

# COMPANY PROFILE

Novozymes is the world leader in bioinnovation. Our business is industrial enzymes, microorganisms, and biopharmaceutical ingredients. Our biological solutions help companies make more from less, as our solutions save energy and raw materials, and reduce waste. The result is higher quality, lower costs, lower CO<sub>2</sub> emissions, and a better environment.

Novozymes is organized into two business areas, each covering a number of industries: Enzyme Business and BioBusiness. The development, production, distribution, and sale of enzymes form the major part of our business, currently accounting for 94% of sales. BioBusiness, accounting for the remaining 6%, is home to both a smaller, established business in microorganisms and biopharmaceutical ingredients and a portfolio of initiatives where Novozymes is exploring business opportunities outside the enzyme sphere.

We generated sales of DKK 9,724 million and EBIT of DKK 2,117 million in 2010.

## Rethink Tomorrow

We use biotechnology to discover new sustainable solutions. More than 16% of Novozymes' global workforce of 5,432 works on innovation and development, and we invest around 14% of our sales in research and development.

Our solutions are based on a unique technology platform that provides a wealth of opportunities for the world's industries. Gene technology, microbiology, and fermentation technology are some of the tools on which we base our business. Combining industrial insight with this technology platform, we partner with customers across a broad range of industries to create tomorrow's industrial biosolutions that not only improve the use of our planet's resources but also our customers' business. We currently hold more than 6,500 granted or pending patents, which is an indication of the possibilities that emerge when nature and technology join forces.

## Sustainability is integrated

Sustainability is an integral part of our business, and we enable our customers to optimize their use of raw materials and energy, thereby reducing the environmental impact of their operations. In 2010 alone, the worldwide application of our products enabled reductions in CO<sub>2</sub> emissions of approximately 40 million tons.

We believe in decency and responsibility in business, which includes respect for all stakeholders. Our commitments to international agreements and universal values help define issues and challenges of relevance to our stakeholders and our business:

- We subscribe to the United Nations Global Compact
- We support the United Nations Declaration of Human Rights
- We support the United Nations Convention on Biological Diversity
- We subscribe to the International Chamber of Commerce's Charter for Sustainable Development

## ENZYME BUSINESS

Enzymes, which are found in all living organisms, are biodegradable proteins that catalyze biochemical reactions. Enzyme technologies can typically replace conventional chemicals, getting more out of raw materials and making production processes more efficient.

We are constantly striving to expand our markets by introducing innovations within existing markets as well as developing new applications. With a 47% share of the global enzyme market in 2010, we retained our position as the world's largest and leading producer of industrial enzymes.

We organize our enzyme business into four areas:

### Detergent enzymes

Enzymes are widely used in laundry and dishwashing detergents, and account for 32% of Novozymes' sales. Our solutions improve the performance of detergents by enabling improved stain removal, garment care, and general wash performance. Enzymes can also replace petrochemically derived ingredients that traditionally make up the bulk of detergents. Because of their unique catalytic action, enzymes are particularly useful ingredients in low-temperature detergents and concentrated detergents.

### Technical enzymes

Technical enzymes are mainly used in the transformation of starch into different kinds of sugars. The largest application is enzymes for the biofuel industry, turning starch (primarily corn) into fermentable sugars. Other areas include enzymes for converting starch into syrups and enzymes for textile treatment, leather, and pulp & paper. In 2010, we launched the first commercially viable enzymes for large-scale production of biofuel from cellulosic feedstocks.

### Food enzymes

Enzymes for the food and beverage industries enhance quality and efficiency in the manufacture of products such as bread, wine, juice, beer, and alcohol. Enzymes can, for instance, be used to reduce waste by keeping bread fresh for longer, to produce trans-fat-free oils, and to reduce levels of a potential carcinogen, acrylamide, in baked or fried starchy foods.

### Feed enzymes

Enzymes increase the digestibility and nutritional value of animal feed. For instance, Novozymes' protease RONOZYME®

ProAct helps animals digest the protein in their diet by supplementing the activity of their own digestive enzymes. This improved nutrient uptake leads to better feed utilization and helps the environment as fewer nutrients are released through manure.

## BIOBUSINESS

BioBusiness builds on the technological capabilities and expertise gained from working with biotechnology and enzymes for more than 60 years. BioBusiness focuses on developing new and improved microorganisms, biopharmaceutical ingredients for drug delivery and formulation, and renewable chemicals. We consider BioBusiness to be a portfolio of growth opportunities for the future.

### Microorganisms

Microorganisms are a diverse group of microscopic organisms such as fungi, bacteria, and yeasts. They are found everywhere in nature, where they both form and degrade organic materials. Novozymes develops, produces, and sells microorganisms in three main areas. In bioagriculture, the uses of our microorganisms include enhancing yields by helping plants to take up naturally occurring nutrients such as nitrogen and phosphates more effectively. In wastewater treatment, our microorganisms help break down organic matter. In institutional and household cleaning, our microorganisms have a wide range of applications in cleaning, degreasing, and odor control.

### Biopharmaceutical ingredients

Novozymes supplies a range of recombinant biopharmaceutical ingredients for improved drug delivery and formulation, and medical devices. Our biopharmaceutical ingredients are typically recombinant molecules that replace the similar molecules derived from humans and animals traditionally used in the industry. Our solutions offer customers alternative, cost-competitive, and safe solutions, helping them to develop better drugs and devices.

### Renewable chemicals

Novozymes is working on a number of research projects to

develop cost-competitive processes for using microorganisms to produce chemicals from renewable sources. Today, most chemicals are derived from oil. We believe that, in the future, sugar from renewable sources will form the basis of some of these chemicals, complementing the volumes generated from oil. Novozymes is working to develop these technologies in close collaboration with global partners.

