

FOOD MILES/SUSTAINABILITY MARKET INTELLIGENCE

January 2009 Quarterly Report

The growing importance of sustainability as a market driver in some of New Zealand's food and beverage export markets has led the Ministry of Foreign Affairs and Trade and New Zealand Trade and Enterprise to prepare a quarterly report for business people highlighting trends and issues in key markets.

THE NETHERLANDS AND THE NORDICS

IN SUM:

- The Dutch Professor credited with inventing the concept of water footprinting considers that governments will increasingly move to adopt water footprinting measures as part of any policy focus on sustainable production and consumption.
- A consortium of Finnish researchers is working on a supermarket loyalty programme that will give households an overview of the greenhouse gas footprint of the food products they buy.
- A Finnish agricultural union is encouraging the concept of food patriotism as a means to strengthen the market position of Finnish food products.
- The Dutch government has a programme of work under way to address the impacts that animal protein production and consumption has on the environment.
- The researchers charged with investigating climate labelling options for Finland continue their work to develop a carbon label.

PRIVATE SECTOR ACTIVITY

A perspective on embedded water – the Netherlands

Professor Arjen Hoekstra (University of Twente) is credited with inventing the concept of water footprinting (also known as 'embedded water'). According to Hoekstra, private sector initiatives to calculate corporate and product-level water usage are increasing. As governments look to influence production and consumption patterns towards more sustainable water use, Hoekstra considers that water footprinting standards, labels and information campaigns will become an increasing part of this policy mix. He has noted, for example, that the Spanish government has decided that water footprint analysis should be part of the river-basin plans that have to be developed in the EU Water Framework Directive. Separately, a Water Footprint Network has been established, aiming to bring together expertise and promote global standards. See www.waterfootprint.org/?page=files/WFN-partners.

The 'Climate Bonus' project – Finland

'Climate Bonus' is a personal carbon footprinting calculation system being developed by a consortium of Finnish research institutes. It is intended to encourage households to lower the greenhouse gas (GHG) emissions associated with their diets, and retailers

and food producers to offer more climate-friendly product choices. It was inspired by a loyalty system already in use in a Finnish chain of supermarkets that provides customers with an overview of the nutritional impact of their entire diet. This system records nutritional information about food purchases (from the participating supermarket) when the product is scanned at the checkout. This information is then compiled in a personal database which can be accessed online – the idea being to motivate consumers to make better nutritional choices over time.

The consortium aims to create a similar system for monitoring and improving the ‘climate-friendliness’ of a household’s food choices. The researchers consider that food, as the “second or third largest source of embodied emissions”, must be addressed if Finland and other countries are to achieve reductions in GHG emissions.

The project takes a life-cycle approach and is reliant on the development of carbon footprinting methodologies that are robust and comparable. The aim is to develop a system that can handle seasonal variation of food products and that can source reliable data for imported goods (an ongoing challenge). It is intended to be voluntary and will be developed incrementally over time. The consortium believes the system might have export potential in the future.

There has already been some media coverage of the Climate Bonus idea and overall, public response has been positive, although people appear to resist anything too prescriptive – i.e. they do not want to be told what they should and shouldn’t eat.

Food patriotism (buy local) – Finland

The Finnish Central Union of Agricultural Producers and Forest Owners (MTK) is working to harness the power of environmental footprinting and labelling, and the concept of food patriotism (i.e. buy Finnish), to strengthen the market position of Finnish food products. The impetus behind this work is both environmental and economic, after Finnish farmers’ real incomes plummeted in 2008.

At a workshop on methods to improve water management in agriculture, MTK focused on how empowering consumer choice could be an effective tool. MTK argued that Finnish food producers should ensure that customers can access reliable information about the environmental impacts of their food, and should exploit the branding potential of clean and healthy domestic production.

MTK is also promoting food patriotism through farm visits for school children, public speaking opportunities and publishing opinion articles. In the first half of 2009, MTK intends to launch a campaign based on case studies of Finnish farmers using sustainable practices. The aim is to reinforce Finns’ innate belief in the clean and healthy nature of food produced domestically, and to encourage them to support local employment in the food sector.

GOVERNMENT ACTIVITY

Protein production (and consumption) – the Netherlands

As part of its commitment to sustainable development, the Dutch government has set a long term goal “that the production and consumption of protein in the Netherlands

should contribute to global prosperity and food security, and respect the carrying capacity of eco-systems.”

The government considers that animal protein production and consumption has a large impact on the environment and that globally, the trend for increased consumption of animal protein will impact negatively not only on ecosystems but also on food security. In the Dutch government’s view, encouraging more efficient agricultural production alone is not enough to alleviate these pressures. It considers that the message is not a simplistic one that consumers must “stop eating meat and dairy” but rather a more nuanced call for a shift in production and consumption patterns to sustainably-produced animal proteins and more plant protein.

On the production side, the Dutch Minister of Agriculture, Nature and Food Quality released a number of relevant policies during 2008, including policies on animal welfare and more sustainable livestock farming. The minister’s goal for Dutch livestock farming is that it be sustainable by 2015. To this end, the Dutch government is supporting farmers to invest in environmental and animal-friendly production techniques and sustainable animal housing that will lift their performance above minimum statutory requirements.

Consumer awareness – the Netherlands

Concerned about the lack of consumer awareness of the effects of food choices on health, the environment and animal welfare, the Ministry of Agriculture, Nature and Food Quality has commissioned two reports to better inform government policy in this area.

The first report looked at the environmental effects of Dutch consumption of protein-rich foods, and various scenarios for change. It found that if all Dutch consumers replaced all meat and dairy in their diets with plant proteins, there would be a reduction in GHG emissions of 6 megatons of CO² per year. The amount of land required to produce food would decrease by 12,500km². More realistic scenarios, such as one meat, egg and dairy free day per week or shifts from red meat to chicken, also produced (smaller, but more achievable) environmental savings.

The second report looked at ways the Dutch government can encourage changes in consumer behaviour, and made a range of recommendations to encourage a transition to more environmentally-friendly consumption patterns. The report also identified two visions to address the “protein problem” – one, emphasising extensive production and eating more “frugally” i.e. simple, unprocessed food; and two, focusing on growth and innovation. The report argued that these are complementary rather than mutually exclusive visions and that the world will need them both. That advice chimes with the government’s approach to date, which has been to emphasise that there is not one single solution to the “protein problem”. This is seen as good news for Dutch livestock farmers, who do not want to see government funds spent (only) on convincing people to eat less meat. Policy development is at an early stage, but the Dutch government has already been engaged in extensive dialogue with stakeholders to try to develop a joint agenda for action. More detailed policy is expected to be released in mid 2009.

Animal welfare in the Dutch poultry industry

The Dutch Agriculture Minister is investigating whether the Dutch poultry sector can be forced or encouraged to use other chicken breeds for egg and meat production. In the Netherlands, 30 million female chicks hatch each year destined for egg production. The same number of male chicks are killed because they are not suitable for meat production.

The Minister has promised the Dutch Parliament to look at the feasibility of a "combination chicken" where the male chicks can be used to produce meat. It is expected, however, that the "combination chicken" will not be economically viable on a large scale. The Minister will therefore also investigate whether it is possible to check the embryos in the egg for sex and then not hatch the male eggs.

Climate labelling – Finland

The October 2008 quarterly report noted that the Finnish government had published research on the strengths and weaknesses of various climate labels. This work, undertaken by the Finnish Environmental Institute (SYKE), concluded that a carbon label based on a full life-cycle analysis would be the most robust. SYKE recommended that the government fund the development of a prototype label, and participate in international efforts to develop footprinting methodologies and standards.

Although the government has not decided whether to adopt SYKE's recommendations, SYKE has continued to work on the development of a carbon label. The labelling scheme is similar to the scheme used by UK supermarket chain Tesco, with green, orange and red colours used to indicate how climate-friendly a product is when compared with others of its type. SYKE is still working on the methodology for the footprint calculation but has stated that detailed life-cycle analyses would not be practicable. SYKE is instead focussing on the energy used in, and method of, processing, which typically account for 60 percent of the emissions associated with any particular product.

It is possible that the SYKE model might be enhanced through the addition of other sources of information, including background data on all the raw materials used in production acquired through extended input/output models. Agrifood Research Finland (MTT), for example, undertakes research into the environmental impacts of foods throughout their life cycle and, in cooperation with Finnish producers, ways to reduce these impacts. Studies to date include cheese, oat flakes, broiler meat, hothouse cucumbers and beer. As part of its Sustainable Consumption and Production project, the Finnish Ministry of the Environment has also funded SYKE to lead a research project into the environmental impacts of material flows in the Finnish economy. This research also looks at food production, and involves MTT as well as the University of Oulu and VTT Technical Research Centre of Finland. Impacts on the environment caused by imported raw materials and goods are also taken into account. This project may yield models useful in SYKE's development of a climate footprinting methodology.

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