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COLLECTIVE ACTION TO ADDRESS GHG EMISSIONS IN SEAFOOD – STANDARDS, TOOL AND MANUAL

Erik Skontorp Hognes, SINTEF Fisheries and aquaculture.*

** SINTEF Fisheries and aquaculture, PB 4762 Sluppen, 7465 TRONDHEIM.*

Tel.: +47 40 22 55 77, E-mail: erik.hognes@sintef.no

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ABSTRACT

By providing means to make LCA based GHG assessments a more operative and applicable tool for the seafood industry the cooperation framework "Collective action to address GHG emissions in seafood" wish to help reduce the energy use and GHG emissions from food production. During the previous year two new standards for carbon footprint of seafood products have been developed to provide fair and transparent reporting on the carbon footprint of a seafood product. In addition a web based tool for carbon footprint of wild caught seafood products and a manual for GHG assessment of seafood products are under development.

INTRODUCTION

Seafood is a climate friendly food commodity compared to other meat sources such as poultry and red meat (Hognes, Ziegler, & Sund, 2011; Winther et al., 2009; Ziegler et al., 2012). Still the seafood industry wants to further reduce their energy use and climate impact (Ellingsen, 2004) and as a part of the focus on sustainable food production, and methods to report on the sustainability of food products, the seafood industry, retailers, consumers, governmental bodies, NGOs and researchers have asked for standards and tools for carbon foot printing of seafood products. A global cooperation named "Collective action to address GHG emissions in seafood"¹ has participated in the preparation of two standards for carbon foot printing of seafood products and is now developing a web based tool for carbon footprint of wild caught seafood products² and a manual for greenhouse gas assessment of seafood products.

Important aims of this work are to:

¹ More information on this project framework here: www.seafish.org/media/sustainability/greenhouse-gas-emissions-in-seafood

² The current version of the tool can be studied here: www.seafish.tictocdesign.com/co2emissions/tool



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- Provide means and tools that can help to reduce climate impacts from food production by increasing the seafood decision maker's understanding of their climate impacts and their ability to use LCA as a tool in developing their products and business strategy.
- Make the use of carbon footprint (and LCA) more achievable: Standards and tools will make the required competence more available and with time expand and improve the availability of LCA data for the seafood industry.
- Secure fair and transparent carbon footprint documentation, that can be used in different forms of B2B and B2C communication, and that is accurate, repeatable and that can be audited.

Examples of emerging report methods that can include requests to report on the carbon footprint of food products are the "Sustainability consortium"³ that currently includes retailer and industry members representing a revenue of 1.5 trillion USD. Another example is the ENVIFOOD protocol developed by the "The European Food Sustainable Consumption and Production Round Table"⁴. Both of these examples use LCA as a fundament for their reporting methods.

DESCRIPTION OF WORK

Two different standards for carbon footprint of seafood products are developed: one by Standards Norway (SN, 2013) and one by British Standard Institute (BSI, 2012), the latter is a set of supplementary requirements and guidance specific to seafood products to be used in conjunction with PAS 2050. Both these standards have the goal of providing background for a future seafood specification of the coming ISO 14067 standard for carbon footprint of products. An important part of the standards development was to communicate with stakeholders in the seafood industry and to map and understand their needs and requirements; the BSI development had an international scope for their stakeholder input. Members of the collective action framework participated in the committees for both standards.

The web tool for GHG assessment of wild caught seafood products is developed to facilitate the use and understanding of the standards, and to let the seafood industry and their stakeholders explore the climate aspects of seafood. The tool is a development of the current "seafood GHG profiling tool" by Seafish and Dalhousie University and covers fuel and electricity consumption in fishing, processing and transport, - from fishing to retailer gate. In addition to energy commodities inputs and outputs such as packaging materials, fishing gear and refrigerants emissions are also covered. It also provides an optional screening of the potential importance of capital investments in the fishing vessel.

³ www.sustainabilityconsortium.org

⁴ More about the ENVIFOOD protocol here: www.food-scp.eu



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The GHG manual aims at making GHG assessment and LCA thinking more accessible and applicable for decision makers in the seafood industry. While standards provide clear rules for how a carbon footprint should be calculated, and tools can facilitate the calculations, neither of these is a good platform for thorough explanation and examples of how the practicalities of using GHG assessments within seafood production are solved. The main targeted audience will be the actor in the seafood industry that are well known with the seafood systems, but somewhat new to GHG assessments and LCA way of thinking, but wants to make these an operating part of their management system. As an example the manual will be of great value for seafood producers that wish to: 1) increase the quality of their environmental management system and reduce their energy use and GHG emissions and 2) prepare themselves for requests to report their carbon footprint to their clients, consumers, regulating bodies and NGOs. The manual will be produced as a compilation of contribution from seafood and LCA experts from all over the world and will be published as a web page.

RESULTS AND CONCLUSIONS

The British Standard is now published and the Norwegian Standard will be published during 2013. It is now interesting to study how the standards will be received by decision makers in the seafood value chain and others concerned. It is especially interesting to see how they will be used in B2B communication between retailers and seafood exporters/producers. The tool and the manual will be finished by 2013. After that the challenge will be to make both of them a living and updated resource for seafood producers, retailer and consumers that wish to achieve a more sustainable, energy efficient and climate friendly food production.

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