

Climate Certification with a Processing and Production-Type Standard Approach

Cejie, J.¹, and Ekmark, Z.²

Abstract

A project to establish climate certification standards for foods has been running since April 2007. The first areas to be covered are plant production, simple processing, transports, and fisheries. Release of the standard for these areas is planned for June 2008.

The system is designed to suit the needs of the private consumer. The climate impact analysis is made at the level of the farming system, or the processing, rather than for each individual product. This means that the end result may be a climate mark without any grading as opposed to a labeling with a declared carbon footprint expressed as CO₂ eq per kilo of product or something similar.

It is fundamental to find scientific proof for what activity represents the most significant climate impact. The basis for this analysis is the LCA approach. Based on LCAs in a database, paired with an ambitious stakeholder involvement process, we have been successful in identifying areas to be regulated. It is important to understand that the processes that release GHGs (greenhouse gases) may vary significantly due to regional or local conditions—our findings may not be relevant all over the world.

The active use of organogenic soils results in a significant release of GHGs, about one-third of GHGs from Swedish agriculture. The GHG release varies radically depending on how actively the soil is worked. This is, then, the factor to regulate in the standard. Using organogenic soils for pasture only seems to be the preferred management.

Another important factor is to reduce the rate at which nitrogen compounds are converted to N₂O. Important activities to control this include calculations of how much nitrogen is brought to the field, and also the timing of the spreading. It is also important to regulate the time allowed between the spreading and the covering of the manure.

The most important activity to control in greenhouses is the choice of energy for heating, as well as measures taken to conserve energy. Regarding fisheries, the single most important factor is whether the stock is within safe biological limits, since this has a major impact of fishing effort per unit of caught fish. Also important are the cooling agents used on board.

The choice of energy source for electricity and heating is important for simple processing. However, establishing management plans for reducing the use of energy is also crucial. Very efficient long-distance transports may have a minimal impact on the climate. Modern analysis tools and models enable fairly accurate calculations of the release of GHGs during transport. The project suggests that transports could best be restricted by means of establishing a maximum amount of GHG per kilo of product.

¹ KRAV ek för, Box 1037, SE-751 40 Uppsala, Sweden, e-mail: johan.cejie@krav.se, Internet: www.krav.se

² **Corresponding author.** KRAV ek för, Box 1037, SE-751 40 Uppsala, Sweden, e-mail: Zahrah.Ekmark@krav.se, Internet: www.krav.se/klimat