



The “How To” Guide for
**Resilient
Dairy Supply
Chains**



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A. How To: Identify the Major Impacts Within a Dairy Supply Chain

Assessing Your Footprint and Hot Spots

Assessing your footprint provides an opportunity to identify the biggest sources of emissions in your supply chain. Knowing and ranking the hot spots in your supply chain helps you understand where you can make the biggest impact, which opportunities are most cost-effective and which stakeholders are most important for you to engage to achieve your goals. You can continue to prioritize your impacts as you learn more from your stakeholders.

The first step to consider is mapping your company's supply chain using supplier surveys to understand current management practices. Supplier surveys will help identify which initiatives will deliver the most significant environmental and emissions reductions impact in a specific company's operational supply chain. In less integrated animal supply chains, purchasing records may need to be examined to locate sources and general locations of animals upstream of direct suppliers.





B. How To: Address On-farm Impacts from Dairy

Crop Production Management

Identify Partners

- Encourage key suppliers to work with you on feed grain opportunities.
- Identify local trusted agricultural advisers and programs that can support implementation.

Evaluate Management

- Develop or identify existing data collection methods — including Excel, ag tech software platforms or other tools such as Field to Market, which can be used to establish baseline conditions and support ongoing measurement of improvements.
- Identify opportunities and best practices to improve crop management.
- Set goal(s) for implementation of best practices.

Support Implementation

- Work with local implementation partners to collect data annually.

- Work with local trusted advisers and crop consultants to implement best practices.
- Support farmer transitions through cost sharing, extended contracts or other means.
- Support peer-to-peer learnings and localized farmer networks.

Evaluate and Report Impact

- Review data annually to find opportunities to refine your initiatives to improve crop management and reduce the environmental impacts of growing row crops.





B. How To: Address On-farm Impacts from Dairy

Manure Management

Identify Partners

- Identify key sourcing regions where manure is produced.
- Engage farmers, suppliers and others in the region to determine baseline management practices through surveys or meetings with farmer groups.

Evaluate Management

- Work with suppliers to utilize the baseline information on manure management practices to develop improvement plans.
- Set goal(s) for implementation of best practices.
- Develop or identify data collection methods with which to continue to assess management and encourage best practices.

Support Implementation

- Support farmer transitions to improved manure management systems.
- Support research and pilot programs.
- Examples of good practices include:
 - Composting
 - Solids separation
 - Aerobic treatment
 - Covered anaerobic lagoon
 - Anaerobic digester
 - Developing and implementing a manure nutrient management plan

Evaluate and Report Impact

- Review data annually to assess progress.
- Look for opportunities to refine and improve your manure management and reduce environmental impacts.



B. How To: Address On-farm Impacts from Dairy

Enteric Emissions Management

Identify Partners

- Identify sourcing regions for your supply chain.
- Engage farmers, suppliers and others in the supply chain region to identify potential local partners.
- Benchmark enteric emissions practices in your key sourcing regions.



Evaluate Opportunities for Innovation

- Partner with others to spur research and new technology development that can reduce enteric emissions.

Pilot Innovation

- Pilot new approaches in supply chains to see how they work and collect information on performance.
- Examples of innovation:
 - Feed Additives
 - The ZELP mask
 - Genetics
 - Vaccines

Evaluate and Report Impact

- Review data to assess the impact of pilots and find opportunities to scale the best innovations to improve enteric methane management and reduce environmental impacts.



C. How To: Set a Goal and Report Improvements

Goal Setting

- i. Determine the scope, timeline and type of goal that makes sense for your company and products. For food and agriculture companies, the majority of your emissions are Scope 3 so it is essential that you set a Scope 3 goal. It is important when setting a goal that you set a SMART (Specific, Measurable, Achievable, Relevant & Time based) goal, so you can objectively evaluate if you have reached the goal or not.
- ii. There are a variety of tools that you can use to quickly estimate the potential value of goals for your company. Look at what others in your sector are doing for additional insights into how other companies think about goal setting and their implementation plans. While your goal should reflect the maturity of your company's sustainability program and can take many forms and timelines, we encourage you to aim for an ambitious Science Based Target (SBTi).





C. How To: Set a Goal and Report Improvements

Goal Setting Resources

Frameworks, Tools & Case Studies

[Carbon Productivity Portfolio](#)

[Carbon Target and Profit Calculator](#)

[Science Based Target Methods](#)

[Science Based Targets \(SBTi\) Manual](#)

[Case Studies](#)

Climate Disclosure

[WRI GHG Protocol Corporate Standard](#)

[CDP](#)

[EPA Center for Corporate Climate Leadership](#)

Strategy

[WWF](#)

[Climate Corps™](#)

[EDF Supply Chain Solutions Center](#)

Policy

[We Mean Business](#)

[Low Carbon USA](#)

Video Primers

[3% Solution](#)

[Low Carbon Lesson](#)

[Science Based Targets](#)

[Setting a SMART goal video](#)





C. How To: Set a Goal and Report Improvements

Reporting Progress

You should report annually on the progress you are making towards the goals you've set. Reporting your sustainability efforts ensures that your company receives credit for actions taken. It is important to not only share wins but also any challenges that might have impacted your activities. Sharing challenges is an opportunity to help industry wide efforts to scale solutions that work.

- Guidance from sources such as [GRI Reporting](#), [GHG Protocol](#), [FARM ES](#) and the [SAI Platform](#) can be used to create annual sustainability reports to share progress towards your goals using commonly accepted guidance for how to measure, manage and report emissions.
- Some companies also see value in participating in reporting disclosure programs such as [CDP](#), [The Dow Jones Sustainability Indices](#) or [Coller FAIRR Protein Producer Index](#). These rankings allow companies to disclose their progress to investors and customers,

get credit for the progress they are making to reduce their greenhouse gas emissions and be ranked and compared to their industry peers.

- Increasingly more companies are being asked by their customers to complete surveys on their environmental performance. As companies gather data for their own sustainability reports and to participate in reporting disclosure programs, companies should craft their data gathering and reporting strategy in a way that will allow them to efficiently participate in customer programs and be [rewarded](#) for their participation.



D. Industry Resources

Resources

[The Guidebook for Resilient Animal Agriculture](#)

[Field to Market](#)

[Innovation Center for U.S. Dairy](#)

[Midwest Row Crop Collaborative](#)

[Natural Resources Conservation Service](#)

[The Global Dairy Platform](#)

State level resources may also be available — check with your state level Department of Agriculture, Environmental Protection Agencies or ag-extensions at local universities.





E. Acknowledgments

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