Association des Amidonniers et Féculiers

# THE COMPETITIVENESS OF THE STARCH INDUSTRY

## AAF

## Association des Amidonniers et Féculiers

## The European Starch Industry Association

**15-16 November 2007**

Association des Amidonniers et Féculiers

I. The European Starch Industry

II. Issues impacting our competitiveness

III. Future outlook for the industry

Association des Amidonniers et Féculiers

# I. The European Starch Industry

# Membership
# 24 companies - 6 associate members

- *Agrana Stärke*
- *AKV Langholt*
- Altia Corporation
- *Avebe Group*
- Cargill
- Chamtor
- Copam
- Crespel & Deiters
- *Emsland Stärke*
- *Finnamyl*
- Finnsugar
- Hermann Kröner
- Hungrana
- Jäckering
- *Kartoffelmelcentralen (KMC)*
- National Starch & Chemical
- Remy Industries
- *Roquette Frères*
- *Skrobarny Pelhrimov*
- *Südstärke*
- *Sveriges Stärkelseproducenter Förening - Lyckeby Stärkelsen*
- Syral
- Tate & Lyle
- *Wielkopolskie Przedsiebiorstwo Przemyslu Ziemniaczanego (WPPZ)*

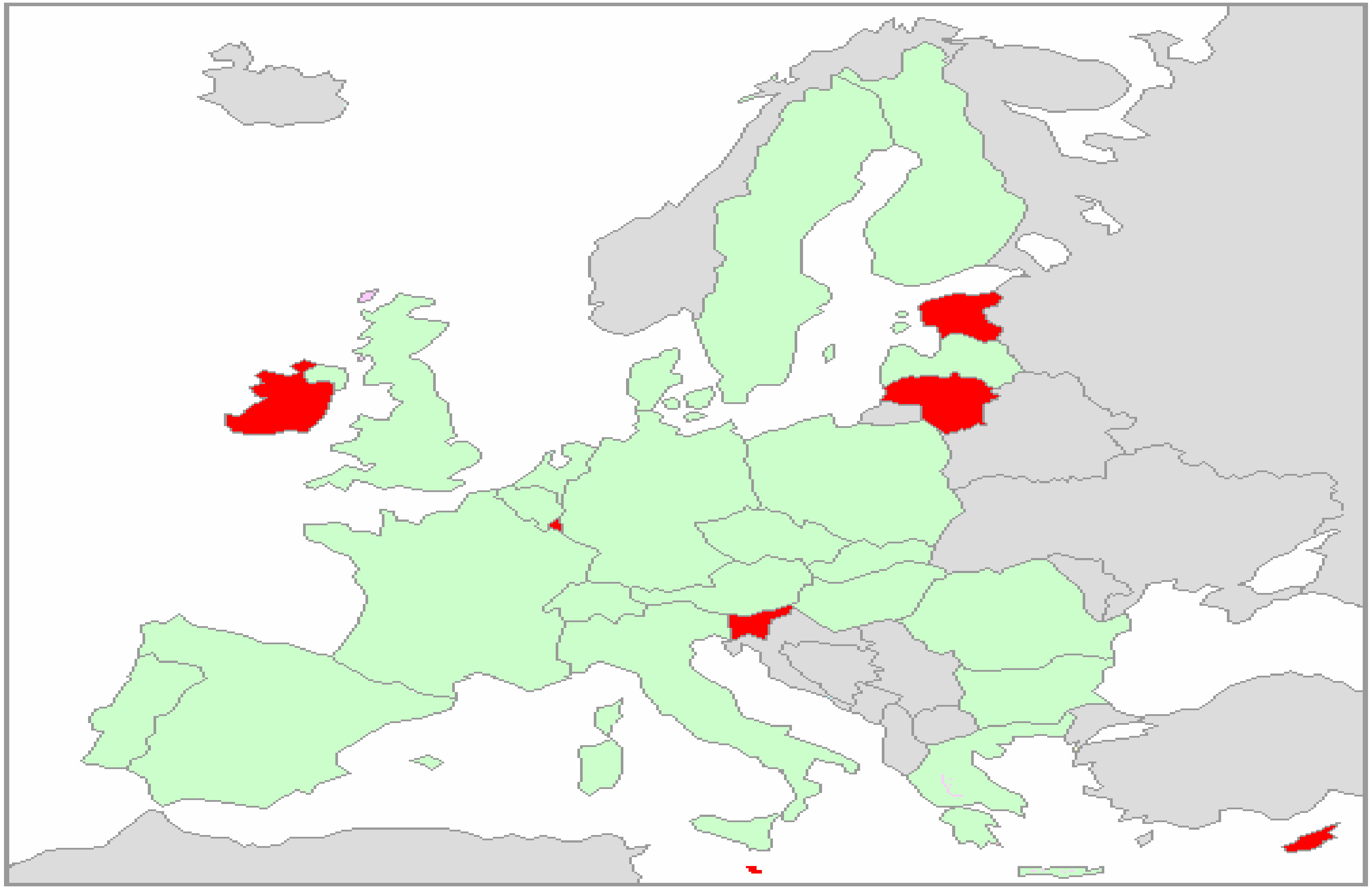
*Potato starch producers*

**Associate Members**

- BSIA
- Fachverband der Stärke-Industrie
- Finnish Starch Manufacturers Association
- Humaiz
- USIPA
- VNFG

# AAF Members location

AAF Members are located in 20 out of the 27 European countries.



Association des Amidonniers et Féculiers

# Industry data

- In 2006, the AAF members used :

→ Approx. 14.2 Mio tons of cereals

→ Approx. 7.9 Mio tons of starch potatoes

⇒ to produce 9.6 Mio tons of hunderds of different starch products, derivatives and a range of co-products.

- The starch industry processes almost exclusively EU raw materials.

Association des Amidonniers et Féculiers

# Industry data

- Total number of production sites in EU 27: 77
- Total number of Direct Employees: ~ 15.500
- Total turnover (sales) in EUROS for the year 2007: ~ 7.5 bn €
- Average investments from 2005 to 2007 included: ~ 1.2 bn €
- Average investments per year in Research and Development from 2005 to 2007 included: ~ 100 Mio €

Association des Amidonniers et Féculiers

# The European starch industry : an essential role in the food chain

**We are a main supplier of the food and drink industry which is the largest EU manufacturing sector and the largest employer.**

*Agriculture* → **Maize, Wheat, Potatoes, other cereals**

⇓

*First Transformation* → **Starch Industry**

⇓

*Production of confectionery, drinks, biscuits...* → **Food Industry (and non-food)**

⇓

**Distribution**

⇓

**Consumers**

**Extracts starch from grains and potatoes and processes it into several hundreds of products used as ingredients and functional supplements in food**

Association des Amidonniers et Féculiers

# Applications of starch and derivatives

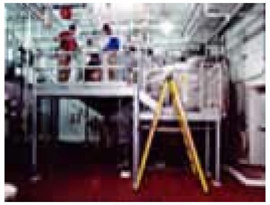
**Food and drink**




**Paper and board**



**Industrial and bio-applications**



**Pharmaceuticals and cosmetics**


**Animal feeds and pet food**


# An industry serving a wide range of food applications

Association des Amidonniers et Féculiers

• ***1st generation products***
- Glucose syrups
- Isoglucose
- Maltodextins
- Dextrose
- Modified starches

***Applications***
- Soft drinks, confectionery, sauces, ice creams, drinks, …

• ***2nd generation products***
- Polyols : sorbitol, xylitol, mannitol, maltitol, erythritol, …
- Fermentation products : ethanol, lactic acid, lysine, citric acid and sodium citrate, …
- Others : caramel colour, sorbitan esters, …

***Applications***
- Sugar-free and energy-reduced products, confectionery, …
- Alcohol drinks, food supplements, soups, ketchup, …
- Drinks, puddings, desserts, …

Association des Amidonniers et Féculiers

# An innovative industry in the non-food sector

- Paper Products
- Inks
- Textiles
- Glues and Adhesives
- Construction Materials
- Detergents
- Toothpaste
- Paints
- Cosmetics
- Oil drilling
- Tyres

→ The paper industry is the main non-food application sector.

Association des Amidonniers et Féculiers

# Enormous potential for the development of green chemistry in the EU

→ The second main non-food application sector for the starch industry is the **Bio-industry**, including fermentation.

- Bio-degradable plastics (PLA, ...)
- Bio-detergents
- Vitamins
- Fine chemicals and pharmaceuticals
- Binders
- Biofuels
- Solvents
- Bio-pesticides
- Lactic acid
- Bio-colorants, flavours and aroma compounds
- Lubricants
- Lysine
- Citric acid

Association des Amidonniers et Féculiers

# II. Issues impacting our competitiveness

Association des Amidonniers et Féculiers

# Competitiveness

Today, our main competitor on the world market is the US starch industry which :

→ Has no production limits on isoglucose production;

→ Benefits from subsidies on ethanol production;

→ Profits from competitive raw material costs combined with a long-term visibility and transparency (hedging instruments);

⇒This **favourable** operational environment enables the US starch producers to achieve competitive production costs through **economies of scale** which are merely not reachable in the EU (yet).

Association des Amidonniers et Féculiers

# Competitiveness

The issues impacting our competitiveness are :

1. EU Regulatory framework
2. Raw materials supply
3. Reform of the sugar regime
4. WTO and bilateral trade negotiations

Association des Amidonniers et Féculiers

# Competitiveness

## 1. The EU Regulatory framework

→ Administratively complex;

→ The CAP Health Check will aim at simplifying and improving certain market instruments;

⇒ Importance of timing and method of deregulation to avoid sectors losing their competitiveness e.g. no elimination of refunds before EU/world market prices are aligned; no immediate full decoupling for the potato starch sector.

Association des Amidonniers et Féculiers

# Competitiveness

## 2. Raw materials supply

There are imbalances in supply and demand of cereals caused by :
- Adverse climatic conditions,
- Low (world) stock levels,
- Increasing demand.

⇒ The industry needs regular and improved access to cereals in terms of volumes, quality (mycotoxins) and competitive prices through :
- The elimination of the set-aside and energy crop schemes.
- The maintenance of a reference price for import duties and refunds.
- A flexible import system through variable duties.
- A workable tolerance for the low-level presence of unauthorised GM events.

Association des Amidonniers et Féculiers

# Competitiveness

→These imbalances also create a higher price volatility.

↳Need tools to ensure the alignment of EU and world cereals market prices.

⇒This critical supply of raw materials at EU level has to be managed in a balanced way for not favouring one sector over another.

Association des Amidonniers et Féculiers

# Competitiveness

## 3. Reform of the sugar regime

→ Sweeteners represent > 50 % of the starch industry's output;

→ Most starch sweeteners serve the same markets as sugar (e.g. glucose in fermentation, confectionary);

→ Isoglucose (HFCS) is produced by the cereal starch industry and is regulated by production quotas (less than 5% of the total sugar quota in 2007/2008);

⇒ The elimination of isoglucose quotas is required in order to build economies of scale.

⇒ EU market management instruments should not obstruct our efficiency (e.g. sales of sugar intervention to the fermentation sector).

## Competitiveness

# 4. WTO and bilateral trade negotiations

These negotiations have to take into account :

→ A better access to world market cereals;

→ The competition from imports of starch products and in particular imports of tapioca starch (native starches - tropical products?);

→ The elimination of export refunds has to be done when the EU and world market prices are aligned;

→ Rules of origin have to be respected.

Association des Amidonniers et Féculiers

# III. Future outlook for the industry

Association des Amidonniers et Féculiers

# The future

The development of the EU Green chemistry is **key** to the EU starch industry because :

→ Starch is renewable and bio-degradable. It is therefore the perfect raw material for «green» and «sustainable» applications.

→ The starch industry already manufactures starch-based chemistry bio-products, where the fossil-fuel components are replaced with starch-based "green" ingredients.

→ While relatively little of these bio-products are produced in the EU, they are widely produced and developed in third countries such as the US, Brazil, China and India.

Association des Amidonniers et Féculiers

# The future

To build a sound and sustainable industry which will invest in R&D for more added value products for both food and non-food applications, it is necessary to increase its competitiveness through :

→ Access to raw materials at competitive prices.

→ Build economies of scale : isoglucose, bioethanol.

→ Encourage, on a temporary basis, consumer's choice for bio-products through e.g. an awareness campaign, mandatory use, fiscal incentives etc. and the demand for bio-products stimulated.

Association des Amidonniers et Féculiers

# The future

Today's innovations for tomorrow's market needs :

• **PET Hot Fill Containers**

The use of isosorbide, a new bio-based monomer, enables to enhance the properties and value of polymers and gives it higher temperature performances for use in multiple markets.

→ *A Roquette / Dupont partnership*

• **NatureWorks™ PLA**

100 % maize-based PLA for the packaging of food products and consumer goods, bottles, plates, cups and cutlery.

→ *A Cargill-Teijin/ NatureWorks parnership*

Association des Amidonniers et Féculiers

# The future

- **BIO-PDO™**

1,3 propanediol, a key ingredient of Sorona®, a polymer for clothing, carpeting, biodegradable plastics etc.

→ *A Tate & Lyle / Dupont partnership*

⇒ All these innovations in the use of starch provide new opportunities to produce and use bio-products beyond their current limitations.

Association des Amidonniers et Féculiers

# The future

In order to build economies of scale and increase competitiveness by developing innovative products, the industry needs :

1. Freedom to operate (i.e. no isoglucose quotas).
2. A simplification of the current regulatory CAP framework.
3. Security of raw materials supply at competitive price.
4. No market measures favouring one sector over another.