

An introduction to

MiLCA

Protocol for including
Mitigation actions in
Agricultural Lifecycle Analysis

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MiLCA



Protocol for including
Mitigation actions in
Agricultural Lifecycle Assessment

Why MiLCA?

- Dairy companies daily have new ‘products’ offered to them to solve the GHG challenge
- Many pilots are underway – evaluating with farmers
- **But:** dairy sector currently lacks confidence in many of these products and is concerned about incorrectly reporting GHG reductions
- Dairy sector based on previous collaborative work wanted to develop a consistent and science-based approach

What MiLCA provides

- **A checklist of what is acceptable to consider**
- **A clear (science) guideline for new product development – aligned with GRA developments**
- **Recognition of the importance of high-quality data to maximize reportable mitigation**

Four principles included in the MiLCA protocol

- Technologies should be **safe**
- Technologies should be **effective**
- Claims should be **conservative**
- Data should be **appropriate**

Technologies should be safe

Written evidence documenting

- Regulatory approval
 - Must be able to legally use the technology in the system
- Environmental impacts
 - ISO 14044 compliant LCA
 - Range of environmental indicators
- Impacts to the farming system
 - Animal health
 - Product quality

Environmental management — Life cycle assessment — Requirements and guidelines

Management environnemental — Analyse du cycle de vie — Exigences et lignes directrices

Technologies should be effective

Scientific evidence to provide confidence in efficacy

- Demonstrated repeatable reductions
 - One peer-reviewed meta-analysis or;
 - Minimum of 3 peer-reviewed scientific studies or;
 - A methodology from a Carbon Crediting Scheme



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A meta-analysis of effects of 3-nitrooxypropanol on methane production, yield, and intensity in dairy cattle

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Claims should be conservative

A conservative claim is responsible

- Avoids over-crediting
- Key principle in multiple existing global carbon credit frameworks
- Conservativeness is also a principle of
 - UNFCCC Clean Development Mechanism
 - Article 6.4 of the Paris Agreement
 - Draft GHG Protocol Land Sector and Removals Guidance

VERIFIED CARBON STANDARD > VCS QUALITY ASSURANCE PRIN...

VCS QUALITY ASSURANCE PRINCIPLES

Gold Standard



Restricted



Data should be appropriate

Poor quality farm data reduces confidence – discounting approach

- Data quality categories
 - Reliability (*e.g.* directly measured, estimated)
 - Completeness (*e.g.* from system being assessed, alternative system)
 - Temporal correlation (*e.g.* data < 1 years, data 3 < 6 years)
 - Geographical correlation (*e.g.* farm, region)
- No discount for highest quality data
- Discounts for poor quality farm data – incentivise data collection