

24 August 2012

EU starch industry publishes Life Cycle Assessment study on starch products

The European Starch Industry Association, AAF, published today the summary report of its Life Cycle Assessment (LCA) study of its products. Following on from an earlier LCA study in 2001 for some products, this new study uses the most updated and recognised methodologies and databases, making the EU starch industry one of the first agri-food sectors to conduct such a detailed and multi-product study on a sectorial level.

The publication of the LCA study not only reflects AAF's mission to assure a reliable and sustainable supply of safe starch-based ingredients but also responds to the increasing demand for this type of information from the customers of the EU starch industry, and the joint desire of EU starch companies to ensure that this information is being provided in a consistent manner using the same robust methodology. The "mass-allocation on a dry substance basis" was confirmed as the only appropriate and robust allocation method for the products of the European starch industry.

The study which was carried out by the Belgium-based Research Institute 'VITO – vision on technology' provides a cradle-to-gate life cycle impact assessment for all the major starch product categories for the following environmental impacts: carbon footprint, water depletion and agricultural land occupation.

In order to conduct a cradle-to-gate life cycle impact assessment, the three identified environmental impacts need to be measured for the three life cycle phases; cradle to raw material (the agricultural phase), transport of the raw material to the factory gate (the transport phase) and gate to gate (the manufacturing phase). For the manufacturing phase, the study could rely on recent primary data provided by almost all AAF member companies. As such, the reliability and accuracy of the data for this phase is extremely high. However since the agricultural phase is not under the control of the starch companies, the study had to rely on secondary data from existing published datasets for this phase.

Some of the main conclusions of the study are:

• For almost all the starch product categories, it is the agricultural phase which has the largest environmental impact. For most starch products the agricultural phase constitutes around 2/3 of

carbon footprint and 3/4 of the water depletion impact (and 100% of the agricultural land occupation impact).

• It is also important to note that a high level of uncertainty (25% at least) exists around the exact impact of the agricultural phase depending on the published data set used (which will in turn depend on the raw material used, and the cultivation place and method).

• When looking only at the manufacturing phase, the main environmental impact comes from the use of energy. The EU starch producing company invested significantly in the last decade to reduce the extent of this impact, as the majority of the EU starch production now use High Efficiency Combined Heat and Power (CHP) generation.

• At less than 2% of the total environmental impact, the transport phase impact is very low. This is because the industry typically has suppliers located close to the production plants and/or uses efficient means of transport (e.g. barge or rail).

• The starch industry produces close to zero waste.

• For some starch products (those with a long life cycle, i.e. being used in non-food/feed applications), the carbon uptake of the crops will in fact outweigh the greenhouse gas emissions during the (agricultural and manufacturing) production phases.

A copy of the full summary report is available at <u>http://www.aaf-eu.org/pdf/2012-08,%20Eco-profile%20of%20starch%20products%20-%20summary%20report.pdf</u>

For further information please contact:

Jamie Fortescue, AAF Managing Director <u>j.fortescue@aaf-eu.org</u> +32 (0)2 289 67 67

Loïc Gruson, Regulatory Affairs Officer <u>l.gruson@aaf-eu.org</u> +32 (0)2 289 67 65

The AAF is the trade association which represents the interests of the EU starch industry both at European and international level. Its membership comprises 24 EU starch producing companies, together representing more than 95% of the EU starch industry, and, in associate membership, 7 national starch industry associations. The European starch industry processes approximately 22 million tons of agricultural raw materials into 10 million tons of starch products and derivatives annually.

AAF Website: <u>www.aaf-eu.org</u>