U.S. DAIRY STEWARDSHIP COMMITMENT











About this Resource

The U.S. Dairy Stewardship Commitment (Stewardship Commitment) was developed by the Innovation Center for U.S. Dairy® (Innovation Center) to support dairy farmers, cooperatives and processors who voluntarily choose to work across the industry to advance sustainability leadership and transparently report progress.

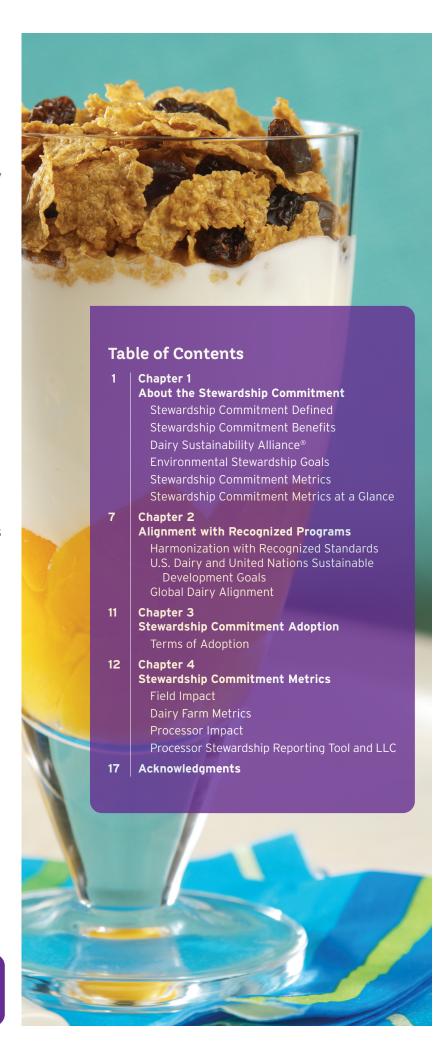
Retailers and other dairy buyers can use the Stewardship Commitment to track their suppliers' sustainability and continuous improvement efforts and are encouraged to share this story with consumers.

To maintain relevance and value, this Stewardship Commitment resource is updated annually. It is the user's responsibility to refer to the most updated version.

Legal Note

THE INFORMATION, INDICATORS AND METRICS PROVIDED IN THIS STEWARDSHIP COMMITMENT DOCUMENT ARE BASED ON STAKEHOLDER INPUT AND STATISTICAL ESTIMATES, AND NOT ON ACTUAL ASSESSMENTS OF YOUR DAIRY FARM'S OR COMPANY'S OPERATIONS OR BUSINESS NEEDS. AS SUCH, THE INFORMATION, INDICATORS AND METRICS SHOULD NOT FORM THE BASIS FOR DECISIONS WITHOUT FIRST OBTAINING APPROPRIATE PROFESSIONAL, SCIENTIFIC, ENGINEERING AND / OR LEGAL ADVICE SPECIFIC TO YOUR DAIRY FARM OR COMPANY. THE INNOVATION CENTER AND DAIRY MANAGEMENT INC. MAKE NO REPRESENTATIONS, WARRANTIES OR GUARANTEES RELATED TO THE INFORMATION, INDICATORS AND METRICS PROVIDED IN THE STEWARDSHIP COMMITMENT DOCUMENT OF ANY KIND, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, AND SPECIFICALLY DISCLAIM ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. IN NO EVENT WILL THE INNOVATION CENTER, DAIRY MANAGEMENT INC. OR THEIR AFFILIATED ENTITIES BE LIABLE TO ANY PARTY FOR DAMAGES FOR LOSS OF DATA, LOST PROFITS, OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM USE OF THE INFORMATION, INDICATORS AND METRICS PROVIDED IN THIS STEWARDSHIP COMMITMENT DOCUMENT, EVEN IF ADVISED OF THE POSSIBILITY.

Download the most up-to-date Stewardship Commitment at www.usdairy.com/commitment





Stewardship Commitment Defined

The U.S. Dairy Stewardship Commitment (Stewardship Commitment) is a voluntary, stakeholder-aligned initiative to advance sustainability leadership across the dairy community. It aligns and quantifies industry action on important areas like the environment and animal care to affirm and illustrate U.S. dairy's longstanding values of responsible production, nourishing communities and continuous improvement. Cooperatives and processors that adopt the Stewardship Commitment agree to work collaboratively with diverse stakeholders and follow a rigorous set of standards to demonstrate a positive impact. On a broader scale, adopting companies support and contribute to U.S. dairy's ability to track, aggregate and report on national progress.

A Consistent and Credible Voice

By defining sustainability metrics based on globally recognized standards, the Stewardship Commitment empowers the dairy community to demonstrate impact in a transparent and meaningful way. These metrics are underpinned with voluntary, industry-aligned resources and reporting tools to advance continuous improvement and are developed through an open and collaborative multi-stakeholder process. The Dairy Sustainability Alliance® embodies this approach as the national forum through which dairy farmers, cooperatives and processors converse with customers, non-profits and other key stakeholders to advance Stewardship Commitment priorities. The result is a consistent voice to enhance consumer trust and communicate progress both within U.S. dairy companies and on a national and global scale.

The Stewardship Commitment reflects a shared belief that social responsibility is larger than any single organization or supply chain. Rather, it requires a transparent, collaborative and ongoing effort to work toward the benefit of all. To

reflect these values, dairy companies are encouraged to formally adopt the Stewardship Commitment, while dairy farmers, retailers, community partners and others are encouraged to contribute to and support this effort.

About the Innovation Center for U.S. Dairy® (Innovation Center)

The Innovation Center was established in 2008 under the leadership of America's dairy farmers through Dairy Management Inc.™ (DMI), the non-profit organization that manages the national checkoff program. Led by dairy company CEOs and industry leaders representing over 60 percent of the U.S. milk supply, the Innovation Center provides a precompetitive forum for the dairy community to identify category-wide priorities and develop recognized industry-aligned tools and resources to advance U.S. dairy's commitment to social responsibility and positive impact. The U.S. Dairy Stewardship Commitment affirms this intent.

To ensure an inclusive and mutually beneficial approach, the Stewardship Commitment is developed with voices spanning the value chain



(acknowledgments on page 17). This collaborative process provides shared value and a common understanding of sustainable dairy. From farm to table, everyone benefits – food companies, the dairy community and, most importantly, the millions of people who enjoy dairy every day.

Learn more at www.usdairy.com or contact the Innovation Center at innovationcenter@usdairy.com



Stewardship Commitment Benefits

The U.S. Dairy Stewardship Commitment provides a voluntary, stakeholder-aligned platform to define and exhibit sustainability progress. To ensure long-term relevancy and value, it is updated annually to reflect the latest science, insights and priorities. Through these efforts, the Stewardship Commitment provides a collaborative and consistent voice that benefits the entire supply chain from "grass to glass."

BENEFIT TO ALL

Advances and demonstrates U.S. dairy's positive social, environmental and economic impact through collaboration across the value chain

BENEFITS TO DAIRY FARMERS, COOPERATIVES & PROCESSORS

Expands business development opportunities

• Substantiates U.S. dairy's leadership in the global marketplace by aggregating and reporting on important social responsibility and environmental stewardship metrics



- Reduces demands of multiple and overlapping external surveys and reporting requirements
- Employs tools and metrics developed with direct input from U.S. dairy farmers, cooperatives and processors

Saves time and money

 Reduces need to invest in developing individual programs and protocols

Validates the combined work of U.S. dairy farmers, cooperatives and companies

• Earns recognition for the dairy community's commitment to nourish communities, care for the land, be socially responsible and continuously improve

Ensures dairy's voices are heard and reflected in discussions with key stakeholders

 Provides ongoing interaction with customers, nonprofits, government, and other key stakeholders through the Dairy Sustainability Alliance®

BENEFITS TO CUSTOMERS & CONSTITUENTS

Builds confidence that U.S. dairy farmers and companies advance key aspects of social responsibility by employing consistent, credible and recognized reporting mechanisms

- Reduces the need to develop costly internal assurance programs and validation processes
- Aligns with widely recognized programs and protocols
- Provides measurement and reporting consistency in dairy supply chains
- Offers opportunity for direct input on dairy's priorities and metrics to contribute to the future of U.S. dairy sustainability



Dairy Sustainability Alliance®

The Innovation Center's Dairy Sustainability Alliance® (Sustainability Alliance) illustrates the collaborative, open and transparent process through which the U.S. Dairy Stewardship Commitment is developed. Comprised of over 175 member organizations and more than 350 professionals, Sustainability Alliance members convene to share knowledge and collaborate on issues and opportunities to accelerate progress and contribute to the long-term viability of the industry. Sustainability Alliance members include industry suppliers, cooperatives, processors, retailers, government, dairy checkoff and civil society.

The Sustainability Alliance includes 40 dairy farmer representatives from across the country who provide essential onfarm perspectives and expertise. This dialogue provides the dairy chain with insights from U.S. farmers, who serve as the lynchpin for a sustainable dairy industry, and allows farmers to hear firsthand about downstream opportunities and challenges. All efforts and outcomes of the Dairy Sustainability Alliance's work are voluntary, pre-competitive, technology-neutral and made available to the entire industry.

Dairy Sustainability Alliance Involvement

All Dairy Sustainability Alliance members commit to advance socially responsible, economically viable and environmentally sound dairy food systems. The diverse nature of Sustainability Alliance membership and the unique insights each member brings are key to ensuring the Stewardship Commitment reflects the voices of all involved. This is core to the Stewardship Commitment and dairy company membership in the Sustainability Alliance is a key term of adoption. (page 11)

The Dairy Sustainability Alliance meets twice each year to facilitate information exchange and interaction. Workshops and side meetings surround these meetings to inform continuous improvement across an array of sustainability priorities, including animal care, environmental stewardship and processing operations.

Sustainability Alliance meetings occur in the spring and the fall, and convene over 250 Sustainability Alliance members. Discussion and input sessions are critical, and members provide feedback and insights to inform proposed Stewardship Commitment metrics and the development of industry goals.

In the fall, Sustainability Alliance members also join the Sustainable Agriculture Summit, which attracts hundreds of professionals from national organizations representing



Launched in 2011, the annual U.S. Dairy Sustainability Awards program serves to recognize and honor outstanding dairy farms, businesses and partnerships for socially responsible, environmentally sound practices. These practices, along with countless others throughout the nation, illustrate continuous improvement efforts across the industry that demonstrate U.S. dairy is committed to a more sustainable world.

Learn more about the program and past winners at www.usdairy.com/awards.

dairy, row crops, specialty crops, pork, beef and poultry. Co-hosted by the Innovation Center and Field to Market® (page 7), the Summit aims to strengthen the supply chain network of producers, agribusinesses, retailers and influencers who drive continuous improvement in agricultural sustainability and deliver food, fiber and fuel to a growing world.

Learn more at http://sustainabilityalliance.usdairy.com.





Environmental Stewardship Goals

In 2020 the Innovation Center set bold environmental stewardship goals to advance U.S. dairy's role in building a sustainable future. These voluntary goals are designed to be reached by the U.S. dairy community collectively, and progress will be reported in aggregate at the field, farm and processor levels.

Commitment Goals

The industry-wide goals state that by 2050, U.S. dairy collectively (field, farm and processor) commits to:

- Achieve greenhouse gas neutrality
- Optimize water use while maximizing recycling
- Improve water quality by optimizing utilization of manure and nutrients

The Stewardship Commitment was instrumental in goal development. Informed by the highest ranked environmental priorities of the U.S. Dairy Materiality Assessment (page 5) and developed with input from the Dairy Sustainability Alliance®, these goals articulate the collective U.S. dairy intention and direction at the field, farm and processor level to pursue dairy as an environmental solution.

Stewardship Commitment metrics help enable progress tracking against these and future industry goals. Progress against the goals will be reported every five years, beginning in 2025. This reporting will not only document progress but also identify technological and other advancements that can accelerate improvements, enabling nimble adaptation and focus on what can be scaled for impact.

The Innovation Center realizes that not every farmer, cooperative and processor is equipped to achieve each goal individually, but all can contribute in some way. The U.S. dairy supply chain is working together to identify multiple economically viable pathways for reaching these goals, including:

Achieve greenhouse gas neutrality Optimize water use while maximizing recycling Improve water quality by optimizing utilization of manure and nutrients

- Attracting investment and partners to ignite new technology and innovation
- Creating new revenue sources such as manure-based product development and ecosystem services markets
- Expanding science-based research and data collection that closes knowledge gaps, improves analysis and advances practices and technologies that reduce environmental impacts
- Increasing the utilization and expansion of best practices, resources and tools for farmers, cooperatives and processors

Strategies include the Net Zero Initiative, an industry-wide effort to accelerate voluntary action by making sustainable practices and technologies more accessible and affordable to farms of all sizes and geographies. For dairy processors, the Innovation Center facilitates a working group of over 30 dairy companies to advance priorities aligned with goal objectives.





Stewardship Commitment Metrics

The Stewardship Commitment metrics are voluntary, stakeholder-aligned measures that empower the dairy community to credibly demonstrate sustainability progress. Underpinned by an externally validated materiality assessment, these metrics reflect topics most pertinent to U.S. dairy across three dimensions: (1) significance of U.S. dairy's impacts, (2) importance to stakeholders, and (3) U.S. dairy's influence on each. The metrics are developed at the field, farm and processor levels to support both individual company and aggregate national reporting.

Metric Development and Oversight

The Innovation Center's Board of Directors (Board), comprised of dairy company CEOs and industry leaders, represents more than 65 percent of the U.S. milk production and sets metric development priorities based on extensive stakeholder input. These priorities are further substantiated through an industry and third-party reviewed and validated U.S. Dairy materiality assessment. A materiality assessment or incorporation of the most recent national assessment is also a Stewardship Commitment term of adoption for dairy companies (page 11).

The Executive Operating Committee (EOC), a subgroup of the Board, oversees the efforts of seven industry-led committees that develop additions and refinements to Stewardship Commitment metrics for stakeholder review. The EOC also oversees a committee of dairy cooperative and farmer sustainability leaders – including representative Innovation Center Board CEOs –



Complete Materiality Assessment available at usdairy.com/commitment

tasked with advancing the adoption, reporting and credibility of the U.S. Dairy Stewardship Commitment.

A formalized process for metric development and approval is essential to advance credibility

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and support for the Stewardship Commitment. The metric development and approval process includes contributions from industry leadership, as well as cross-sector, multi-stakeholder input through the Dairy Sustainability Alliance® and a 60-day publicly available comment and review period. This process is based on the ISEAL Principles, which provide widely recognized guidance for credible sustainability standards. Through the Stewardship Commitment metric development process, the Innovation Center aims to advance industry-wide adoption and maintain the endorsement and advocacy of dairy customers and third-party stakeholders.

Stewardship Commitment Metric Development: ISEAL Codes of Good Practice

- ✓ 60 days for submission of comments
- ✓ Interested parties have equal opportunity to participate
- ✓ Parties directly affected (e.g., dairy farmers and processors) will be adequately represented
- ✓ All comments will be considered but not necessarily incorporated
- ✓ A written summary of how issues were addressed will be made publicly available
- ✓ Procedures will be established and documented to guide decision making
- ✓ All approved metrics will be published promptly



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Development • Indirect and non-monetary benefits available to employees	
 Worker safety Leading indicators to measure/encourage safe worker behavior (Y/N) Describe measurement systems employed, and how this has led to a safer workforce Days of restricted work activity or job transfer (DART) rate Explain why this has changed over time. 	
Community Community volunteering	
Contributions Monetary & product donations • Monetary and product donation activities	
Educational opportunities • Describe community educational events per year and the total number of participant	S.
Product contributions • Servings of dairy donated or consistently supplied to a non-profit organization to feed food in	secure people
Product Food safety Safety & Quality • Validated, verifiable food safety programs and management systems in place (Y/N) • Frequent reassessment of food safety programs to ensure efficacy and to reflect new tools/practices and ensure continuous improvement (Y/N)	food safety
Traceability • Commitment to voluntary U.S. Dairy Traceability Guidelines (Y/N)	



Harmonization with Recognized Platforms and Standards

To streamline reporting and assure credibility, the Stewardship Commitment draws upon globally recognized best practices and guidance in sustainability standards and report development. Where possible and practical, Stewardship Commitment metrics align with established measures developed by others to ensure harmonization and prevent duplication.



Dairy Sustainability Framework (DSF)

Provides a global platform to map sustainability programs, identifies priority topics applicable to dairy worldwide and measures progress across the global dairy value chain (page 10).

The Innovation Center is an aggregating member of the DSF and submits national progress for DSF global reporting. The Dairy Sustainability Alliance® serves as the convening body for U.S. stakeholders and Stewardship Commitment metrics (page 5) provide the measurement and reporting platform for all DSF-recognized dairy companies in the U.S. market.



Field to Market®: The Alliance for Sustainable Agriculture

Convenes a diverse group of stakeholders – including more than 140 grower organizations, leading companies, academia, conservation groups and public sector partners – to define, measure and advance the sustainability of U.S. crop production.

The Innovation Center has a formal partnership with Field to Market to harmonize on-farm sustainability metrics and help enable U.S. dairy to track sustainable production of dairy feed crops through the Field to Market platform (page 12).



Greenhouse Gas Protocol

As the world's most widely used GHG accounting and reporting framework, the GHG Protocol underpins the Innovation Center Life Cycle Assessment (LCA) and methodology for FARM Environmental Stewardship (page 13) and dairy processor (page 15) GHG reporting.

In 2019, Stewardship Commitment farm-to-processor GHG reporting guidance received the "Built on GHG Protocol" endorsement by The World Resources Institute (WRI) – a first for the agricultural sector. This assures recognition for Stewardship Commitment GHG reporting in supply chain and ESG disclosures, and platforms such as CDP, GRI and SBTi.



International Organization for Standardization

Develops international standards for products, services and systems to ensure quality, safety and efficiency.

The Farmers Assuring Responsible Management™ (FARM) Animal Care program (page 13) is the world's first ISO-compliant livestock animal care program.

In 2021 FARM was certified by another leading and trusted authority, the Professional Animal Auditors Certification Organization (PAACO).

The Stewardship Commitment's Animal Care metric is focused on FARM, which covers 99 percent of the U.S. fluid milk supply.



Global Reporting Initiative™ (GRI)

Provides the most widely used crossindustry sustainability reporting standards for organizational reporting worldwide.

A GRI-aligned materiality assessment (page 5) provides a basis for Stewardship Commitment priorities. When used with Stewardship Commitment metrics, this can help cooperatives, processors and manufacturers with the development of a GRI report.

Where applicable, Stewardship Commitment metrics align with six GRI environmental disclosure standards as well as social disclosure related to workforce and product safety.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science Based Targets Initiative (SBTi)

A collaboration between WRI, the U.N. Global Compact, CDP, and the World Wildlife Fund to develop methodologies and resources that over 3,700 companies have used to set credible, time-bound GHG reduction targets.

SBTi cites the GHG Protocol as the definitive reporting standard for disclosing progress towards science-based targets. Stewardship Commitment GHG reporting guidance is endorsed by WRI, a founder of both the GHG Protocol and SBTi. This assures stakeholders that Stewardship Commitment GHG metrics align and comply with GHG Protocol standards and SBTi methodologies.











Sustainable Dairy Partnership Business to Business

ESG Criteria

Environmental, Social and Governance (ESG) criteria are nonfinancial factors used by institutional investors and other stakeholders to assess a company's ability to execute its business strategy and create long-term value. ESG topics are a growing priority, as investors increasingly see a strong link between corporate sustainability and financial performance. Informed by the U.S. Dairy Materiality Assessment (page 5), Stewardship Commitment topics pertaining to ESG criteria are highlighted in the table below. Individual dairy companies may have other material topics, and company specific policies such as pay ratio and board independence are not within the scope of the Stewardship Commitment. To help inform business priorities, the Innovation Center offers guidance to conduct a robust company assessment as informed by ESG criteria in the Materiality Guide for U.S. Dairy Companies.

The Sustainable Dairy Partnership

The Sustainable Agriculture Initiative (SAI Platform) convenes over 170 member companies and organizations to advance sustainable agriculture worldwide. As a member of the Dairy Working Group, the Innovation Center collaborates pre-competitively with dairy customers, companies and national programs to provide U.S. perspectives and advance recognition of the Stewardship Commitment.

The Dairy Working Group oversees the Sustainable Dairy Partnership (SDP). Built on the Dairy Sustainability Framework (page 7) and its 11 Global Criteria, the SDP provides a globally relevant, yet regionally applicable approach to supply chain assurance and sustainable dairy. For GHG, an integrated Carbon Reporting Module assures FARM Environmental Stewardship (FARM ES) is accepted through established global standards. Leveraging management systems that are already in place – as well as

relationships with farmers – the SDP enables processors to provide evidence and show continuous improvement in marketplace reporting.

Companies that adopt the Stewardship Commitment have already taken steps towards implementing the SDP, including:

- Animal Care requirements through the National Milk FARM Program
- Membership in the Dairy Sustainability Framework (DSF)
- GHG and Nutrient Management Plan measurement and reporting through FARM ES
- Stakeholder dialog and input through participation in the Dairy Sustainability Alliance®
- Materiality assessment guidance and resources to assist in creating an SDPrecognized assessment

Further, SDP implementation guidance based on Stewardship Commitment adoption is available to all SDP users, and key aspects of the Stewardship Commitment are formally integrated into the SDP reporting hub, allowing proof of adoption to automatically meet several core SDP requirements.

ESG Criteria¹ within Stewardship Commitment Metrics Environmental (E) Social (S) Corporate Governance (G) 000 E1. GHG emissions S1. CEO pay ratio G1. Board diversity **E2.** Emissions intensity S2. Gender pay ratio G2. Board independence E.3 Energy usage S3. Employee turnover G3. Incentivized pay E4. Energy intensity S4. Gender diversity G4. Collective bargaining E5. Energy mix **S5.** Temporary worker ratio G5. Supplier code of conduct S6. Non-discrimination G6. Ethics and anti-corruption E6. Water usage E7 Environmental operations S7. Injury rate G7. Data privacy E8. Climate oversight/board S8. Global health and safety **G8. ESG reporting** E9. Climate oversight/management S9. Child and forced labor G9. Disclosure practices E10. Climate risk mitigation S10. Human rights G10. External assurance

NOTE: Those in bold are currently addressed in the Stewardship Commitment.



U.S. Dairy and United Nations Sustainable Development Goals

To transform the world — benefitting all people and the planet we live on — the United Nations launched 17 Sustainable Development Goals (SDGs) in September 2015. The goals aim to drastically decrease poverty, hunger, climate change and inequality by 2030. Food and agriculture have the opportunity to be key levers of action to drive success, and the dairy community is dedicated to being part of the solution. While the work of the dairy community directly or indirectly connects to all 17 goals, the U.S. dairy community is uniquely qualified to contribute significantly to helping achieve the following SDGs.

Goals		Dairy's Contribution
	ZERO HUNGER	U.S. dairy helps play a leading role in alleviating hunger and food insecurity by providing hundreds of millions globally with access to safe, affordable and nutritious dairy foods and ingredients. Alongside partners including Feeding America, the Academy of Nutrition and Dietetics, the School Nutrition Association and the Urban Schools Food Alliance, the dairy community is making strides to end hunger and provide a sustainable source of nutrition to youth and vulnerable populations. This includes childhood nutrition through the National School Lunch and Breakfast Programs, reaching over 30 million students, many of whom are in underserved communities, as well as through product donations and charitable giving to food banks and pantries nationwide.
People	GOOD HEALTH AND WELL-BEING	Dairy foods like milk, cheese and yogurt contribute a unique nutrient package that sets them apart from other foods, which is why they are in their own food group. They provide essential nutrients such as high-quality protein, calcium, phosphorus, B vitamins and more that help promote growth, development and overall health. Dairy foods are the top food source for calcium, vitamin D and potassium, based on what the average American eats (NHANES data); therefore, dairy provides three of the four nutrients of public health concern identified by the U.S. Dietary Guidelines for Americans.
	DECENT WORK AND ECONOMIC GROWTH	The dairy community plays an essential role in sustained economic growth and reduced unemployment. In the U.S. market, the dairy community directly provides nearly one million jobs² and contributes \$750 billion annually to the U.S. economy – 3.5 percent of U.S. gross domestic product (GDP).³ Much of the milk production and dairy product manufacturing occurs in rural communities.
Environment	CLIMATE ACTION	U.S. dairy cows generate the lowest greenhouse gas (GHG) emissions per gallon of milk in the world, ⁴ and the dairy community is committed to continuous improvement for environmental stewardship. This includes a GHG reporting tool and improvement guidance available to all dairy farmers, guidelines and tools to credibly report GHG intensity and reductions for dairy processing, and a voluntary industry-wide goal of GHG-neutral dairy production by 2050.
nunity	RESPONSIBLE CONSUMPTION AND PRODUCTION	The U.S. Dairy Stewardship Commitment provides a stakeholder-aligned, national platform where the dairy community can work collectively on efforts that balance food production with positive societal impact and environmental stewardship. Through the use of Stewardship Commitment metrics, U.S. dairy can measure and report progress to transparently demonstrate the responsible use of resources in local communities and throughout the world.
Сотт	PARTNERSHIPS FOR THE GOALS	• It takes everyone working together to define and achieve the ambitions set by the Stewardship Commitment. To ensure an inclusive and mutually beneficial approach, the Innovation Center forges valuable third-party partnerships with organizations such as Field to Market®, Feeding America and the USDA; and leads the multi-stakeholder Dairy Sustainability Alliance® to unify the dairy community and advance a shared vision of achieving resilient, sustainable food systems.

²https://www.idfa.org/dairydelivers

³https://bit.ly/3oB5KA2

Greenhouse Gas Emissions from the Dairy Sector. Food and Agriculture Organization. http://www.fao.org/docrep/012/k7930e/k7930e00.pdf.



Global Dairy Alignment

Dairy is integral to the lives of billions of people worldwide. In the American diet alone, dairy supplies 58 percent of vitamin D, 51 percent of calcium and 16 percent of protein. Further, the livelihoods of approximately one billion people are connected to dairy and seven percent of the world's land is cared for by the dairy sector.⁵ Thus, dairy has a significant role to play in contributing positive outcomes to address the world's most pressing challenges, such as nutritional security, poverty reduction, resource scarcity and climate action. As the largest dairy-producing country in the world, the U.S. must play a leadership role. This wider context fuels the Innovation Center's work with leading global dairy, crop and environmental organizations to support shared efforts for sustainable dairy.



A Global Platform for Sustainable Dairy

The linkages between dairy, its societal benefits and the environment are complex. The challenge has been to establish a common global platform to advance sustainability across the diversity of dairy production.

To this end, the Dairy Sustainability Framework (DSF) was established for dairy organizations worldwide to map and connect their sustainability activities in a consistent manner. As of November 2022, the DSF has

10 aggregators that report national progress on behalf of their sourcing regions and more than 60 member organizations across the world.⁶

The DSF consists of 11 Global Criteria outlining high-level objectives (strategic intents) committed to by the dairy sector. Recognizing the diversity of dairy production systems, the DSF enables regional setting of priorities and measures and the quantification of progress.

On behalf of the U.S. market, the Innovation Center is an aggregating member of the DSF. In this role, it submits national progress to demonstrate U.S. contributions to sustainable dairy for DSF

global reporting. Through the Dairy Sustainability Alliance® the Innovation Center also provides a national convening body for DSF-engaged dairy stakeholders, while the Stewardship Commitment provides the measurement and reporting protocol for all DSF-recognized dairy companies in the U.S. market.

All U.S. dairy companies that adopt the Stewardship Commitment are implementing and recognized members of the DSF. Membership indicates alignment with the 11 DSF criteria and a commitment to continuous improvement through the supply chain relative to each.

Global Criteria	Stewardship Commitment Alignment			
Environment Environment				
Biodiversity	Biodiversity (page 12)			
Greenhouse Gas Emissions	Greenhouse Gas Intensity (pages 14, 15)			
Soil	• Feed Impact (page 12)			
Soil Nutrients	Nutrient Management Plan (pages 13, 14)			
Waste	Resource Recovery (page 15)			
Water	• Water Quantity (page 14), Water Quality (page 14), Feed Impact (page 12)			
	Social			
Animal Care	• FARM Animal Care (pages 13, 14)			
Product Safety & Quality	• Food Safety (page 15), Traceability (page 15)			
Working Conditions	Worker Safety (page 15), Human Resources (page 15)			
Economic				
Market Development	• Foundational to U.S. dairy (page 15)			
Rural Economies	Community Contributions (page 15)			



Chapter 3 | Stewardship Commitment Adoption

Terms of Adoption

Dairy cooperatives and processors that adopt the Stewardship Commitment must submit a written affirmation statement and meet the rigorous terms outlined below. As of November 2022, 35 dairy cooperatives and processors representing more than 75% of the U.S. milk supply have adopted the Stewardship Commitment. Participation is updated regularly at www.usdairy.com/commitment.

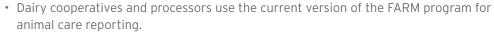
Stewardship Commiment Terms of Adoption



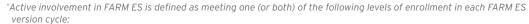
Dairy cooperatives and processors that, in the exercise of their independent business judgment, decide to adopt the U.S. Dairy Stewardship Commitment and agree to the following:

- 1. Active membership in the Dairy Sustainability Alliance® and agreement to its terms of membership.
- 2. Enrolled and in good standing with the National Dairy FARM (Farmers Assuring Responsible Management) animal care program and/or sourcing from 100 percent FARM-enrolled farms.
- 3. Completion and affirmation of a company materiality assessment within two years of Commitment adoption, OR incorporation of the most recent Innovation Center U.S. Dairy Materiality Assessment into company priorities and strategic considerations.





- Dairy cooperatives and proprietary processors (i.e., those with direct ship contracts) are
 actively involved* in the FARM Environmental Stewardship Program, using it to assess
 on-farm GHG, energy and nutrient management metrics.
- Dairy processors report annually using measurements consistent with methodologies outlined in the Dairy Processor Handbook (e.g., GHG, water, energy, resource/waste recovery); processors use the Processor Stewardship Reporting Tool to support aggregated U.S. dairy reporting.
- Dairy processors adopt and apply food safety plans which they regularly update, and follow the guidance in the Innovation Center's Food Safety and Traceability Guidance documents.
- Dairy cooperatives and processors report community contributions.
- 5. Engagement in Innovation Center volunteer and partnership opportunities to discuss and inform future indicators, metrics and reporting needs, and active stakeholder communication aimed at telling U.S. dairy's social responsibility story.
- 6. Recognition of U.S. Dairy Stewardship Commitment adoption in dairy company's sustainability messaging, customer outreach and on their website.
- 7. Affirmation of U.S. Dairy Stewardship Commitment adoption and agreement with terms through an annual verification questionnaire.



- Evaluations must be completed on member or direct-ship farms selected using the FARM ES Sampling Protocol, which is representative of the entire organization's farmgate milk supply,
- Evaluations must be completed at 100 percent of member or direct-ship farms. For organizations currently not meeting the active involvement definition, definition must be fully met within the FARM ES v.3 cycle (2024-27).







Learn more at usdairy.com/sustainability/commitment.

The Innovation Center for U.S. Dairy follows all applicable antitrust regulations. Each company is encouraged to exercise its own independent business judgment regarding whether or not to participate in this initiative and if so how. None of the suggested activities will take any action toward antitrust- prohibited subject matters such as pricing, allocation of customers or markets, boycotts, refusals to deal, or any other matter that could be construed as a combination in restraint of trade.



Feed Impact

To help understand field-level impacts, the Innovation Center supports extensive research and projects, and works in partnership with leading initiatives to progress sustainable crop production, measurement and reporting.

Feed Metrics

On average, dairy farmers only grow 35 percent of their cattle feed.⁷ They are, therefore, limited in the ability to collect primary data on two-thirds of the feed supply. However, many aspects of feed production are recognized sustainability priorities for U.S. dairy. To close data and research gaps, in 2021 a new initiative launched in partnership with the Foundation for Food and Agriculture Research to improve measurement-based assessment of dairy's GHG footprint for feed production and set the stage for new market opportunities related to carbon, water quality and soil health.

This effort complements an ongoing partnership with Field to Market: the Alliance for Sustainable Agriculture, which is a diverse collaboration working to advance improvement in the sustainability of U.S. commodity crop

production. Because an estimated 45 percent of a dairy cow's feed comes from corn silage and alfalfa, the Innovation Center and Field to Market focus on enabling U.S. dairy to track sustainable production of these crops through Field to Market's platform. Individual companies can also work directly with Field to Market to address specific supply chain reporting needs. Connections to complementary field sustainability resources are also being explored.

Further, in 2021 the Innovation Center released biodiversity metrics for U.S. dairy. These were integrated into an optional conservation questionnaire with the FARM Environment Stewardship program (page 13) in 2022. The metrics assess the implementation of plans/programs and practices with biodiversity benefit, with intent



to recognize efforts underway and enhance understanding on the importance of this topic and beneficial practices. Findings from these metrics will inform opportunities to further enhance biodiversity in dairy, and identify possible new or revised metrics to measure progress and a potential industry goal.

As a term of Stewardship Commitment adoption (page 11), dairy cooperatives and proprietary processors are actively involved in the FARM Environmental Stewardship Program, which includes measures related to feed production.

With the dairy community's active support, the Innovation Center and dairy community will continue to advance sustainability and consistent measurement and reporting for both purchased feed and that grown on-farm.

Indicator	Metric
Land use, irrigation water use, water quality and soil conservation	The Innovation Center continues to work with Field to Market to ensure these indicators and metrics are useful and relevant to dairy.
GHG and energy intensity	• U.S. dairy's LCA for U.S. Milk underpins GHG and energy metrics for feed production. Metrics mirror those used at the dairy farm (pages 14, 15) and are reported in aggregate.
Biodiversity	 Written and implemented plans or programs that preserve, restore and/or improve biodiversity (select plans or programs from applicable options) Implemented practices that preserve, restore, and/or improve biodiversity (select practices from applicable options)

Tools and Resources

- Field to Market, www.fieldtomarket.org: Learn about Field to Market membership. See examples of ongoing projects and how farmers and the supply chain are working together to catalyze continuous improvement.
- Fieldprint® Platform, http://bit.ly/2sZkSOH: An assessment framework that empowers brands, retailers, suppliers and farmers to measure environmental impacts in crop production and identify opportunities for continuous improvement.
- Natural Resource Conservation Service, https://bit.ly/3C7EkJ2: Provides technical and financial assistance to farmers. Programs, such as the Resource Stewardship Evaluation Tool (RSET), are available to support and advance sustainable feed production.



Dairy Farm Metrics

Dairy farmers believe stewardship includes leaving the land and surrounding environment better than they found it for the next generation. This culture of continuous improvement is illustrated in the Stewardship Commitment's dairy farm metrics, which provide common and recognized measures that demonstrate farmers' stewardship of the land and the well-being of animals in their care.

The National Dairy FARM Program



The National
Dairy Farmers
Assuring
Responsible
Management™
(FARM) program
provides the
foundation for

the Stewardship Commitment's dairy farm metrics, which are measured and collected on the farm by trained and certified FARM evaluators. Open to all U.S. dairy farmers, co-ops and processors, FARM works with the producer community and industry partners to show customers and consumers that the dairy community is taking the very best care of cows and the environment, producing safe and wholesome milk, and pursuing exceptional work environments.

FARM Animal Care

The Stewardship Commitment's Animal Care metric is measured through the FARM Animal Care program, currently in use by 99 percent of the U.S. milk supply. As an International Organization for Standardization (ISO) compliant and Professional Animal Auditor Certification Organization (PAACO) certified livestock animal care program (page 7), FARM Animal Care demonstrates that dairy farmers raise and care for their animals in a humane and ethical manner. Within the Stewardship Commitment, all adopting companies must be enrolled and in good standing with FARM and/or source from 100

percent FARM-enrolled farms that are in good standing with the program (page 7).

FARM Animal Care standards focus on appropriate care for all age classes of animals, proper housing, family and non-family employee training, protocol development and implementation, recordkeeping and working with veterinarians and other animal care professionals. The program is updated every three years and is currently in its fourth iteration.

FARM Animal Care: a three-pronged approach

- 1. The FARM Animal Care
 Reference Manual and
 corresponding educational
 materials detail the
 highest standards for
 animal care.
- 2. Farmers are evaluated at least once every three years by trained and certified experts.

 Evaluators provide feedback around areas in which farmers are excelling, as well as those where improvement is needed.
- 3. Third-party verification ensures program integrity through outside experts, who provide statistically verified data on the implementation of the program.



If a needed improvement is identified, action plans must be addressed within a designated timeframe in order for the farm to remain certified.

FARM Environmental Stewardship

FARM Environmental Stewardship (FARM ES) is U.S. dairy's national program to measure and report on-farm environmental progress. Trained second-party evaluators conduct FARM ES assessments on behalf of participating cooperatives and processors. The evaluation provides a comprehensive estimate of a farm's greenhouse gas emissions and energy use and assesses the establishment of a written, implemented and maintained nutrient management plan. These results help farmers identify potential efficiency gains and cost savings in a secure, confidential platform. As a core component of the Stewardship Commitment, FARM ES is a dairy cooperative and proprietary processor requirement for company adoption (page 11).

Stewardship Commitment greenhouse gas and energy use metrics are intensity-based per pound of fat- and protein-corrected milk (FPCM)⁸.



At the dairy farm, the scope of these measures includes farm and field operations as well as purchased feed. Calculations are based on the Innovation Center's comprehensive Life Cycle Assessment (LCA) for Fluid Milk. This provides reliable, statistically robust estimates that explain 98 percent of the variability in total GHG footprint.

Water Use on the Farm

Dairy farmers understand the importance of water resources because their prosperity is directly tied to water access, scarcity and excess. The Stewardship Commitment measures water efficiency per pound of fat- and protein-corrected milk (FPCM) for lactating dairy cows. Through LCA

data collection at over 500 farms nationally, average on-farm water use is 14 gallons per pound of milk (FPCM). While resources to collect this information directly are limited, this aggregate number can serve as a benchmark and be used when reporting on-farm water use.

The U.S. Dairy Environmental Stewardship Goals (page 4) include optimization of water use and recycling as well as demonstrated improvements in water quality. With a public commitment to report quantifiable progress, resources to demonstrate and progress dairy producers' water stewardship efforts will be made available in consultation with farmers, experts and other key stakeholders.



Indicator	Metric
Energy intensity	Total energy use (converted to MMBTU)/lb. of milk (FPCM)
GHG intensity	Total GHG emissions (tonnes CO ₂ e)/lb. of milk (FPCM)
Water use (on-farm)	Gallons of water withdrawn (for lactating cows)/lb. of milk (FPCM)
Nutrient Management Plan	• Do you implement and maintain a written Nutrient Management Plan? (Y/N)
FARM Animal Care	Do you participate in the FARM Animal Care program? (Y/N)

Tools and Resources

Animal Care

- Producer Resources, https://bit.ly/3708CEx: Resources include the Animal Care Reference Manual, training materials and farmer tools.
- Year in Review, https://bit.ly/3jGCiFI: Provides an annual report of FARM progress and details the national results of on-farm assessments.

Environment

- FARM Environmental Stewardship, http://bit.ly/2pRA3Uc: Resources include fact sheets, data collection templates, an Environmental Stewardship reference manual and training videos.
- Penn State's Dairy Water Use Spreadsheet, https://bit.ly/20puWal: Allows dairy farmers to estimate their daily on-farm water use deploying simple inputs.
- PRO-DAIRY Calculator, https://bit.ly/2pJHFeO: Estimates a farmstead's water use (barns, milking etc.) with provisions for entering other water uses on-farm. Based on use inputs, the calculator estimates average daily water use for each month.
- SnapPlus (Wisconsin) https://snapplus.wisc.edu: Helps farmers make best use of their on-farm nutrients to protect soil and water quality.
- Newtrient, www.newtrient.com: Helps dairy farmers and other stakeholders assess manure management opportunities and challenges to make informed decisions. Resources include a catalog of technologies and vendors, and education materials.
- USDA NRCS Nutrient Management Guidance, https://bit.ly/3hUarqW: NRCS guidance related to Nutrient Management Plans, including a manual and technical guide.



Processor Impact

U.S. dairy's social responsibility efforts don't stop at the dairy farm. Dairy processors are taking action to collaborate pre-competitively, drive progress and demonstrate a positive impact on Stewardship Commitment priorities and the industry's 2050 Environmental Stewardship Goals.

Dairy Processing as a Priority

The Stewardship Commitment provides a comprehensive suite of sustainability metrics to demonstrate industry progress at the processor stage of the supply chain. These metrics and accompanying resources to measure and report progress were developed in collaboration with over 30 dairy processing companies within the Dairy Sustainability Alliance®. Reporting

these metrics through the Processor Stewardship Reporting Tool (page 16) is a Stewardship Commitment Term of Adoption.

Dairy Processor Handbook

Detailed measurement and reporting guidance on the processors' Stewardship Commitment metrics is provided in the Innovation Center's Dairy Processor Handbook. This handbook acts as a supplementary resource to the Stewardship Commitment and clearly lays out the necessary information and calculations for the metrics with detailed examples and step-by-step guidance. The Processor Handbook also includes a collection of resources linked to each priority area to provide additional support for measurement and disclosure.

Indicator	Metric
Energy intensity	Total energy use (converted to MMBTU)/lb. of production output
GHG intensity	• Total GHG emissions (tonnes CO ₂ e, Scope 1 and 2)/lb. of production output
Water withdrawal	Gallons of water withdrawn by source of water supply/lb. of production output
Water efficiency	Gallons of water withdrawn/lb. of production output
Water recycling and reuse	• [Gallons of water supplied that are captured for reuse within the facility + milk water captured for use]/lb. of production output
Milk water use	Gallons of water captured from milk for use within facility/lb. of production output
Surplus water	• [Discharge volume - water withdrawn]/lb. of production output
Water discharge and quality	Policy, program or monitoring system to ensure routine compliance with industrial or storm water permit parameters (Y/N)
Waste diversion	Percent by weight total waste stream (lbs.) diverted from landfill or incineration without recapturing energy
Throughput efficiency	Total waste stream/lb. of production output
Resource utilization	 Food/organics repurposed to feed hungry people Food/organics donated or repurposed as animal feed and non-food recycled or composted (lbs.)/total waste stream (lbs.) Food/organics repurposed for industrial uses or compost and non-food repurposed for energy recovery (lbs.)/ total waste stream (lbs.) Waste sent to landfill or incineration without recapturing energy (lbs.)/total waste stream (lbs.)
Recycled content	• Is your company researching and/or investing in the use of post-consumer recycled (PCR), and/or post-industrial recycled (PIR) content for primary, and/or secondary product packaging? (Y/N)
Material optimization	• Exploring options to reduce or replace non-recyclable and/or non-compostable packaging (Y/N)
Material utilization	Materials used for product packaging, differentiated by primary, secondary and tertiary packaging
Human resources	 Total number of jobs supplied and full-time employees at the end of year Indirect and non-monetary benefits available to employees
Worker safety	 Leading indicators to measure/encourage safe worker behavior (Y/N) Describe measurement systems employed, and how this has led to a safer workforce. Days of restricted work activity or job transfer (DART) rate Explain why this has changed over time.
Community volunteering	Volunteer activities performed by employees
Monetary & product donations	Monetary and product donation activities
Educational opportunities	Describe community educational events per year and the total number of participants.
Product contributions	• Servings of dairy donated or consistently supplied to a non-profit organization to feed food insecure people.
Food safety	 Validated, verifiable food safety programs and management systems in place (Y/N) Frequent reassessment of food safety programs to ensure efficacy and to reflect new food safety tools/ practices and ensure continuous improvement (Y/N)
Traceability	Commitment to voluntary U.S. Dairy Traceability Guidelines (Y/N)



Processor Reporting and Additional Resources

When the Stewardship Commitment was launched, no mechanism existed for dairy processors to consistently measure and report metrics defined in the Commitment. In collaboration with the dairy processing community, an array of complementary resources and tools were developed to meet these needs.

Processor Stewardship Reporting Tool

To facilitate aggregated reporting of annual progress on behalf of dairy processors and broader industry efforts, more than 20 dairy processors partnered with Harbor, an environmental, health and safety (EHS) consulting firm, to develop a processor reporting tool based on the Intelex Platform. Intelex is a widely used EHS and quality management software solution used by over 1,300 companies worldwide.

The Processor Stewardship Reporting Tool provides a credible and cost-effective way to calculate and report processor sustainability information on a facility-by-facility basis, while simultaneously supporting U.S. dairy by contributing to aggregate data collection representative of the majority of the industry.

Every indicator and metric within the Tool is calculated exactly as described in the Dairy Processor Handbook, ensuring complete alignment and consistent measurement and reporting across the dairy processing industry.

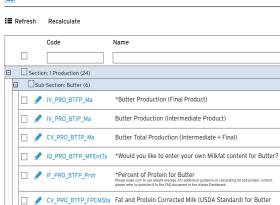
The Tool captures information on Stewardship Commitment metrics at its core, but individual processors can work independently with Harbor (for an additional cost) to expand their company dashboard to measure and report on additional metrics if desired.

Reporting on Stewardship
Commitment metrics through
the Processor Stewardship
Reporting Tool is a
Stewardship Commitment
Term of Adoption. Therefore,
companies that voluntarily adopt
the Stewardship Commitment agree
to participate in the Processor

Stewardship Reporting Tool.

The Innovation Center Board of Directors created an independent, dairy processor-owned LLC (Limited Liability Company) to financially support the development and maintenance of the Processor Stewardship Reporting Tool. LLC members voluntarily adopt the Stewardship Commitment and

INTELEX



 $Intelex\ platform\ software$

financially contribute. Costs are evenly distributed across LLC members and enable access to an Intelex license for a significantly reduced rate.

More information on the characteristics of the Processor Stewardship Reporting Tool is found on page 4 of the Dairy Processor Handbook. Organizations with interest in adopting the Stewardship Commitment and joining the LLC should contact Stewardship.Commitment@dairy.org for more information.

Tools and Resources

- Dairy Processor Handbook, http://bit.ly/3vWR97R: Supplements the Stewardship Commitment by providing detailed measurement and reporting guidance for processors on each metric, aiding them in credibly and consistently reporting into the Processor Stewardship Reporting Tool.
- Dairy Nourishes America Toolkit, https://bit.ly/3gn8EFs: Describes four donation models processors can utilize to provide hungry people with nutritious dairy products.
- Scope 1 & 2 GHG Inventory Guidance, https://bit.ly/33UC60F: Provides detailed GHG accounting and reporting guidance in accordance with the GHG Protocol. Guidance received formal "Built on GHG Protocol" endorsement from WRI.
- Scope 3 GHG Inventory Guidance, https://bit.ly/2VSbucl: Provides detailed GHG accounting and reporting guidance in accordance with the GHG Protocol. Guidance received formal "Built on GHG Protocol" endorsement from WRI.
- Materiality Guide for U.S. Dairy Companies, https://bit.ly/3ozDXQC: Assists dairy companies in conducting their own materiality assessment based on the U.S. Dairy Materiality Assessment, which outlines national sustainability priorities.
- U.S. Dairy Traceability Guidelines, https://bit.ly/2JY1X07: Provides information and guidance to help processors implement traceability protocols and compare current practices to a set of minimum standards.



Acknowledgments I Contributions

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Farms, Farmers and Cooperatives

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Processors, Retailers and Brands

Agropur Albertsons Bel Brands USA

Cayuga Milk Ingredients

Chobani Danone Domino's General Mills Inc. Glanbia Foods Inc.* Grande Cheese Great Lakes Cheese[†] Hilmar Cheese Company[†]

HP Hood[†]

Idaho Milk Products Kraft Heinz Company The Kroger Company[†] Leprino Foods Company^{*,†}

Mars Inc. McDonald's

Milk Specialties Global

Saputo

Sargento Foods Inc.
Schreiber Foods Inc.*,†
Target Corporation
The Starbucks Company

Unilever

Valley Queen Cheese

Walmart Yum! Brands

Associations and Government

Global Dairy Platform
Idaho Dairymen's Association
International Dairy Foods Association
National Milk Producers Federation*,†
Milk Producers Education Program†
State and regional dairy checkoff
U.S. Dairy Export Council†
U.S. Department of Agriculture
U.S. Environmental Protection Agency

Community

California Dairy Cares

California Dairy Research Foundation Dairy Strong Sustainability Alliance Environmental Defense Fund

Field to Market

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Manomet, Inc.

New Mexico State University

Newtrient, LLC

Sustainable Agriculture Initiative (SAI)

The Fertilizer Institute
The Nature Conservancy
United Soybean Board
University of California, Davis
University of Wisconsin-Madison

World Wildlife Fund

About the Innovation Center for U.S. Dairy®

The Innovation Center for U.S. Dairy® is a forum that brings together the dairy community to address the changing needs and expectations of consumers through a framework of shared best practices and accountability. Initiated in 2008 by dairy farmers through the dairy checkoff, we collaborate on efforts that are important both to us and our valued customers – in areas like animal care, food safety, nutrition and health, the environment and community contributions.

Through the Innovation Center, the U.S. dairy community demonstrates its commitment to continuous improvement from farm to table, striving to ensure a socially responsible and economically viable dairy community. Learn more at www. USDairy.com.

www.USDairy.com • InnovationCenter@USDairy.com

