LCA Best Practice Guidance

Helping GOED create guidance and best practices for LCAs in the Omega-3 industry

LRQA Advisory

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Background for this proposal

What is an LCA

A methodology for assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service

GOED's Challenge and Ask

- Several GOED members have conducted LCAs but have not published the results due to marketing considerations
- GOED seeks a consultant to create a standardized LCA framework for the Omega-3 industry
- GOED has invited LRQA to assist in developing this guidance document and to pilot it with select member companies

Benefits to a standardized LCA

- **Environmental Impact:** Identifies hotspots to reduce emissions, energy use, and waste
- **Resource Efficiency:** Optimizes materials, energy, and waste management
- **Sustainable Design:** Supports renewable, efficient, and recyclable product development
- **Supply Chain:** Improves sustainability and collaboration with suppliers
- **CSR & Reporting:** Demonstrates transparency and builds trust with stakeholders
- **Compliance & Risk:** Ensures regulatory alignment and mitigates risks
- **Performance & Investment:** Provides benchmarks and data for informed decisions
- **Industry Collaboration:** Drives collective progress on climate goals

Introducing LRQA

Key Facts

5,000+
technical experts

60,000+
clients globally

Operating in
150+
countries

75m+
data points collected In EiQ

LRQA is a leading global **assurance partner,** bringing together decades of unrivalled expertise in **assessment, advisory, inspection and cybersecurity services** – underpinned by data-driven insights – to help its clients navigate a **new era of risk.**

Operating in more than **160 countries** with a team of more than **6,000 people**, LRQA's award-winning **compliance, supply chain, cybersecurity and ESG specialists** help more than 61,000 clients across almost every industry to **anticipate, mitigate and manage risk** wherever they operate.

- Assure assets and management systems
- Strengthen cybersecurity maturity
- Achieve product integrity
- Navigate the energy transition and achieve net zero
- Source responsibly

Project Plan

Optional

Step 1: Understand the Landscape and Align on Direction

Objective: Build a shared understanding of current LCA practices and align on what the industry needs from a common approach

Activities

1. Align on purpose, success criteria, and key stakeholders
2. Interview early adopters to gather lessons learned and appetite for collaboration
3. Map sustainability maturity across Omega-3 product types (fish, algae, etc.)
4. Review a sample of existing LCAs to highlight gaps and opportunities

Deliverable: Insights summary on industry baseline, member needs, and key inputs for a shared LCA approach

Step 2: Develop a High-Level LCA Framework

Objective: Provide a standardized, effective LCA methodology and best practices

Activities

1. Define preliminary LCA boundaries, impact areas, and key principles
2. Reflect diversity across Omega-3 sources while maintaining comparability
3. Ensure flexibility for future refinement

Deliverable: High-level LCA framework to guide future alignment and validation efforts

Step 3: Build Out Detailed Methodology & Tools

Objective: Translate the framework into practical tools, training, and implementation guidance

Activities

1. Develop case studies and process templates
2. Provide tools to support rollout and capacity building
3. Recommend monitoring and improvement mechanisms

Deliverable: Comprehensive guidance package for members to apply the LCA in practice

Step 1: Understand the Landscape and Align on Direction

Goal

- Build a shared understanding of current LCA practices and align on what the industry needs from a common approach

Key Activities

1. **Kickoff with GOED:** Confirm goals, scope, and member engagement, identify stakeholders (e.g., producers, suppliers)
2. **Interview early adopters:** Gather lessons learned, key challenges such as methodology and data uncertainty, and member willingness to collaborate
3. **Map current practices and value chains:** Assess maturity across Omega-3 types (e.g., fish, algae, seed/vegetable oil) and to better understand regional or operational variability
4. **Review existing LCAs:** Evaluate methodological differences and transparency levels, and data uncertainty. Review hotspots and discuss environmental impact categories applicable to the industry
5. **Identify enablers and barriers:** Pinpoint conditions for broader adoption of a shared approach, e.g., regulatory requirements or consumer awareness

Deliverable

- Insights summary covering industry baseline, key challenges, and design decision inputs for an LCA methodology including but not limited to system boundaries and life cycle stages across Omega 3 production routes, functional unit, geographical and temporal scope, types of impacts considered, co-product allocation rules, and data quality requirements

GOED and Member Input

- Support in identifying relevant GOED members to participate in interviews
- Share insights and documentations from available LCAs and previous sustainability studies

Step 2: Develop a High-Level LCA Framework

Goal

- Provide a standardized, effective LCA methodology and best practices

Key Activities

1. **Define core elements:** Outline LCA boundaries, impact areas, standardized functional unit(s), allocation guidelines when there are co-products (e.g., fishmeal), and data quality expectations across the supply chain
2. **Ensure cross-product relevance:** Reflect differences across Omega-3 sources while maintaining comparability
3. **Establish guiding principles:** Align with ISO standards (14040, 14044 and 14067) and practical industry needs
4. **Facilitate validation:** Host working sessions to gather feedback from GOED members
5. **Document open questions:** Capture areas for refinement in future phases

Deliverable

- Draft LCA framework summarizing design principles and guidance for future development and alignment on LCA practices across the Omega 3 sector allowing fair comparability across pathways and operations

GOED and Member Input

- Review, validate proposed framework, and provide feedback for the methodology

Step 3: Build Out Detailed Methodology & Tools *(Optional)*

Goal

- Translate the framework into practical tools, training, and detailed implementation guidance

Key Activities

1. **Develop case studies:** Highlight high-quality LCAs across product categories
2. **Create templates and tools:** Standardize data collection and impact assessment
3. **Draft implementation guidance:** Define clear steps and team roles
4. **Design monitoring mechanisms:** Support continuous improvement across members
5. **Explore recognition pathways:** Optional alignment with certification or best practice labeling

Deliverable

- Comprehensive LCA guidance package, including tools, training, and optional certification support

GOED and Member Input

- Identify members to pilot guidance
- Share feedback on rollout support needs and certification expectations