

# SALES AND MARKETS

2010 was a very strong year from a sales perspective. High demand in the enzyme business resulted in double-digit organic sales growth for Novozymes.

Total sales in 2010 were DKK 9,724 million, an increase of 15% compared to 2009. Exchange rates impacted sales positively, and sales in local currency (LCY) increased by 10%. Organically, sales grew by 11% compared to 2009.

## ENZYME BUSINESS

Enzyme Business sales were DKK 9,109 million, up by 17% compared to 2009. Sales in LCY were up by 12%, with divestments of noncore activities in India in 2009 having a small negative impact on sales growth. Detergent, technical, and food enzymes were the strongest growth contributors in the period.

The global enzyme market grew in 2010 to a total market value of approximately DKK 19 billion, up from DKK 16 billion in 2009. All segments of the market grew in 2010, but the detergent and biofuel enzyme segments were the main drivers behind the market growth. The industry did not see any major new entrants to the market in 2010, and there was no change in the overall competitive position between the existing players. Novozymes' global market share of 47% was unchanged.

### Detergent enzymes

Detergent enzyme sales increased by 18% in DKK and by 15% in LCY compared to 2009. The strong growth was driven by increased enzyme penetration across detergent tiers to enhance wash performance, enable low-temperature washing, and replace traditional chemicals in detergent

formulations.

### Technical enzymes

Technical enzyme sales increased by 18% in DKK and by 12% in LCY compared to 2009. Most industries in the technical enzyme group contributed to the growth, with many of the smaller industries showing growth. Enzyme sales to the textile industry bounced back after a challenging 2009, while the strong growth in enzyme sales to the starch industry was driven by greater demand from emerging markets.

Enzyme sales to the ethanol industry, representing 19% of Novozymes' total sales, were up by 25% in DKK and by 19% in LCY compared to 2009. Favorable blending economics and exports kept US ethanol demand and production at a high level during most of 2010. In the European market, ethanol enzyme sales continued to show good growth, although the market is small compared to North America.

### Food enzymes

Food enzyme sales increased by 18% in DKK and by 13% in LCY compared to 2009. The divestment of noncore ingredient activities in India in 2009 reduced food enzyme sales growth by around 1 %-point. Higher demand, particularly for baking and brewing enzymes for enhanced quality, performance, and yields, was the main driver behind the growth. For the brewing industry in particular, it should be remembered that 2009 was a relatively easy comparison. Newly introduced products in the food industry continued to contribute positively to growth.

### Feed enzymes

Feed enzyme sales were up by 6% in DKK and flat in LCY compared to 2009. Although phytase enzyme sales

## 2010 SALES BY INDUSTRY



■ Detergent enzymes (32%)    ■ Technical enzymes (32%)  
■ Food enzymes (22%)        ■ Feed enzymes (8%)  
■ Microorganisms (4%)       ■ Biopharmaceutical ingredients (2%)

## 2010 MARKET SHARE IN ENZYMES FOR INDUSTRIAL USE



■ Novozymes (47%)            ■ Danisco (21%)  
■ DSM (6%)                    ■ Others (26%)

stabilized in the latter part of 2010, a competitive European phytase enzyme market put pressure on sales during the year. RONOZYME® ProAct, a feed enzyme increasing protein uptake in poultry, performed very well during its first year on the European market and continued to deliver strong growth in emerging markets.

### ANOTHER STEP TOWARD A BIO-BASED SOCIETY

In 2010, Novozymes and Dacheng Group, a major starch-processing company based in China, signed an agreement to develop technologies to produce glycol from agricultural waste. Glycols are biochemicals used in household cleaning products and cosmetics, and as building blocks in the production of polyesters and plastics. The agreement ties in well with Novozymes' vision of developing a bio-based society where agricultural waste replaces oil as a new raw material.

Under the agreement, Novozymes will provide Dacheng Group with know-how and enzymes for converting biomass such as corn stover and wheat and rice straw into sugar. Dacheng will then convert the sugar into glycols using a technology involving inorganic catalysts. Dacheng already produces glycol from corn starch on a commercial scale and is also planning to produce glycol from agricultural waste within a few years.

The agreement is a good example of how Novozymes is working together with global partners to develop new solutions based on renewable sources instead of petroleum. Along the same lines, Novozymes is working together with partners such as Cargill, ADM, and Braskem to develop microorganisms (organic catalysts) for the production of renewable chemicals from sugar.

### BIOBUSINESS

BioBusiness sales were 5% lower in DKK and 12% lower in LCY compared to 2009. Divestment of noncore activities in the microorganism business in 2009 and lower sales of biopharmaceutical ingredients (BPI) were the main reasons for the decrease. Organically, BioBusiness sales were 10% lower compared to 2009.

#### Microorganisms

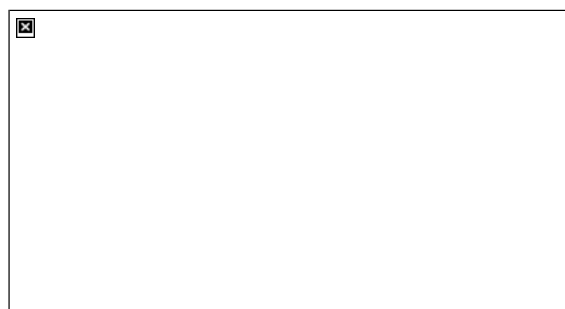
Microorganism sales were up by 3% in DKK and down by 4% in LCY compared to 2009. The total consolidated sales growth impact in 2010 from the divestment of the turf and landscape business in July 2009 and the acquisition of Brazilian bioagriculture company Turfal in August 2010 was approximately minus 4 %-points. Sales to the bioagriculture (BioAg) and wastewater treatment industries increased, whereas microorganism sales to the institutional & household cleaning industry were lower compared to 2009, partly explained by ongoing product pruning.

#### Biopharmaceutical ingredients

Biopharmaceutical ingredient sales were down by 21% in DKK and by 28% in LCY compared to 2009. The decrease was caused by lower sales of Recombumin® and cell culture ingredients throughout the year and also by the absence of plectasin sales in the fourth quarter of 2010 compared to the same quarter of 2009. The BPI industry is subject to substantial quarterly variations in sales patterns, as sales comprise a small number of transactions of relatively large value.

### FIVE-YEAR SALES DEVELOPMENT IN ENZYME BUSINESS

DKK million



Legend for Enzyme Business:  
■ Detergent enzymes  
■ Food enzymes  
■ Technical enzymes  
■ Feed enzymes

### FIVE-YEAR SALES DEVELOPMENT IN BIOBUSINESS

DKK million



Legend for BioBusiness:  
■ Microorganisms  
■ Biopharmaceutical ingredients

## A PLATFORM FOR GROWTH IN AGRICULTURE

With one acquisition finalized and another pending customary regulatory approval, 2010 was the year when Novozymes accelerated building a platform for strong growth in the agricultural market. Novozymes entered this fast-growing market, currently estimated to be worth USD 1 billion, with the acquisition of Philom Bios in Canada in 2007. In August 2010, Novozymes announced the acquisition of Brazilian company Turfal, and in December 2010, we signed an agreement to acquire one of the leading global players, EMD/Merck Crop BioScience, from Merck KGaA.

### Interesting niche in a global market

Agricultural biologicals are a small but interesting niche in the USD 150 billion global market for fertilizers and pesticides. The market is divided into three segments: biofertility, biocontrol, and bioyield enhancement. Biofertility products help plants take up more nutrients, while biocontrol products help plants fight off pests and diseases, and bioyield enhancement products support the health of plants.

These products enable farmers to optimize the use of fertilizers, increase yields, and save money while also benefiting the environment. Becoming a major player in this area is an opportunity for Novozymes to help meet the global challenge of feeding the world's growing population in a sustainable manner.

### Expected acquisition

The acquisition of EMD/Merck Crop BioScience is expected to be completed between February and May 2011 provided Novozymes receives regulatory approval. The total consideration to be paid to Merck KGaA is USD 275 million, subject to customary post-closing adjustments.

With approximately 165 employees and sales of around USD 60 million in 2010, EMD/Merck Crop BioScience is one of the leading players in the global market for agricultural biologicals and has delivered average annual growth of around 15% over the past seven years.

Headquartered in Milwaukee, Wisconsin, and with a division of equal size in Pilar, Argentina, EMD/Merck Crop BioScience has a well-established presence in the US and Argentina and complements Novozymes' existing operations in Canada and Brazil. EMD/Merck Crop BioScience's products and technologies are well defined and established, with documented and proven efficacy gains on numerous soils and crops. Its biofertility and bioyield enhancement products are primarily used in growing soy and pulse crops, and join Novozymes' existing biological product range consisting mainly of biofertility and biocontrol products applied to canola, pulses, and soy.

## Turfal gives access to the growing Brazilian market

Turfal is one of the key players in the Brazilian biofertilizer market with around USD 3 million in annual sales and more than 40 years' experience in the market. Conveniently located only 25 miles from Novozymes' Latin American headquarters in Araucária just outside Curitiba in southern Brazil, Turfal is to be the hub for all of Novozymes' agriculture business in Brazil. It will provide Novozymes with a platform for faster testing and registration, and deliver direct access to the growing Brazilian market for agricultural products.

## SALES BY REGION

Sales in Europe, the Middle East, and Africa (Europe/MEA) increased by 11% in DKK and by 10% in LCY compared to 2009. Detergent and food enzyme sales were the main growth contributors, while sales of biopharmaceutical ingredients decreased.

Sales in North America were up by 18% in DKK and by 12% in LCY compared to 2009. Detergent, food, and technical enzyme sales, in particular enzyme sales to the US ethanol industry, were the main growth drivers.

Sales in Asia Pacific increased by 15% in DKK and by 7% in LCY compared to 2009. Detergent and technical enzyme sales were the strongest growth drivers in absolute terms, while sales of feed enzymes decreased. Sales of microorganisms also performed well during the year, whereas the divestment of noncore ingredient activities in India in 2009 impacted growth negatively.

Sales in Latin America were up by 27% in DKK and by 16% in LCY compared to 2009. All enzyme areas developed well during the year, especially food and detergent enzyme sales. Microorganism sales also performed very well during the year, partly explained by the acquisition of Brazilian company Turfal in August 2010.

### 2010 SALES BY REGION

