

## **Climate certification within organic processing and production**

**Author: Johan Cejje**

*KRAV ek för*

**Summary:** In order to improve the climate performance of organic production and processing, the private standard setter KRAV has co-run a four year project to create climate certification standards. The system uses a Production and Processing Method approach, rather than carbon foot printing. The basis for the standard, however, is solid science presented as Life Cycle Analysis. The project is currently delivering draft standards that include practical measures that can be taken by any Scandinavian farmer. These measures include better management of manure, nitrogen efficiency and cow health. Green houses need to be heated and illuminated with renewable energy. The project will also deliver standards relating to processing, transports, packaging and import. KRAV will integrate the new climate standards into its own organic sustainability standards, starting with green houses and fisheries in 2010. Import requirements for the KRAV logo will be amended accordingly. It is suggested that this work might inspire the EU organic regulations to improve even faster.

**Key words:** climate, certification, private standards, Life Cycle Analysis, fossil fuels, organic, food, feed, renewable energy

### **Background**

Organic processing and production has a great potential for mitigating climate change. However, in 2006, KRAV and a number of other Swedish organisations recognised that the level of science and knowledge had come to a point where we could identify further areas of improvement in terms of climate performance. As the LCA (Life Cycle Analysis) approach had matured, we saw that it had become possible to determine what parts of the food production was most important to global warming. This in turn should make it possible to identify activities that are important to regulate in order to reduce food's impact on the climate.

A project was set up that included organic as well as conventional farming. The aim was to provide leading farmers and processors with a new tool on the market, and consumers with a new filter for daily decisions in terms of food. The project was designed to rest on solid scientific data. Further, it was decided that climate impact alone could not be the sole scope of the system. Areas of environmental, animal welfare and social issues also needed to be covered for the system. The total direct costs of the project, that is scheduled to finish in 2010, is about € 1 000 000.

The project has aimed at the PPM (Production and Processing Methods) type standard, rather than carbon foot printing, which is along the lines of organic certification. The aim of the project has been to create an add-on certification scheme, which could be used by operators that already have a basic sustainability certification. Areas covered by the project include production inputs, farming (plant production, meat production, milk production, green houses), fisheries, aquaculture, processing, packaging, trade mechanisms and transports until the shop.

### **Process of the climate certification development**

For each area where the project has developed standards, the following process has been used: a scientific report identifying and quantifying the most important climate aspects of the area has been prepared by an adequate consultancy. The report has been reviewed by a scientific panel which also has suggested draft standards. The report and standards have been put out for public comment and/or discussed in stake holder groups. The standards have also been tried in mock certification audits in order to identify technical or practical weaknesses. After amending the standards, the scientific panel has once again had a review before the national accreditation body has ensured certifyability and then the standard has been set by the project's steering committee.

All draft standards and scientific reports produced have been published in Swedish. Translations to English are being published at <http://www.klimatmarkningen.se/in-english/>. Currently draft standards for plant production, green houses, milk production and fisheries have been published and are awaiting approval by the national accreditation body.

For reasons of competence, focus and funding, the project and development process has been limited to conditions in Sweden or possibly Scandinavia, which make trade mechanisms a necessary part of the system.

### **Outcomes of the project**

The outcome of the project is a certification system which can be used in two ways. Either it is used as a separate system, as a voluntary top-up of an existing sustainability standard. Or, it used to improve an existing certification scheme. The various standard items would then be incorporated into, for example, an organic standard.

Important aspects of the published draft standard that are relevant to the organic sector include that the use of energy and fossil fuels generally needs to be analysed in each operation. An action plan to reduce energy use and fossil fuel use needs to be established. Electricity used must be of renewable origin. Peat soils are a problem in Sweden, and other parts of Scandinavia. They need to be managed so as to minimize leakage of carbon dioxide.

The farm needs to focus nitrogen use in its management plan. This includes new requirements for how to store manure, when to spread it and how quickly it needs to be covered. Rather simple measures can reduce the loss of nitrous oxide significantly. Requirements also include a documented key ratio for continuously improved nitrogen efficiency. For milk production, animal health is of utmost importance, as production efficiency is crucial in this methane heavy form of production. Also the source of fodder is important as the volumes are large when it comes to ruminants, making transport's impact significant. Feed ingredients such as soy beans need to be of certified sustainable origin in order to avoid land use change related problems.

Green houses that are heated and illuminated are required to use at least 80% renewable energy. Insulation needs to be used in green houses used between October and March. Fisheries need to be operated on certified sustainable stocks, and fuel use can be no more than 0,5 litres of diesel per kg of landed fish for human consumption. No more than 0,07 litres of diesel per kg of fish landed for feed purposes.

### **Effects for the Swedish organic market**

The project's standards will be included in the KRAV organic/sustainable standard, which already meets the EU regulation and IFOAM's Organic Guarantee System. Operators using the EU regulation and logo will not be affected. Standard items will be included into the KRAV standard after an open process of commenting. The first areas of amendment are green houses and fisheries. The standards for these areas come into force during 2010. The remaining standard areas will be amended until 2012. Import regulations for the KRAV logo will be amended accordingly.

KRAV remains committed to simplify international trade to the greatest extent possible, and welcomes any initiative for trading at a higher climate level.