Oregon Business "100 Best Green" list

OUTSTANDING SUPPLY CHAIN COLLABORATION

LAFAYETTE AG STEWARDSHIP ALLIANCE, FARMERS FOR SUSTAINABLE FOOD AND GRANDE CHEESE COMPANY

Wisconsin



Framework Helps Wisconsin Industry Identify Proof Points

Wisconsin dairy farmer Jim Winn understands the importance of having tools that prove dairy's commitment to environmental stewardship. He believes the key is having industrywide collaboration, which inspired the launch of the Framework for Farm-Level Sustainability Projects.

The Lafayette Ag Stewardship Alliance (LASA), Farmers for Sustainable Food and Grande Cheese Company – with support from The Nature Conservancy and others – created and are testing the framework. The first-of-its-kind handbook will help farmers determine conservation practices that are most useful for their farms, and then use that information to demonstrate the sustainability benefits of those practices.

The framework focuses on projects that protect soil and water quality, keep farms financially viable, and demonstrate a commitment to sustainability to communities, customers and regulators. It is being used in a pilot project involving a dozen farms in LASA, a farmer-led watershed conservation group founded in 2017 to improve water quality in a geologically sensitive part of southwestern Wisconsin.

“The framework gives us a tool to prove to ourselves, our neighbors and those who buy our products that there’s value in being innovative on our farms and in the field,” said Winn, who serves as LASA president and whose dairy is participating in the project. “Having processors and others in the supply chain behind us, pulling in the same direction, is pretty powerful.”

The pilot project follows the model of a “milkshed,” which represents the farms and various businesses in a region that furnish dairy foods to customers. The framework is flexible in its design so it can be replicated for projects in other regions. LASA and its partners are encouraging others to use it, at no cost.

The handbook uses nationally accepted metrics from Field to Market: The Alliance for Sustainable Agriculture to address on-farm sustainability indicators, and a tool called Prioritize, Target and Measure Application (PTMApp) is being used for measuring impact on waterways. The FARM Environmental Stewardship model was used to evaluate greenhouse gas emissions and energy use on several of the dairy farms.

Given the results achieved in year one, the Innovation Center is supporting the extension of the project for two more years as part of the U.S. Dairy Net Zero Initiative (NZI).



Results from the first year of the pilot project that reflect 2019 data were released and are encouraging:

- On average, participating farms adopted five practices that Field to Market recognizes as having a positive impact on sustainability scores
- Farms with livestock and those that use manure for most crop nutrient needs scored, on average, better than the project benchmark for greenhouse gas emissions and energy use
- Existing on-farm conservation is reducing the amount of sediment reaching local streams and rivers by 35%; the tool demonstrated that an additional 17% reduction is possible if cover crops were implemented on 50% of suitable land

OUTSTANDING DAIRY FARM SUSTAINABILITY

MVP DAIRY, LLC

Celina, Ohio



Unique Family Partnership Takes Multi-Faceted Approach to Sustainability

The McCarty & VanTilburg families believe dairy is an environmental solution. Together, the two fourth-generation farming families created MVP Dairy, LLC – an Ohio dairy farm that's laying the groundwork to achieve carbon neutrality. Their holistic approach to sustainability encompasses soil health, manure management, biodiversity and animal welfare.



To conserve natural resources, the MVP Dairy team carefully manages regenerative farming practices that recharge the soil, promote biodiversity, enhance carbon sequestration and efficiently use natural resources. These practices have resulted in a reduction of 6,755 tons of carbon dioxide equivalent (CO₂e) last year, which is comparable to the average yearly energy use of 662 homes in the U.S. MVP Dairy was also able to sequester 1,842 tons of CO₂e and save 5,499 tons of soil from erosion, equivalent to 344 dump trucks full of soil.

Cow manure is managed through a patented, municipal-style system to reduce odors for nearby neighbors. This system also significantly reduces emissions by an estimated 60 percent compared to traditional systems and creates a water source to irrigate cropland.

MVP Dairy also manages an extensive biodiversity program which includes pollinator habitats, dedicated wetland areas and 137 acres of buffers. The dairy farm is home to more than 20 wildlife boxes, including owl, bird, duck, insect and bat boxes, and has planted more than 700 trees on-site since it was built in 2019.



Animal care and genetics are also an important focus for MVP Dairy. The dairy's six tunnel-ventilated barns maximize airflow and cooling while operating on variable-rate frequencies to decrease energy use and conserve water.

"We try to incorporate sustainability into every aspect of our dairy," says Kyle VanTilburg, "Our family has been farming here for more than 100 years and we take a lot of pride in our community and preserving the land for generations to come."

MVP Dairy's innovative practices and top-notch animal care can be seen first-hand at their on-farm Dairy Learning Center, Inc., which offers public farm tours and interactive displays that share milk's journey from soil to yogurt cup. The Center helps the MVP team operate transparently and is a space that the local community can be proud of.

- MVP Dairy is one of the first dairies globally to achieve B Corp certification, one of the most stringent social and environmental standards available
- Reduced CO₂e by 6,755 tons last year
- 6 acres of pollinator habitats, 6 acres of grassed waterways, 23 acres of forest, 68 acres of wetlands
- 12 cover crops are used in between cash crop seasons
- MVP has planted more than 700 trees on-site since opening in 2019

OUTSTANDING DAIRY FARM SUSTAINABILITY

GOODRICH FARM

Salisbury, Vermont



Third-Generation Dairy Family Modernizes to Improve their Triple Bottom Line

At Goodrich Farm, the brother-sister team of Danielle and Chase Goodrich are following in the footsteps of their grandparents, Donald and Mildred, and their parents, Ernest and Lee Ann. Chase focuses on crop and feed production on 2,000 acres of land in west-central Vermont, while Danielle manages the herd of 900 dairy cows.

The farm is located within the environmentally-sensitive Otter Creek and Lake Champlain watersheds, an area that has transitioned from a farming community to one where residents have limited connection to farm life.

When assuming leadership of the farm, Chase and Danielle were determined to modernize farming practices and facilities, prioritizing herd health, energy use, on-farm emissions and water conservation.

To increase efficiency and impact the farm's bottom line, they consolidated milking operations from older barns at two sites into one, cutting energy and labor costs while enhancing cow comfort and health.

Just a few of their numerous manure management steps include no-till cover crops to reduce phosphorus runoff, a wetland management program, and installing satellite ponds.

To address air quality, in 2020 Goodrich Farm installed a 1.32 million gallon anaerobic digester that has reduced the farm's greenhouse gas emissions by as much as 95 percent, reduced the farm's chemical fertilizer expenses by 80 to 85 percent, recycles more than 30,000 tons of manure, and utilizes 66,000 tons of non-farm organics from Vermont food manufacturers, retailers and other users who need to comply with Vermont law.

About 65 percent of the renewable natural gas is piped to nearby Middlebury College, bringing the college closer to reaching its 10-year goal to power the campus with 100 percent renewable energy. The remaining 35 percent is sold to Vermont Gas Systems. The digester is owned and operated by Vanguard Renewables.

Consistent with the industry's Net Zero Initiative, the Goodriches actively share their experiences and lessons learned. As Chase says, "Sustainability on a dairy farm takes all shapes, sizes and forms. It is so important to be open and listen to new ideas, practices and strategies."



- The anaerobic digester reduced chemical fertilizer expenses by 80 - 85% and bedding expenses by \$50,000/year
- The farm recycles more than 30,000 tons of manure and has reduced on-farm greenhouse gas emissions by as much as 95%
- The digester diverts 66,000 tons of non-usable food and beverage waste from landfills and incineration

OUTSTANDING DAIRY FARM SUSTAINABILITY

RED SUNSET FARM

Mifflintown, Pennsylvania



First Generation Dairy Farmers Make Environmental Impact to Last a Lifetime

Nearly twenty years ago, Dave Graybill stepped away from a career as a high school agriculture and shop teacher to become a dairy farmer. “If the golden opportunity for this specific farm had not come about, I would still be an ag teacher,” he said. “This was a once-in-a-lifetime opportunity to farm a great piece of land.”

That farm is Red Sunset, in Mifflintown, PA, which sits on red vertical shale on a ridge within the Chesapeake Bay watershed.

Dave worked with his local USDA Natural Resources Conservation Service (NRCS) office and the Juniata County Conservation District to establish environmental goals and make a plan. To that end, Dave has implemented more than 30 conservation practices – including buffer strips, contour farming, enhanced wildlife habitat and structural improvements like enhanced manure storage and stormwater diversions – designed to make the farm an environmental and economic asset.

“Being situated within the Chesapeake Bay watershed has required us to look at farming differently; we come under heavy environmental scrutiny,” said Dave. A rough assessment of Dave’s in-field practices (no-till, cover crops, nutrient management) shows annual reductions of 2,443 lbs. nitrogen, 116 lbs. phosphorus, and 255,000 lbs. total suspended solids.

Graybill permanently fenced paddocks of 1 to 3 acres for grazing, rotating them so that each rests for one month to allow for regrowth. Energy use and costs were cut by switching to LED lights and installing a plate cooler and heat reclaimer on the bulk tank.

In a region where dairy is scrutinized for its role in watershed recovery, Dave is a valuable liaison to the environmental community, helping gain recognition and support from that critical constituency for dairy’s positive work. He has also hosted policymakers and environmentalists on his farm to showcase practices that improve soil health and water quality. He sits on the well-known Chesapeake Bay Foundation’s Farmer Advisory Council and was featured on the foundation’s website as an example of environmental sustainability.

“If this farm doesn’t look better the day I leave it than the day I got here, I will be very unhappy.”

- A recent assessment showed that Red Sunset’s total income was in the top 10% of comparable sized farms, demonstrating that profitability and conservation go hand-in-hand
- Red Sunset implements more than 30 conservation practices – including buffer strips, contour farming, enhanced wildlife habitat and structural improvements like enhanced manure storage and stormwater diversions
- Graybill manages 45 bee colonies each summer, with 50,000+ bees per colony
- Instead of hauling manure daily, Red Sunset hauls approximately 50 loads annually, saving an estimated 335 tractor hours



MEET OUR EXPERT JUDGING PANEL

An objective judging panel assessed the nominations and selected this year's winners. This panel included experts from government, dairy science organizations, nongovernmental organizations, business and trade media, and environmental and dairy industry leaders.

Jenny Ahlen, Environmental Defense Fund

Deb Atwood, AGree

David Butler, Alltech

Kathie Canning, Dairy Foods

Michael Dykes, International Dairy Foods Association

Jim Eckberg, General Mills

Andrew Harig, Food Marketing Institute

Daphne Holterman, Dairy Farmer and Past Award Winner

Holly Jones, Agropur

John Lucey, Center for Dairy Research, University of Wisconsin

Steve Maddox, Dairy Farmer and Past Award Winner

Jerod Matthews, Feeding America

Dave Natzke, Progressive Dairy

Nick Peak, U.S. Environmental Protection Agency

Carter Purcell, Field to Market

Jamie Thorn, Starbucks Coffee Company

Denise Skidmore, Hilmar Cheese Company

Tara Vander Dussen, Dairy Farmer

Carrie Vollmer-Sanders, The Nature Conservancy

Darcie Renn, Albertsons Companies

Lisa Zwack, The Kroger Co.

SHARE THESE STORIES

What's the secret to sustainability? According to research conducted on behalf of the Innovation Center for U.S. Dairy, sustainability isn't about the size, age or location of a dairy operation. It's the management practices that make the difference. The most sustainable aspects of the dairy industry come from the way we run our businesses every day. And as more people are interested in learning where their food comes from, telling our stories of good stewardship helps ensure they can continue to feel good about choosing their favorite dairy foods and beverages.

Visit USDairy.com/Awards to learn more about how others are implementing sustainable practices and help spread the word by sharing these successes – and yours – with customers, communities and consumers.

