Starch industry publishes environmental impact assessment

By Rod Addy, 27-Aug-2012

The European Starch Industry Association (AAF) has published a comprehensive Life Cycle Assessment (LCA) study of its products, making it one of the first agri-food sectors to complete such a project.

Agriculture generated the biggest environmental impact in almost all cases in the food and non-food starch supply chain, the report concludes. It is responsible for two thirds of the greenhouse gas emissions and three quarters of the water use involved.

During the manufacturing phase, energy use caused the biggest impact. However, the report states the industry has worked hard in the past decade to reduce this impact, through High Efficiency Combined Heat & Power generation.

Loic Gruson, regulatory affairs officer at AAF, said it was in the process of identifying areas in which the manufacturers could do better. However, he told FoodNavigator: "On energy [use] a lot of improvement has already been done in the past 10 years and we are close to the best and most viable techniques."

He said there would have to be an improvement in technology itself before more gains could be realised. "Energy efficiency is already really high and it's difficult to go beyond this at the moment."

Virtually zero waste

One of the most positive things highlighted in the report, which follows an earlier LCA analysis in 2001 covering only greenhouse gas emissions, is that the starch industry produces virtually zero waste.

The transport phase of the lifecycle of starch products is responsible for very low environmental impact – just 2% of the total impact. This is because it uses efficient transport and suppliers are close to factories, the study claims.

The research was carried out by the Belgium-based research institute VITO – Vision on Technology. It provides a cradle-to-gate life cycle impact assessment for all major starch product categories, covering carbon (greenhouse gas) footprint, water depletion and land use.

The reliability of data was very high for the manufacturing phase, for which companies in the industry had provided the very latest information, said VITO. By contrast, the reliability of information at the farm end was more patchy, because numbers were less certain and more dated, it said.