

ICVAQUA PROJECT: LIFE CYCLE INVENTORIES (LCI) IN THE SECTOR OF AQUATIC PRODUCTS IN THE HAUTS-DE-FRANCE REGION

Pierrette Ethuin¹, Julie Mancini², Thierry Grard¹, Jérôme Payet³

¹ Institut Charles Viollette (EA 7394), équipe Qualité et Sécurité des Aliments - site de Boulogne sur mer, unité Biochimie des Produits Aquatiques USC Anses / Université du Littoral Côte d'Opale, Boulogne-sur-Mer, France

² Pôle AQUIMER, Boulogne-sur-Mer, France

³ Cycleco, Ambérieu-en-Bugey, France

Contact: pierrette.ethuin@univ-littoral.fr

The FISH[avniR] study [1] in 2012 involved the practical implementation of the Life Cycle Assessment (LCA) in the aquatic products industries [2-3]. This study has demonstrated that the purpose of environmental labelling or/and eco-design was both limited by the lack of Life Cycle Inventories (LCIs) data and skills in research centers and universities in North of France (*Hauts-de-France* council). The ICVAQUA project aims to build up LCIs of aquatic products and some of their manufacturing processes. Carried out by the *Université du Littoral Côte d'Opale*, it gathers two more partners with complementary skills, Pôle AQUIMER (pole of competitiveness) and Cycleco (independent consulting office). Funding is provided by the *Hauts-de-France* council. ICVAQUA aims also to transfer knowledge and skills about LCA and LCI practices to the academic partner: the research unit « Biochimie des Produits Aquatiques », Institut Charles Viollette, ULCO. This project is linked with the research topics of this laboratory such as the aquatic products authentication evaluation (freshness, differentiation between fresh and frozen-thawed fish, halio-authentication...) and aquatic products microbiology (microflora, biofilm, additives...).

Several LCIs are planned in the study: farmed seabass (*Dicentrarchus labrax*) and gilthead seabream (*Sparus aurata*), different marine species from catch, processes such as salting, smoking, packing...

In order to acquire new expertise in LCA, the first year of the ICVAQUA project is dedicated to the training of the stakeholders (ULCO researcher and Pôle AQUIMER engineer) and to build up, according to the ILCD format, two LCIs of the marine species studied at the laboratory. Then, during the following two years, the other predefined LCIs will be realized.

The goal of this project is also to raise awareness of life cycle thinking among aquatic products companies in the *Hauts-de-France* region by involving them in a collaborative work of data collection and to prepare them to the environmental labelling.

Keywords

Life Cycle Inventory (LCI), aquatic products, aquaculture, fishing, fish manufacturing processes.

REFERENCES

- [1] FISHavniR project: Awareness and support of aquatic products companies in ecodesign / LCA approach ; Pôle AQUIMER, plateforme [avniR], Cycleco and VieDoc ; financed by the ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie) Nord Pas-de-Calais and the Nord Pas-de-Calais Council, 2011-2012.
- [2] 2013/179/EU: Commission Recommendation of 9 April 2013 on the use of common methods to measure and communicate the life cycle environmental performance of products and organizations
- [3] [NF EN ISO 14025 August 2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures.](#)