

Addressing Additionality in Inset Programs

A Follow-Up to [Additionality Considerations for Food Companies](#)



Photo Credit: National Milk Producers Federation

Introduction

As food companies scale their decarbonization programs, they have increasingly confronted the need to address the additionality principles of their value-chain inset programs. As discussed in our previous paper, *Additionality Considerations for Food Companies*, while offset programs have defined industry standards for assessing additionality in carbon projects, current guidance for inset programs provide meaningful flexibility for corporations to determine their own additionality requirements. Still, it is critical that food companies address additionality in their inset programs to inspire confidence that their decarbonization claims are credible.

The carbon inset ecosystem is rapidly changing, and market development will resolve some of the ambiguity food companies face when addressing additionality in programs. In the meantime, food companies can advance their decarbonization capabilities while fostering the development of a credible inset ecosystem by applying a data-driven program design framework. This paper will cover four related topics:

- Perspectives on how food companies navigate ambiguity in additionality guidance for inset programs
- Reconciling differences between inventory and project-based accounting
- Assessing additionality in existing project baseline procedures today
- Areas where food companies can engage in industry-wide solutions to strengthen the inset ecosystem

How Corporations Navigate Ambiguity in Additionality Guidance for Inset Programs

While offset protocols provide clear and often project-specific guidance on project additionality testing and baseline procedures, the Greenhouse Gas Protocol provides flexibility in how corporations assess additionality in value chain projects. While this flexibility is practical given the different circumstances projects may occur under, it may lead to situations where project developers mis-estimate project impacts. Cases of underestimation often imply higher project costs and risks for disclosures. Meanwhile, cases of overestimation can lead to public scrutiny and expose a company to reputational and assurance risk.

As a result, companies will need to determine their internal approaches to additionality rigor, and there are benefits and risks to higher or lower stringency for additionality rigor. [See Figure 1.](#)

Figure 1: Benefits and Risks of Taking Different Approaches to Additionality Rigor

Faster, Lower Rigor Approaches	Slower, Higher Rigor Approaches
Benefits	Benefits
<ul style="list-style-type: none">• Maximize progress towards climate claims• Enable faster project deployment and development of learnings and supporting infrastructure (e.g., internal procedures and policies, tech platforms)• Strengthen supplier relationships and accelerate on-farm know-how	<ul style="list-style-type: none">• Minimize risks of greenwashing claims• Delays action until other industry actors (e.g., standards setting bodies, first movers) clarify best practices and optimize project economics
Risks	Risks
<ul style="list-style-type: none">• Public scrutiny and reputational risks• Need to reconcile with future changes in regulation• Potential reversals to GHG inventory	<ul style="list-style-type: none">• Potential to fall short of public commitments and future regulation, given uncertainty of how fast market and internal capabilities will develop• Miss out on the opportunity to work with the most advanced producer groups• Potential to miss out on lowest cost reduction and removal opportunities

Overall, the approach any given company will take must align with several internal parties:

- **Legal and compliance:** manage risk exposure, develop contract agreements for transition financing and emissions allocation, and determine brand claims.
- **Procurement:** align commercial terms to sustainability outcomes, manage supplier relations and supply resilience, present a strong investment case to financial officers.
- **ESG:** interpret GHG regulations and scientific literature, define data and monitoring, reporting, and verification (MRV) requirements, manage inventory accounting and supplier data.
- **Marketing / public affairs teams:** identify positive press and collaboration opportunities and communicate public targets.
- **Sustainability:** deploy scalable and impactful programs within supply chains that make progress toward climate commitments.

Advancing carbon inset capabilities will require cross-functional alignment to balance interests and manage the needs of external stakeholders (e.g. suppliers, buyers, regulators, investors, NGOs, and financial institutions).



Reconciling Differences Between Inventory and Project-Based Accounting

Today, food companies typically manage two separate emissions accounting systems to measure reductions:

- **Inventory accounting** refers to how a company measures its entire emissions footprint. In this framework, reduction claims are based on prior year emissions minus a baseline year emissions value.
- **Project-based accounting** refers to how a company measures the emissions reduction impact of specific projects and interventions against a project baseline established using primary data. Here, claims are based on the quantified impact of projects.

Food companies face additionality and double-counting risk when making claims about the impact of inset projects, due to underdeveloped interoperability of these two data systems. Today, food companies may not know the on-farm practice assumptions inherent to the industry emissions values used in inventory accounting. Therefore, it can be difficult for food companies to determine whether inset projects are meaningfully additional to their baseline without knowing practice adoption rates in their value chains.

Given these dynamics, integration of these two data systems is necessary to ensure that project-based reductions are appropriately captured in inventory reduction claims. This can be achieved by capturing high-quality, supplier-level data that feeds into both inventory and project-based systems.

Photo Credit: National Milk Producers Federation

The opacity of complex food supply chains, where goods pass through multiple intermediaries for many finished goods, continues to cause data integrity challenges for food companies. Thus, food companies will need to focus on their data infrastructure and supplier relationships to establish a scalable and accurate inventory accounting system capable of intaking project data.

Assessing Additionality in Existing Baseline Procedures Today

While the standards for additionality within inset programs continue to evolve, food companies will work with their value chain today to improve project baseline procedures.

A project baseline represents the most likely emissions outcome absent a project or intervention. Quantification of project impact results from a comparison of measured or estimated project outcomes against the project baseline. Baseline methodology is critical – the assumptions and calculations included in the process will define the accuracy of the project's desired outcomes. In offset markets, project baseline procedures have been an area of public scrutiny. For example, concerns about baseline methodology in forestry projects have significantly lowered demand for forestry credits.

Under the Greenhouse Gas Protocol Project Protocol, project developers are provided flexibility in how they establish project baselines. [See Figure 2.](#)

Given the breadth of inset programs, with different kinds of project types and levels of data availability, the level of flexibility project developers are afforded is practical. Even when implementing programs with a single actor in a supply chain, different choices in baseline procedures may be appropriate.

For example, imagine running both a feed cropping intervention and a manure management intervention with a single dairy farm. When setting a geographic boundary for comparable farms for the feed cropping intervention, an appropriate boundary could be the sourcing range for the feed, such as a reasonable driving distance. This matters because the feed grown within the local radius might have a higher or lower footprint than the national average due to a variety of factors (e.g. healthier soil, irrigation needs, etc.). Meanwhile, when setting a geographic boundary for comparable farms for the manure project, it might be more appropriate to set a different regional boundary that focuses on including farms of a similar scale (e.g., farms with 300 to 1,500 cows), since farm scale impacts manure volume. Drawing different geographic boundaries, even for projects with this single supplier, may be appropriate to ensure emissions sources are comparable.

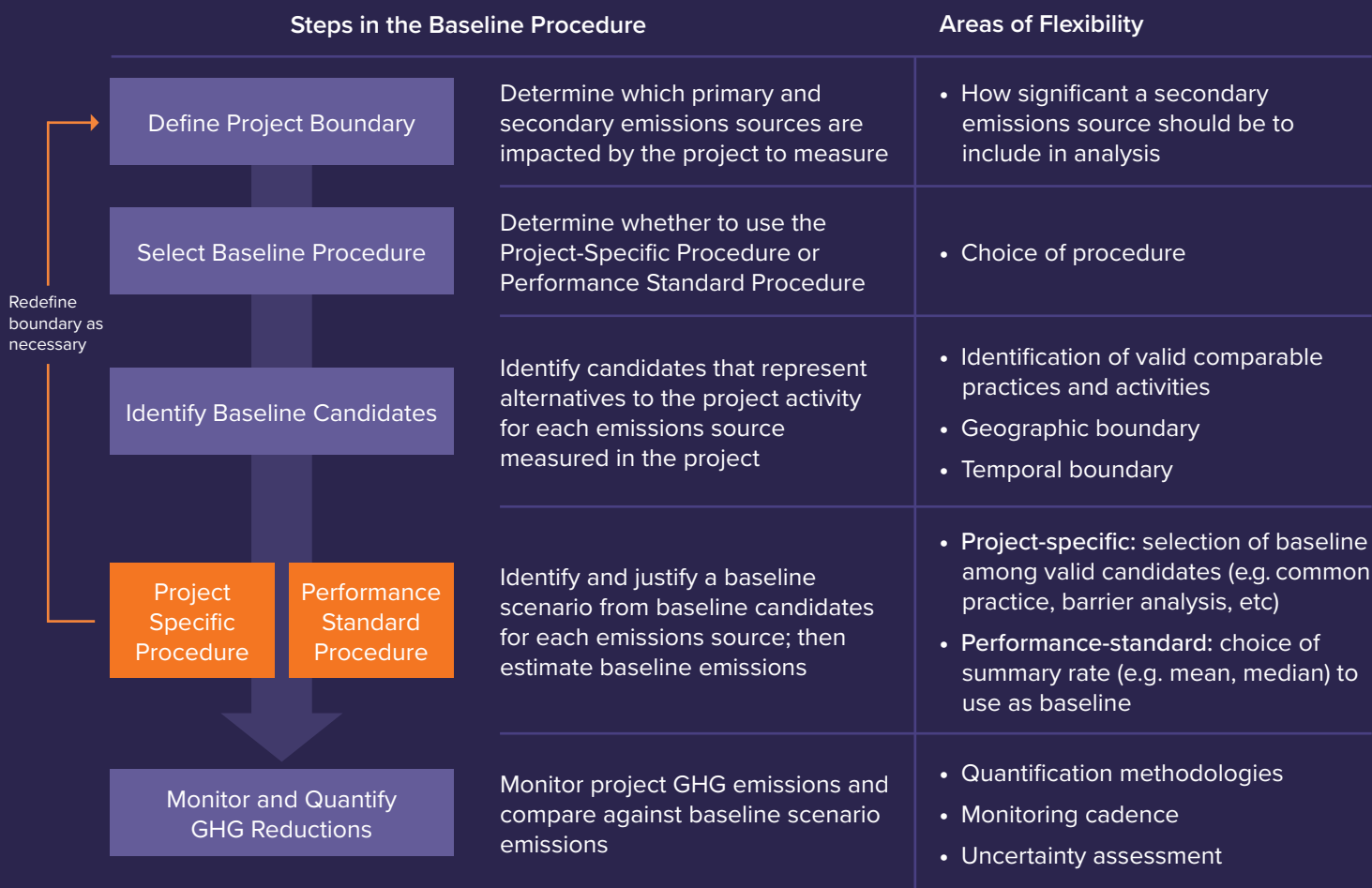
Until industry groups align on project-level best practices, food companies will need to pressure test the baseline procedures of their own project development teams and third-party developers.

Areas Where Food Companies Can Engage in Industry-Wide Solutions to Strengthen the Inset Ecosystem

To strengthen the broader decarbonization ecosystem, food companies should consider advocacy and investment approaches beyond their own internal policies and programs. Industry-wide efforts and targeted supply chain engagement will improve confidence in inset methodology, ultimately de-risking the investment and improving the value proposition to farmers and suppliers.

Figure 2: Steps for Accounting and Reporting GHG Reductions from a GHG Project

Source: The GHG Protocol for Project Accounting



Data quality and architecture is a major opportunity for enhancement. Improved models and transparency about the methodology for GHG quantification would improve the consistency of outputs. These developments can increase confidence that project-based accounting data has appropriate rigor, thereby enabling easier integration with inventory accounting systems and clarifying return on investment for decarbonization funds. Program design variability in the current market, however, poses challenges both to addressing project additionality as well as scaling investment to drive GHG outcomes.

The primary data landscape is rapidly changing in ways that may resolve these concerns. There are efforts underway to release higher quality public data sets to support the development of inset programs, and reduce uncertainty within quantification models. Specifically, the U.S. dairy industry partnered with the Ruminant Farm Systems (RuFaS) model to improve the capability of farmers, suppliers, and the U.S. dairy industry at large to more precisely understand practice adoption rates across enteric, manure, feed and energy footprints of U.S. dairy farms. This enables dairy cooperatives and processors to produce more accurate and detailed emissions factors that downstream buyers can integrate into inventory accounting systems.

Standardization of project methods and establishment of industry-specific and project-specific protocols will strengthen confidence in inset programs. Given that the Greenhouse Gas Protocol provides flexibility on additionality and baseline procedures, a variety of custom strategies exist in the market. This leads to a complex ecosystem that lacks consistency and predictability for assessing practice adoption. As a result, a significant portion of project investments are directed to baselining and MRV procedures, which diminish the funding reaching farms to make changes necessary to reduce GHG emissions.

For auditors and regulatory bodies, standard methodologies will clarify audit processes and enable comparability across programs. Improved consistency and predictability in baseline and additionality assessment procedures will also de-risk the opportunity for food companies, project implementers (e.g., farmers in food value chains), and project developers alike.

Charting a Path Through the Ambiguity in Inset Guidance

Overall, in the current state, the Greenhouse Gas Protocol provides flexibility in how food companies and project developers approach carbon project integrity principles such as additionality. Additionally, without integrating inventory and project-based emissions accounting systems, it may be difficult to recognize reduction projects in inventory reporting. These challenges, however, should not deter corporations from engaging in programs.

Given the pressing need for decarbonization across sectors, taking no action risks falling short of public commitments. Delaying action may also diminish supplier relationships or risk suppliers falling behind on best practices. Most critically, however, underinvestment in supply

chain decarbonization will worsen the global climate crisis, causing near-term impacts on supply resilience and long-term impacts of a warming planet.

Decarbonization will require a variety of improvements to existing programs, specifically:

- **Primary data** – enhancing the business case for high-quality, primary farm data is a necessary first step for accounting system integration.
- **Carbon accounting infrastructure** – improved data architecture facilitates integration of inventory and project-based accounting data.
- **Program contracts** – clear, effective, and standardized terms that specify requirements for primary data, baseline procedures, quantification models, and disclosures strengthen program integrity.
- **Co-financing partnerships** – standardized, high-integrity accounting systems allow for co-claiming of reductions across diverse investors, ultimately improving program GHG outcomes and return on investment.

The investments necessary to address additionality require partnership across the supply chain, cross functional collaboration with internal teams, and trial and error over multiple years. While evolutions across policy, data infrastructure, and decarbonization programs are inevitable, players engaging in programs will be best positioned to influence the inset ecosystem and adapt. Therefore, companies that recognize sustainability as a source of strategic advantage are deploying programs to ensure their supply chains are set up for success.



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