

Sustainability Resource Guide for U.S. Dairy Processors



Getting Started



Purpose of this Guide

This Guide is for individual dairy processor companies seeking to align their company operations with sustainability metrics and goals generally used throughout the dairy industry. Whether your company is just starting its sustainability journey, or is seeking to take operations to the next level, this Guide assembles numerous resources developed by the U.S. dairy community as part of its pre-competitive industrywide commitment to sustainability.



Customer Goals and Expectations

Food companies and other dairy buyers are encouraging, and in many cases requiring as a condition of sale, that their suppliers demonstrate a commitment to ESG (environment, social and governance) goals by setting baselines, setting credible targets, demonstrating continuous improvement and reporting sustainability progress in response to marketplace demands.

With the shared belief that sustainability is larger than any single organization or sector of the supply chain, U.S. dairy has established [2050 Environmental Stewardship Goals](#) that support a vision of dairy as an environmental solution. They address the areas where we can collectively have the greatest impact and demonstrate progress.

To ensure consistency in sustainability measurement and reporting, customers, investors and others rely on globally recognized sustainability standards and protocols. [Learn how U.S. Dairy aligns.](#)

Guidance on setting goals and measuring progress for your company or operation is in ["The Plan" section of this guide](#). To learn more, contact Jennifer Block at Stewardship.Commitment@dairy.org.



What Matters Most to You

All food production comes with an environmental footprint. The first step toward building a sustainability plan is to conduct a materiality assessment to identify, prioritize and define the sustainability topics that matter most to you and your stakeholders.

- [The sustainability topics that matter most to U.S. Dairy](#)
- [How to conduct your own materiality assessment](#)

Major food companies and retailers publicly report sustainability goals and progress, and increasingly expect their suppliers to do so as part of a growing desire to understand and mitigate their environmental footprint from farm to table.

To support dairy companies, buyers and suppliers globally, the [Dairy Sustainability Framework \(DSF\)](#) offers an overarching sustainability vision for the global dairy sector. It also includes regional/local layers, enabling a prioritization of the issues relevant to the region, while connecting them at a global level. The Innovation Center for U.S. Dairy is the single aggregator for the DSF in the U.S.

[SAI's Sustainable Dairy Platform](#) provides a consistent approach for reporting between buyers and processors. The [U.S. Dairy Stewardship Commitment](#) has formal alignment with SDP's sustainable sourcing assurance model.

Click the logos below to view the sustainability goals of several global dairy buyers.



U.S. Dairy 2050 Sustainability Goals

2021 U.S. Dairy Materiality Grid

IMPORTANCE TO STAKEHOLDERS	SIGNIFICANCE OF U.S. DAIRY'S IMPACTS		
	Environmental	Social	Economic
LOW	<ul style="list-style-type: none"> Deforestation* Market Development 	<ul style="list-style-type: none"> Biodiversity Community Contributions Diversity, Equity and Inclusion Energy Food/Nutrition Security and Accessibility Land Use Materials/Packaging Resource Recovery Soil Health/Quality 	<ul style="list-style-type: none"> Animal Care Economic Contributions Employee Attraction and Retention Greenhouse Gas Emissions Health and Nutrition Human Rights Nutrient Management Product Safety and Quality Water Conservation Water Quality Worker Health and Safety
HIGH			

Topics within each box are alphabetized.
*At a national level, deforestation is not seen as materially impacted by U.S. dairy, but it is noted due to importance to stakeholders.

The Plan



Making the Business Case

Companies have long recognized that sustainable practices positively impact a company's bottom line through resource recovery and improving efficient use of environmental resources. Today, consumers, customers and government organizations are all demanding more from companies when it comes to social and environmental responsibility. In addition, the investor community is putting immense pressure on companies to define and integrate ESG principles into their decision-making, and this will likely become a requirement in the near future. Learn more about making a business case for [ESG](#).



People and Planning

Many companies begin their sustainability journey by identifying a champion/executive sponsor to ensure that the company's leadership supports sustainability and understands the operational and financial implications of developing and implementing a rigorous sustainability program. Depending on the size of your organization, you should identify a cross-functional team and/or a dedicated sustainability professional. If an in-house solution is not feasible there are many expert consultants and advisors available to support you.

The following resources can help get you started:

- [Skills and responsibilities](#)
- Learn how dairy companies are demonstrating sustainability leadership
 - [Dairy Farmers of America](#)
 - [HP Hood](#)
 - [Leprino Foods](#)
 - [Maryland & Virginia Milk Producers Association](#)
 - [United Dairymen of Arizona](#)
- [2020 U.S. Dairy Sustainability Report](#) summarizes progress against collected industrywide goals as well as highlights areas of impact in environmental stewardship and social responsibility.
- Through the [Dairy Sustainability Alliance®](#), companies pre-competitively share best practices and lessons learned.



Setting Goals and Measuring Progress

After completing a materiality assessment and identifying sustainability impact areas that are most relevant for your organization (see [What Matters Most](#)), the next step is to prioritize where to make improvements; set goals for those areas and implement mechanisms to measure and report progress towards those goals. This helps manage business risks and provides opportunities for cost reduction and income generation.

Greenhouse Gas Emissions

Greenhouse Gas (GHG) emissions are likely the first place to start. GHG emissions are a material sustainability topic for all industries including U.S. dairy at the national level and are very likely a material topic for dairy cooperatives and processors at a company level too. As a result, stakeholders increasingly expect companies to address and manage their GHG footprint.

Resources for setting and reporting on credible GHG reduction goals for both direct and indirect emissions, including an explanation of the types of emissions (Scope 1, 2, and 3) can be accessed [here](#). (see next page)

Other Environmental Sustainability Impact Areas for Processors

Other material environmental sustainability topics in dairy include energy use, water quantity and quality, and resource recovery. Determining a baseline for these topics can generally be done through facility audits, which usually requires working with third-party consultants.

A simple and streamlined way to establish a baseline for all these topics is through the [Processor Stewardship Reporting Tool](#). The Tool is built directly on the processor metrics outlined in the U.S. Dairy Stewardship Commitment. It provides a credible and cost-effective way to calculate and report on sustainability metrics on a facility-by-facility basis, while simultaneously supporting U.S. dairy's efforts around industry aggregate reporting.

The tool enables companies to monitor and manage sustainability performance at a location level, collect the data necessary to measure and make progress towards company goals. It also provides cooperatives and processors with a Scope 1 and 2 GHG emissions baseline.

Dairy Processor Handbook

The [Dairy Processor Handbook](#) is a comprehensive guide for dairy manufacturers and processors who utilize the Processor Stewardship Reporting Tool. The Handbook was built in direct alignment with the Tool and the Stewardship Commitment, and provides step-by-step guidance on how to measure and report information on these material sustainability metrics at the processing facility:

- Energy use to improve efficiency
- Greenhouse gas emissions to reduce the processing facility's carbon footprint
- Water management to responsibly manage water use
- Resource recovery through optimal recovery, recycling and reuse
- Workforce development to maintain employee satisfaction and a safe working environment
- Community contributions supporting local communities
- Product safety and quality to ensure a safe and reliable dairy product supply

On-Farm Considerations

Sustainability begins with caring for the dairy herds that produce our milk and extends through the supply chain. Dairy farmers have a proud history of providing environmental stewardship with a focus on continuous improvement.

Every dairy farm is different, requiring tailored sustainability goals and practices that make sense for their unique situation. Learn more about On-Farm Sustainability Goals and Practices [here](#). (see next page)

Continuous Improvement

Sustainability is a daily, purposeful commitment that touches all aspects of operations and manifests in sound, responsible business practices. Like all business strategies, it requires an eye to the future and a mindset of continuous improvement.

Learn about continuous improvement and innovation across the supply chain from the winners of the annual [U.S. Dairy Sustainability Awards](#). Industrywide progress is reported in the [2020 U.S. Dairy Sustainability Report](#).

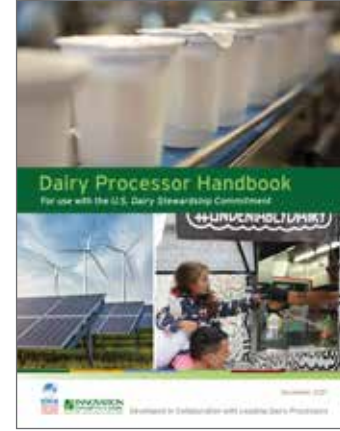
Furthermore, there are several freely available resources – developed by the Innovation Center for U.S. Dairy's Processor Working Group – that dairy processors can use to continuously improve their company environmental footprint, while simultaneously supporting the industry's 2050 Environmental Stewardship Goals.

- The [Dairy Processor GHG Reduction Opportunities Guidance](#) provides strategies, practices, technologies and supporting resources for dairy processors to lower their operational and supply chain GHG footprint.
- The [Dairy Processing Water Definitions and Reuse Opportunities](#) resource provides consistent definitions related to water recycling, and highlights opportunities and applications for water efficiency and reuse in dairy processing.

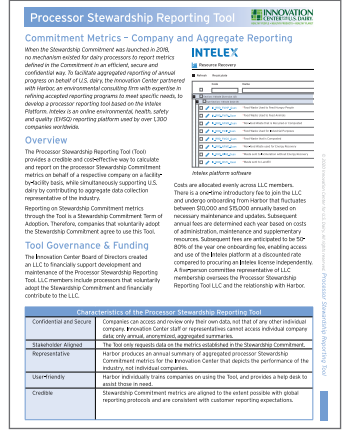
The Processor Working Group hopes to develop and release additional industry guidance documents focused on other relevant topics to support dairy processors on their sustainability journeys.



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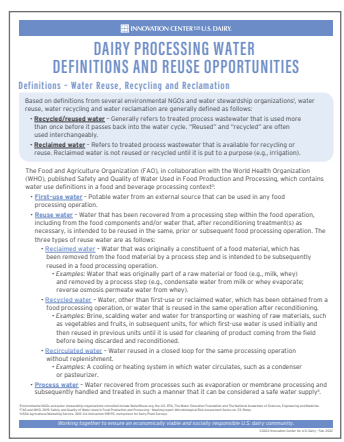
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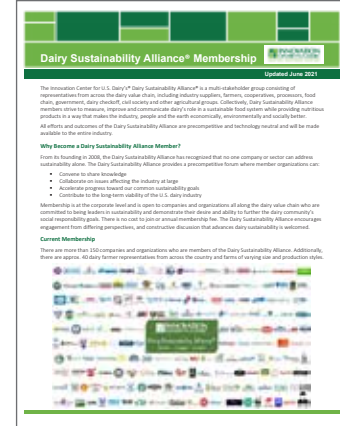
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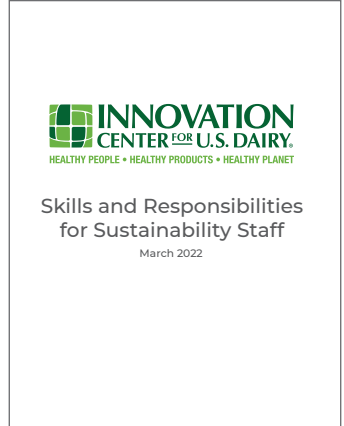
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The Plan



Setting Goals and Measuring Progress

Resources for Setting and Reporting GHG Goals

The Science Based Targets Initiative's (SBTi) target setting methodology is the most credible and accepted GHG reduction goal setting methodology available. SBTi also has [methodology on setting net-zero GHG reduction targets](#), and is in the process of developing a [forestry, land and agriculture \(FLAG\) sector specific standard](#).

Companies must establish a GHG baseline – a complete accounting of the sources and quantity of GHG emissions in a given year – as a benchmark to accurately measure progress against a GHG reduction goal. The reliability of this initial baseline is critical to future reporting and business relationships.

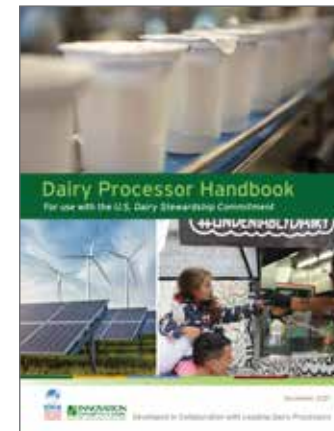
GHG emissions are categorized into different scopes:

- [Scope 1](#)
- [Scope 2](#)
- [Scope 3](#)

The scopes correlate to who “owns” those emissions and the level of control applicable to changing those emission levels at each stage. Accepted GHG accounting standards, such as the GHG Protocol, differentiate between a Scope 1 and 2 baseline, and a Scope 3 baseline. However, the combination of these two baselines together comprises a company's complete GHG emissions baseline.

Information on how to establish and measure a Scope 1 and 2 baseline and track emissions over time can be found in Chapter 5 of the [GHG Protocol Corporate Standard](#). Information on how to establish and measure a scope 3 baseline and track emissions over time can be found in Chapter 9 of the [GHG Protocol Corporate Value Chain \(Scope 3\) Standard](#). Specific guidance for dairy cooperatives and processors is provided in the Innovation Center's [Scope 1 and 2 GHG Inventory Guidance](#), and [Scope 3 GHG Inventory Guidance](#).

The largest source of GHG emissions in the dairy supply chain is the dairy farm itself. For cooperatives and processors, this is a source of a majority of Scope 3 emissions – specifically, Scope 3: Purchased Goods and Services. The FARM Environmental Stewardship Program (ES), managed by the National Milk Producers Federation, is an on-farm evaluation that collects relevant information through a limited set of questions to generate a scientifically robust estimate of a farm's GHG emissions. This on-farm GHG estimate provides a credible and streamlined method for cooperatives and processors to quantify Scope 3: Purchased Goods and Services emissions from their supplier farms. More information can be found on page 5 and 13 of the [Scope 3 GHG Inventory Guidance](#).



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Setting Goals and Measuring Progress

On-Farm Sustainability Goals and Practices

There are different tools available to help assess on-farm environmental impact. U.S. dairy has developed [The Farmers Assuring Responsible Management \(FARM\) Environmental Stewardship \(ES\)](#) program to evaluate and communicate a dairy farm's environmental achievements in a secure, confidential platform. The online tool combined with the program's resources assist with setting a path for continuous improvement in ways that make business sense. Today, FARM ES focuses on greenhouse gas (GHG) emissions, energy use and Nutrient Management Plans.¹

Practice Adoption:

On-farm changes require technical support, financial support, information support and social considerations. Every farm faces unique opportunities and challenges, so local experts can help assess risks and potential.

- The [Considerations and Resources](#) document is a good starting point.
- [Farmers for Sustainable Food](#) provides a framework to set up your own project.
- Resources, experts and technical services to help farms reduce their environmental footprint in the most economically viable ways are available from [Newtrient](#).
- The [Newtrient Solutions Catalog](#) provides all dairy farmers with evaluations of technology solutions that generate energy, manage manure, capture nutrients and deliver ecosystem services to meet their farm's unique needs and business goals.

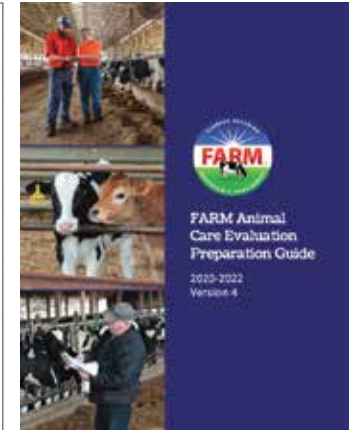
The [U.S. Dairy Net Zero Initiative](#) is an industrywide on-farm effort focusing on foundational research, on-farm pilots and development of new product markets. It provides partnership opportunities to sponsor and participate in leading-edge research. To learn more, contact Jennifer Block at Stewardship.Commitment@dairy.org.

Processors and dairy cooperatives can access extensive resources and dairy animal welfare management guidelines in [The Farmers Assuring Responsible Management \(FARM\) Animal Care Program](#). This program helps to demonstrate dairy farmers' commitment to providing excellent care of their dairy cattle and producing safe, wholesome milk.

¹The Innovation Center for U.S. Dairy and National Milk Producers Federation are collaborating to update the greenhouse gas (GHG) model that powers FARM ES. Through this upgrade, FARM ES will be positioned to better support the dairy community's efforts to measure and achieve its 2050 environmental stewardship goals, including to become GHG neutral or better.



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Dairy Community



The U.S. Dairy Stewardship Commitment Advantage

The [U.S. Dairy Stewardship Commitment](#) provides a voluntary platform to define and exhibit sustainability progress and build confidence among our customers and constituents.

The Commitment:

- Expands business development opportunities in the global marketplace
- Simplifies measurement and reporting by reducing demands of multiple and overlapping external surveys
- Saves time and money by jointly developing protocols, tools and metrics
- Validates the combined work of U.S. dairy farmers, cooperatives and companies

Progress against our collective goals is summarized in the [2020 U.S. Dairy Sustainability Report](#).

Commitment Resources

Social responsibility is larger than any single organization or sector of the supply chain. 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 are encouraged to contribute and support this effort.

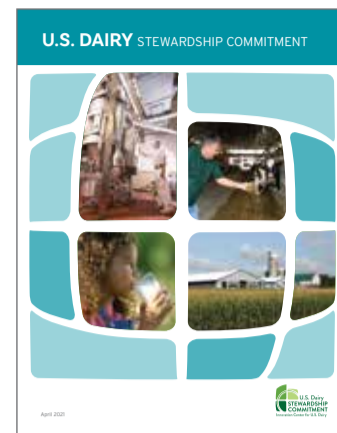
- [Overview](#)
- [Terms of Adoption](#)
- [Frequently Asked Questions](#)
- [Stewardship Commitment Resources Brief](#)



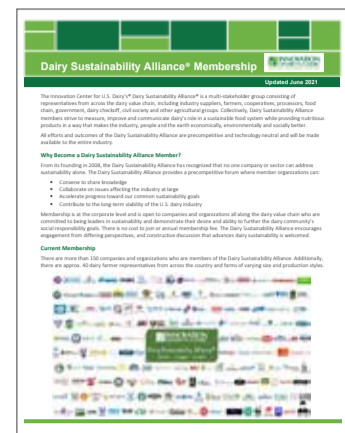
Making Industry Connections

Since 2008, the U.S. dairy community – dairy farmers, companies and key stakeholders – has worked together pre-competitively to advance a shared social responsibility platform. Numerous working groups and programs are available to assist dairy companies at all stages of their sustainability journey. To learn more, contact Jennifer Block at Stewardship.Commitment@dairy.org.

- [Dairy Sustainability Alliance®](#): A multi-stakeholder group of more than 165 member organizations Members convene to collaborate on issues affecting the industry at large, accelerate progress toward common sustainability goals and contribute to the long-term viability of the U.S. dairy industry.
- [The National Dairy Farmers Assuring Responsible Management \(FARM\) Program](#): Has established a rigorous framework of best practices to show customers and consumers that the dairy industry holds itself to the highest standards. The program has four silos: [Animal Care](#); [Environmental Stewardship](#); [Antibiotic Stewardship](#); and [Workforce Development](#).
- [Processor Working Group](#): More than 50 participants representing more than 25 processing organizations, this group is engaged in facility-focused workstreams for waste, water, packaging and greenhouse gas emissions to drive action and demonstrate progress toward the goals.
- [Dairy Stewardship Commitment](#): Adopters of the U.S. Dairy Stewardship Commitment represent nearly 3/4 of U.S. milk production. These 34 cooperatives and processors have taken the voluntary pledge to demonstrate positive impacts in environmental sustainability, animal welfare, community contributions and food safety.
- [U.S. Dairy Net Zero Initiative \(NZI\)](#): NZI is a collaboration of dairy organizations to advance research, on-farm pilots and new market development to make sustainability practices more accessible and affordable to farms of all sizes – an essential first phase to accelerate progress toward the 2050 goals.
- [Traceability](#): Is the ability to track a product through all stages of production, processing and distribution. The [U.S. Dairy Traceability Guidance](#) focuses on product flows, labeling, recordkeeping, data collection and other protocols from the plant to the supply chain to end-product manufacturers. This guidance document and checklist contains information needed to implement traceability standards at your company.
- [IDFA People First](#): IDFA's [People Strategy](#) focuses on ensuring dairy companies have the knowledge, tools and talent to succeed in a more competitive, diverse and inclusive future.



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JOIN

The U.S. Dairy Stewardship Commitment

[CLICK HERE to learn more](#)

COMMITMENT ADOPTER HIGHLIGHTS*

75%
OF U.S. MILK
PRODUCTION
REPRESENTED

100%
COMMITTED TO
ENVIRONMENTAL
MEASUREMENT
AND REPORTING

100%
PARTICIPATE
AND/OR
SOURCE FROM
FARM
ANIMAL CARE
ENROLLED FARMS

>95% OF
WASTE
FROM PROCESSORS
DIVERTED TO
BENEFICIAL REUSE

COMMUNITY CONTRIBUTIONS
12.7 MILLION
POUNDS
OF PRODUCT DONATED

PROCESSORS
**RETURN MORE WATER
THAN THEY WITHDRAW**



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