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Novozymes Report 2003

novozymes®

Unlocking the magic of nature

Glossary

Antimicrobial peptides
Small proteins that can be used for the medical treatment of infections.

Balanced Scorecard
A management tool intended to ensure, through measurement and reporting, that the company develops in line with its strategy. Novozymes' Strategy Map is an advanced type of Balanced Scorecard.

Biopolymers
Relatively large chains (= polymers) of molecules that are found in all living organisms (= bio: human beings, animals and plants), e.g. as proteins or carbohydrates.

Carotenoids
Fat-soluble pigments found extensively in plants and animals.

COD
Chemical Oxygen Demand. An indicator of the amount of organic matter in wastewater.

Contained use
Contained use is a term used in the legislation on the use of gene technology. In Novozymes' case, it means that production using genetically modified microorganisms takes place in facilities where contact with the outside environment is restricted and controlled.

Directed evolution
Active selection of new and improved versions of enzymes/proteins on the basis of an 'infinitely' large number of variants created through random genetic mutations.

Enzymes
Proteins that are found naturally in all living organisms – microorganisms, plants, animals and human beings. Enzymes act as catalysts, helping to convert one substance into another.

Ethanol
Regular alcohol.

Gene chip technology
The development of chemical miniature systems for testing large numbers of genes. Used to monitor and measure the properties and effects of the individual genes on the chip.

GRI
Global Reporting Initiative. An international body working on a standardised framework for reporting environmental, social and economic information.

Hyaluronate
A special type of carbohydrate found in the connective tissue of mammals. Its gelatinous structure binds water and makes it a natural lubricant.

Indicator
Qualitative or quantitative information that typically expresses performance in a given area, possibly relative to a given target or standard, e.g. the indicators for Novozymes' energy consumption.

MTBE
Methyl tertiary butyl ether – an additive used to increase gasoline's octane count.

NGO
Non-governmental organisation.

Nitrate
Nitrate is a compound that occurs naturally in the environment. Nitrate is a nutrient for plants and is commonly found in vegetables and other foods forming part of the human diet. The chemical formula is NO_3.

Patent family
A patent family typically consists of a number of patent applications and granted patents which are all based on the same original patent application.

Phytase
An enzyme that increases animals' ability to utilise their feed's natural content of phosphorus, which is important for bone development, among other things.

Proteins
All living organisms contain proteins, which are essential for all vital processes. Enzymes are proteins.

Robot assays
Automated imitations of chemical/biological processes.

TBL
Triple Bottom Line – environmental, social and economic bottom lines. The TBL concept provides a framework for corporate reporting in these areas.

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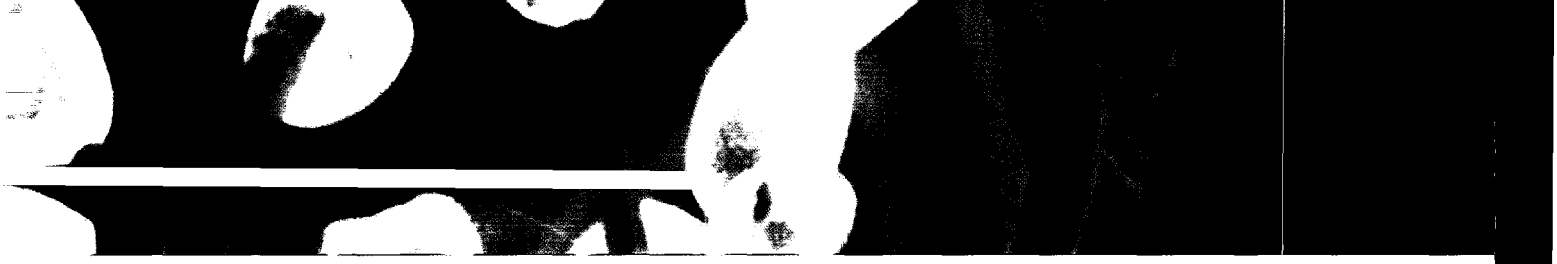


2004 sustainability development targets

Aspect	Timeframe	Target
General	2004-05	Expand the plan for internal sustainability audits and develop methods for including social aspects and occupational health and safety
	2004	Ensure that there is no increase in the frequency of occupational accidents and continue initiatives to achieve reductions where possible
	2004	Publish a position paper on donations
Suppliers	2004	Develop a scheme for environmental audits of suppliers
	2004	Ensure that the supplier evaluation on labour standards and human rights covers 80% of our raw material costs for enzyme production
R&D	2004	Carry out an assessment of the environmental impact of new enzymes in the research and development process
	2004	Maintain zero use of antibiotic resistance markers in new production strains
Production	2004	Increase the eco-productivity index (EPI) for water by 5 percentage points
	2004	Increase the eco-productivity index (EPI) for energy by 5 percentage points
	2004	Develop and launch better indicators for enzyme allergy to enable monitoring of progress
Emissions	2004	Document efforts and outcome regarding increased recycling of solid waste compared with disposal of solid waste
	2004	Evaluate and document options regarding the future reduction of greenhouse gas emissions
Products	2004-05	Develop a Novozymes-specific lifecycle analysis tool for enzyme products and use it for two products in 2004

Fig. 3. Working climate survey – selected data
The statement "I do not consider work-related stress a problem" was believed to be more important in 2003 (average: 4.2) than in 2001 (average: 4.0), and the actual state of affairs in this area was believed to be better in 2003 (average 3.4) than in 2001 (average: 2.9).

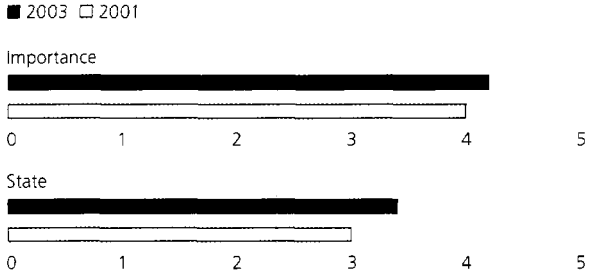
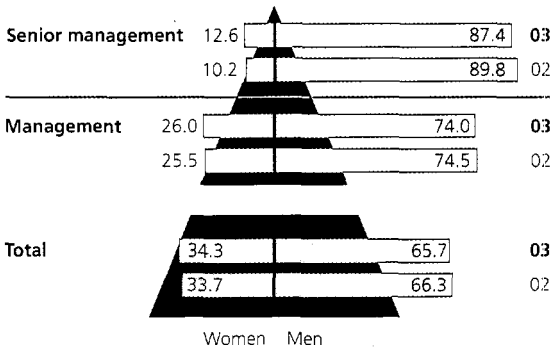


Fig. 4.



was carried out in 2001. In the two intervening years we carried out several projects with the aim of increasing the job opportunities for ethnic minorities in the Danish labour market. The proportion of employees at Novozymes in Denmark from an immigrant/different national background has increased since 2001. We have not set targets for the representation of ethnic minorities because qualifications will always be the key recruitment criterion (see figure 2).

2003 working climate survey

We carried out a global working climate survey covering all of the company's employees in 2003. Besides questions relating to job satisfaction, the survey included questions on employees' perception of Novozymes' Leadership Competences, launched in 2002. See also page 19.

An equivalent survey in 2001 revealed that many employees found work-related stress to be a problem. The 2003 survey found that fewer employees now feel stressed (see figure 3), which is a step in the right direction. The 2001 results led to the launch of a series of initiatives. For example, a web-based toolbox has been developed to help management and employees to put stress on the agenda.

Employee data

As in 2002 we are publishing data showing the breakdown between men and women in the workforce in different types of job, see page 40 of Accounts and Data. The proportion of women has increased among senior management, management and employees as a whole. We are monitoring this trend carefully, and can report that it is headed in the right direction (see figure 4).

This year we have chosen to expand our reporting on absence, see page 40 of Accounts and Data. As illustrated, absence was higher among employees in production than among administrative employees, which reflects the picture seen at many other companies. However, developments in absence data will be monitored carefully to identify any areas requiring special attention.

Stakeholder relations

One target for 2003 was to find new ways of approaching and working with our stakeholders, and a great deal of both theoretical and practical work has been done on this subject. We have made progress, but the target was not achieved. Stakeholder relations remain central to our work on sustainable development.

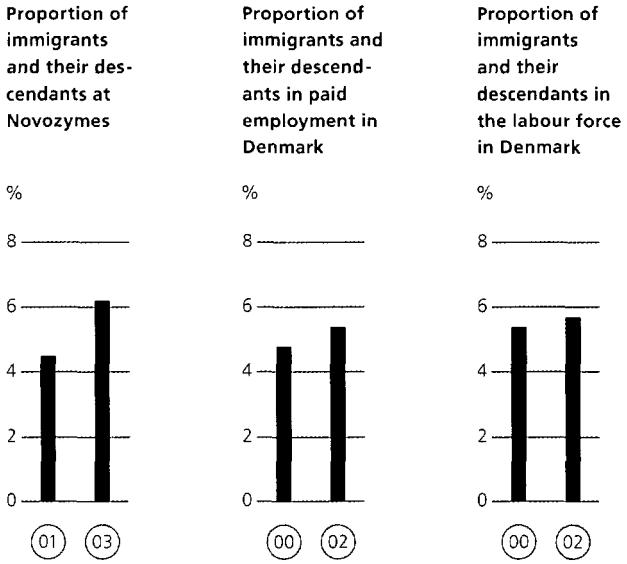
Transport emissions

Data and a report on the environmental impact of the transportation of raw materials and products to and from Novozymes in Europe can be found on the enclosed CD-ROM.

Types of information

We regularly review which information provides the most complete picture of Novozymes' activities. We aim to create greater transparency throughout the value chain by documenting the effect we have on the outside world via our suppliers, production, products and their use. We are currently carrying out lifecycle analyses for a couple of enzymes. These will provide detailed documentation of their environmental and, to some extent, their economic/social impacts, a good basis for comparing the use of enzymes with other products and processes. We choose between absolute and relative data in our disclosures according to what is most appropriate for our reporting. In many cases the emphasis is on describing developments over a long period. □

Fig. 2.



The figures for 2002 are the most recent available from Statistics Denmark. The figures for 2000 have been chosen to provide a 2-year comparison period.

Animal testing

Novozymes uses animals for testing only where such tests are required by law. We strive to reduce the number of animals used for testing, to refine test methods in areas where animals have to be used, and to develop alternative methods to replace the use of animals as far as possible. The target for 2003 was to investigate a number of *in vitro* assays (tests that do not involve animals) with a view to being able to choose and recommend to the authorities the replacement of *in vivo* irritation models (tests on animals) for the registration of enzyme products. These investigations were carried out by a group of experts, including representatives from Novozymes and Genencor. The results were presented in a report to the European Association of Manufacturers and Formulators of Enzyme Products (AMFEP). The report is published by AMFEP.

Occupational health and safety

The target for 2003 was to ensure that there was no increase in the number of occupational accidents and wherever possible to continue to achieve reductions. This target was reached as we achieved a reduction of 20% in 2003. The frequency of occupational accidents fell from 9.2 per million working hours in 2002 to 7.1 in 2003. Occupational health and safety standards were integrated into Novozymes' global quality management system in 2003. This resulted in a sharper focus on safety, which is also expected to be reflected in the frequency of occupational accidents.

However, the frequency of occupational diseases increased to 2.7 in 2003 from 2.2 in 2002. This was due primarily to the development of allergies to enzymes among employees who produce or handle enzymes. Several measures have already been introduced in this area but to further sharpen the focus in 2004 we will be working towards the target of developing indicators which will strengthen our ability to monitor and prevent the development of new cases. The number of employees developing allergies is typically around 2-10 a year.

To increase our knowledge of the consequences of occupational accidents and diseases, we have introduced new indicators to show the total number of days of absence and occupational accidents. Absences as a result of occupational accidents fell by 45% compared with 2002. Absences as a result of occupational diseases fell by 92% compared with 2002. We are also recording the employee's employment situation following an occupational accident or disease. Where occupational accidents are concerned, 39 out of 44 employees have returned to their previous jobs, while one has taken early retirement and four cases were still pending at year-end. When it comes to occupational diseases, six out of 17 have returned to their previous jobs. Other solutions have been found for the remaining 11 employees; the majority remain employed in the company. Management continues to focus on this area.

Internal management systems

Global minimum labour and human rights standards were integrated into Novozymes' quality management system in 2003 in line with our target. These standards are described in greater detail at www.novozymes.com/sustainability. We have also developed new indicators for sustainable development, including social responsibility. These indicators are one of the internal targets in Novozymes' Strategy Map (an advanced type of Balanced Scorecard), which is monitored continuously by Executive Management.

Sharing technological know-how

One target for 2003 was to make key elements of our technology platform more easily available to others. This target was met. Novozymes has a publication strategy which encourages researchers to publish their research results. A very active patenting strategy also means that we publish Novozymes' latest technological advances. Our website includes presentations of our research, production technology, products and knowledge-sharing in this area, as well as an overview with a selection of the most recently published articles by Novozymes' researchers.

Diversity of workforce in Denmark

We carried out a study of the ethnic composition of our workforce in Denmark during the year via Statistics Denmark. The purpose of the study was to document developments in diversity in Novozymes from 2001 to 2003 and compared with the rest of the labour market. An equivalent study >>

and social discussion

This section discusses the data considered to be of the greatest relevance and interest. A complete overview of data can be found on pages 39-40 of Accounts and Data. The emphasis is on key indicators and developments in some of Novozymes' targets for sustainable development.

The targets for 2004 are presented in the overview in this article, while the overview for 2003 is included on the enclosed CD-ROM, which also contains information on our use of the GRI indicators and a report on our progress with respect to the Global Compact. Data for the individual production sites is available at www.novozymes.com.

Targets and indicators

As the overview on the enclosed CD-ROM shows, we achieved the targets we set for 2003, with one exception: a target regarding Novozymes' relations with its stakeholders (see page 42).

Novozymes also has local targets for the individual sites. For example, the site at Franklinton achieved almost all its targets in relation to the USA EPA Performance Track (see also www.epa.gov/performancetrack/index.htm).

Eco-productivity indices (EPIs)

The targets of a 5% increase in the eco-productivity indices for energy and water were achieved in 2003. Data for the period 2000-2003 shows that water and energy are now used 31% and 34% more efficiently than three years ago. The improvements made are due largely to gene technology research which has made it possible to increase the yield from each production run.

Franklinton is the only site where we also have an EPI for waste. Marked improvements were achieved in this regard from 2002 to 2003.

One of the most important reasons to focus on efficient energy utilisation is the connection between energy consumption and CO_2 emissions. Reductions in CO_2 emissions had previously been achieved each year, but there was an increase in 2003 (see figure 1). This is due first and foremost to a shift in production – we are producing more at factories where the energy resource used results in relatively higher CO_2 emissions. The focus on emissions of CO_2 and other greenhouse gases is to be sharpened.

Quantity of wastewater

The quantity of wastewater has increased significantly (14%) from 2002 to 2003, without there being an equivalent increase in terms of water consumption. The explanation for this lies in the unusually large quantities of rainwater which ran into the wastewater system at our site in Franklinton.

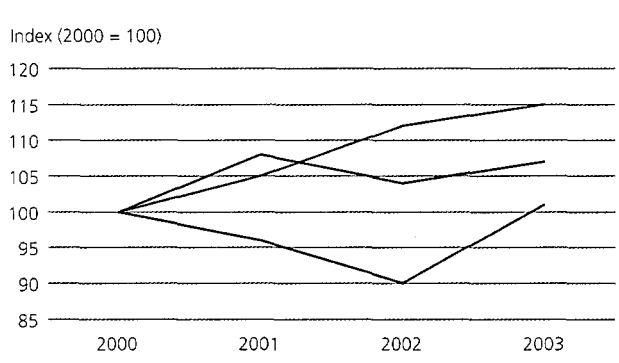
Emissions of ozone-depleting substances

Emissions of ozone-depleting substances (HCFCs) were on a par with emissions in 2002. This was due primarily to a leak at Novozymes North America, Inc. HCFCs do not pose an environmental or health problem at local level, but depletion of the ozone layer is a global issue, which is being addressed.

Compliance with environmental standards

The number of breaches of regulatory limits for groundwater in 2003 was 16, and these were breaches of limits in groundwater wells by Novozymes North America, Inc. (see article on page 28). In 2003 Novozymes received 17 complaints, mainly concerning odour problems.

Fig. 1. Relationship between Novozymes' commercial growth (net turnover), energy consumption and CO_2 emissions



In accordance herewith, the Board of Directors has decided:

- to implement planned share buy-backs with a total value of DKK 2.5 billion over the next 3-4 years
- specifically for 2004, to buy back shares worth up to DKK 650 million
- to recommend the following to the Annual Meeting of Shareholders in March 2004:
  - a dividend for 2003 of DKK 3.15 per DKK 10 A/B share, an increase of 40% on the dividend of DKK 2.25 for 2002
  - a reduction in nominal share capital of DKK 28,388,320, equivalent to 3.8% of total share capital, to enable the share buy-back programme to be implemented. After the proposed reduction, nominal share capital will be DKK 726 million.

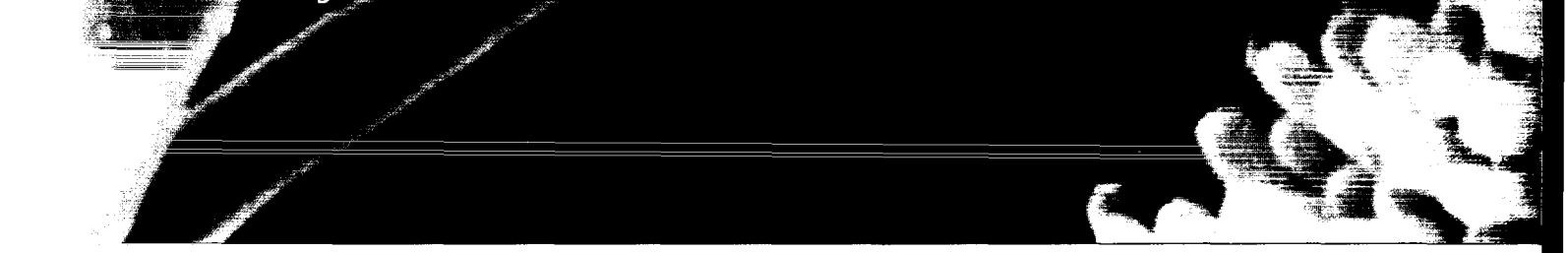
The buy-back programme is contingent upon no major acquisitions being made. At present there are no concrete plans for any major acquisitions.

It should also be noted in this connection that Novozymes' principal shareholder Novo A/S has issued the following statement: "If future buy-back programmes have a negative impact on the liquidity of the company's share, Novo A/S will look positively on improvements."

Incentive programmes

In 2003 Novozymes achieved both of the financial targets for the share option programme for all employees and so a pool of share options will be allocated to some 3,700 employees worldwide. This pool consists of approx. 1,580,350 options to purchase B shares at an exercise price of DKK 148, which was the price of Novozymes' B share at the end of 2002. The options may be exercised after a three-year binding period. No share option programmes are planned for the coming period for either employees or the Management.

At the company's Annual Meeting of Shareholders on March 17, 2004, the Board of Directors will recommend that it be authorised, in the period up to March 16, 2009, to increase the share capital by up to DKK 20 million in B shares in order to be able to offer the Group's employees the opportunity to buy B shares at a price lower than the market price (employee shares). □



Investments, free cash flow, acquisitions, etc.
Net investments before acquisitions totalled DKK 392 million in 2003, against DKK 334 million in 2002.

Free cash flow came to DKK 800 million in 2003, with DKK 182 million being invested in acquisitions. Before acquisitions, free cash flow was DKK 982 million.

The free cash flow was used to pay the dividend for 2002 and for share buy-backs. Net interest-bearing debt was also reduced by DKK 324 million.

(DKK million)	**2003**	**2002**
Cash flow from operating activities	1,374	1,181
Investments before acquisitions	(392)	(334)
Free cash flow before acquisitions	982	847
Acquisitions	(182)	(272)
Free cash flow	**800**	**575**
Dividend paid	(162)	(146)
Purchase of own shares	(392)	(185)

Return on invested capital

Average invested capital as a percentage of net turnover fell from 96% in 2002 to 89% in 2003.

The return after tax on invested capital (ROIC) rose from 13.1% in 2002 to 15.0% in 2003.

(DKK million)	**2003**	**2002**
Average invested capital	5,137	5,399
- as a percentage of net turnover	89%	96%
Return on invested capital (ROIC)	15.0%	13.1%

Movements in shareholders' equity and holding of own shares

Shareholders' equity amounted to DKK 4,144 million at the end of 2003, against DKK 4,155 million at the end of 2002. Shareholders' equity was increased by the net profit for the year but reduced by dividend payments, share buy-backs and currency translation adjustments in respect of subsidiaries' net assets.

The holding of own shares at year-end consisted of 5,923,050 B shares, equivalent to 7.9% of the share capital. Novozymes spent DKK 392 million on share buy-backs in 2003.

(DKK million)	**2003**	**2002**
Shareholders' equity at beginning of year	4,155	4,058
Net profit	726	644
Dividend paid	(162)	(146)
Purchase of own shares, net	(388)	(185)
Currency translation adjustments	(187)	(216)
Shareholders' equity at end of year	**4,144**	**4,155**
Financial gearing	19%	27%

Capital structure

Novozymes' capital base has strengthened markedly since its stock exchange listing in November 2000. At the beginning of 2001 Novozymes had net interest-bearing debt of DKK 1.3 billion and shareholders' equity of DKK 4.0 billion. Despite acquisitions worth DKK 644 million, four share buy-back programmes worth around DKK 1.0 billion and three dividend payments worth a total of DKK 432 million, by the end of 2003 net interest-bearing debt had fallen to DKK 0.8 billion and shareholders' equity had increased to DKK 4.1 billion.

Given the expectation that free cash flow will remain relatively high over the next few years, it has been decided to optimise the capital structure and further strengthen financial reserves in relation to the company's expansive strategy.

The following general decisions have been taken for the coming years:

- to increase the dividend payout ratio to at least 30% of net profit, against 25% in 2002
- to continue share buy-backs and reduce share capital accordingly.

Market share

Novozymes achieved high levels of organic growth in sales of enzymes in 2003 relative to growth in the enzyme market as a whole. Our own estimates therefore suggest that Novozymes gained market share during the year, further consolidating its position as the world's leading enzyme producer. We also increased our market share in industrial microorganisms, albeit as a result of the two aforementioned acquisitions.

Costs, Licence fees and Other operating income

Total costs excluding net financials and tax increased by 3% to DKK 4,821 million in 2003. Costs grew at a marginally lower rate than sales and are positively affected by the lower exchange rates.

Production costs rose by 2% to DKK 2,799 million and thus grew at a slightly lower rate than sales in DKK terms. Continued optimisation and productivity improvements were able to offset increased volumes and the fact that production costs are less sensitive than sales to exchange rate fluctuations. The gross margin rose from 51.5% in 2002 to 51.8% in 2003.

Sales and distribution costs were almost unchanged from 2002, rising by DKK 1 million to DKK 730 million. As in 2002, these costs accounted for 13% of sales.

Research and development costs rose by 5% to DKK 749 million, including costs related to the implementation of Novozymes' new strategy and the cost of research into better enzymes for the production of fuel ethanol. R&D costs were equivalent to 12.9% of sales in 2003, against 12.6% in 2002.

Administrative costs increased by 2% and, as in 2002, were equivalent to 10% of sales.

Employee costs totalled DKK 1,661 million, against DKK 1,627 million in 2002. The average number of employees increased from 3,629 in 2002 to 3,814 in 2003. Part of the increase was related to acquisitions.

Depreciation and amortisation charges totalled DKK 523 million, against DKK 532 million in 2002. The decrease was due partly to exchange rate movements, especially the depreciation of USD-related currencies.

Licence fees and Other operating income totalled DKK 44 million in 2003. This figure includes payments from the US Department of Energy for research and development costs incurred by Novozymes in researching better enzymes for the production of fuel ethanol.

Operating profit

Operating profit rose by 4% to DKK 982 million, of which DKK 976 million is attributable to enzymes and DKK 6 million to microorganisms. The operating profit margin, calculated as operating profit as a percentage of sales, was 17.6% for enzymes and 2.3% for microorganisms. The latter margin was affected by acquisitions in 2003.

Net financials

The net currency gains are due primarily to realised and unrealised gains on the hedging of exposures to the USD and JPY in particular.

Net interest costs fell in 2003 as a consequence of lower net interest-bearing debt. Net interest expenses are negatively affected by an amount of DKK 8 million due to three one-off items.

(DKK million)	**2003**	**2002**
Net currency gain/(loss)	81	40
Net interest	(41)	(46)
Other financials	(7)	(41)
Total financials	**33**	**(47)**

Other financials were boosted by realised gains on sales of shares in 2003.

Profit before and after tax

Novozymes generated profit of DKK 1,015 million before and DKK 726 million after tax, both corresponding to a rise of 13%. The effective tax rate was 28%. ▷▷

Financial discussion

Profit and loss account and balance sheet

The financial results for 2003 are fully in line with the outlook published with the consolidated accounts for the first nine months of 2003 on November 5, 2003.

Net turnover

Net turnover rose by 3% from DKK 5,642 million in 2002 to DKK 5,803 million in 2003. Acquisitions during the year accounted for just over two percentage points of this growth. Sales growth in local currencies was 12%, meaning that the underlying rate of growth was 10%, which is within the long-term target range.

Sales of enzymes

Sales of technical enzymes increased by 3% in 2003. Growth was impaired by markedly less favourable exchange rates. In local currency terms, sales to the detergent industry were highly satisfactory and a clear improvement on the previous couple of years, and developed more favourably than anticipated during the course of the year. A combination of new product launches and increased market share contributed to this improvement.

Sales of other technical enzymes grew by 7%. Sales of enzymes for the production of fuel ethanol grew strongly and sales to the textile industry also grew healthily, while sales to the traditional starch industry dropped due to consolidation and price pressure. Sales to the smaller pharmaceutical, leather and forest products industries also grew healthily in 2003.

Sales of food enzymes fell by 5% in 2003, greatly hampered by less favourable exchange rates, especially the weaker USD. Once currency effects are eliminated, growth was somewhat below the long-term target range of 10-15%. The baking industry was the main driver behind sales growth in local currency terms, while sales to the beverage industry were largely flat in local currency terms. Low beer sales in China, stock adjustments by major customers and difficult conditions for the alcohol industry in Eastern Europe were among the reasons for the slightly disappointing growth. Sales to the smaller industries were satisfactory.

Sales of feed enzymes increased by 15% in 2003, which is slightly more than anticipated. This was due to increased sales in existing markets and penetration of new markets, helped by the alliance with DSM Nutritional Products. The strategic alliance in feed enzymes between Novozymes and DSM Nutritional Products was finally approved in September 2003 when the US Federal Trade Commission approved DSM's acquisition of Roche Vitamins & Fine Chemicals.

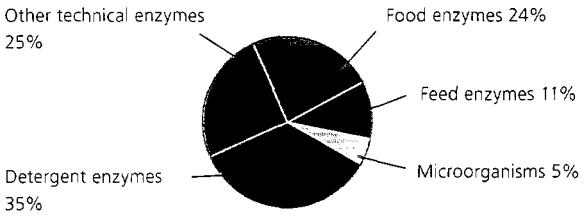
Novozymes launched a total of six new enzyme products in 2003: four technical enzymes, one food enzyme and one feed enzyme. Two of these six new products stem from the special focus areas set up as part of the new strategy in 2001.

Sales of microorganisms

Sales of microorganisms from Novozymes Biologicals grew by 27% in 2003. Part of this growth came from the acquisition of the activities of Semco Bioscience and the bulk of the activities of Roots in February and June 2003 respectively. Organic sales growth came especially from products for industrial and household cleaning, while sales of products for wastewater treatment were down on 2002. In the longer term the acquisition of the activities of Roots will strengthen the plant care business area, which is Novozymes Biologicals' third and smallest business area.

Integration of the newly acquired activities ran according to schedule, and the focus is now on boosting organic growth and increasing profitability.

Sales by segment and industry 2003



The third bottom line: wages are an important factor

Novozymes' economic impact on society goes beyond its traditional financial results. Our economic stakeholders include not only investors but also a wide range of other groups, such as suppliers, authorities and employees, who all share in the value that we generate.

This year we have chosen to look more closely at the impact of wages on the local communities where Novozymes has its production sites. Almost half of the value that Novozymes generates is paid back to employees through wages, pension contributions and other benefits (see figure 1). Thus wages are one of Novozymes' most important contributions to society, which benefits through tax payments, private investments and consumption.

Novozymes aims to promote and support fundamental human rights, which include the worker's right to a wage that meets his basic needs. In our minimum standards for social responsibility we therefore undertake to pay a wage that at least corresponds to the local minimum wage.

Different views of minimum requirement

Figure 2 illustrates how Novozymes' own wages for one of the largest employee groups (process operators) compare with the legal minimum wage in various geographical areas. As illustrated, in general Novozymes' lowest wages are significantly above the legal minimum wage.

Naturally a comparison of this kind does not tell the whole story. As illustrated in the example from one of Novozymes' sites, there can be a significant difference between the legal minimum wage and what is considered locally to be enough to cover basic living expenses. Figure 3 shows the wage Novozymes pays to a process operator compared with the local legal minimum wage, and the wage level the local authorities consider necessary to cover basic living expenses.

Novozymes' minimum standards ensure that all employees receive a reasonable wage that meets their basic needs. The topic is, for example, also included in our dialogue with suppliers, who have been evaluated on the basis of a number of basic labour standards during the last year (see page 26).

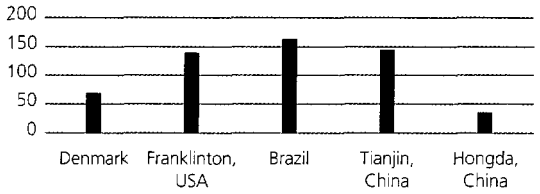
A competitive wage

Novozymes has a tradition of staying on for many years wherever we establish operations. For example, we have been in Brazil for 20 years, in Switzerland for 19 years and in North America for 24 years. Wage levels are not the deciding factor when Novozymes chooses geographical locations. Many other considerations come into play, such as the local market for our products. For example, proximity to the market played a key role in the decision to build the factory in Tianjin in China. When setting wage levels, the most significant consideration is that we offer a competitive wage that enables us to attract and retain employees with the right qualifications.

Read more about Novozymes' minimum standards and human rights at www.novozymes.com/sustainability. ■

Fig. 2. Benchmarking of Novozymes' wage against legal minimum wage

■ Shows by how much Novozymes' lowest operator wage exceeds the legal minimum wage, %.



In reporting the lowest operator wage at Novozymes' sites, the production facilities at Bagsværd, Fuglebakken and Kalundborg have been combined, as they have the same wage system and legal minimum wage. For China, the wage level is shown for both Tianjin and Hongda, as the local wage systems and legal minimum wages are different for the two sites.

Fig. 3. Example of annual wage benchmarking

■ Shows data from a selected site, converted to DKK.

Fig.1. Value added (DKK million)

Wages are one of Novozymes' important contributions to the local communities where the company has its production sites.

and South America, where phytase is increasingly being accepted as a competitive alternative to inorganic phosphates.

In September 2003 DSM announced that the acquisition of Roche Vitamins & Fine Chemicals had been approved by the US Federal Trade Commission. At the same time DSM and Novozymes announced that the two companies would be continuing their strategic alliance in feed enzymes. During 2003 the alliance was extended to include pet food and the Australian and Indian markets. Read more about the DSM alliance on page 24.

Growth in sales of feed enzymes is expected to remain at high levels. However, growth is expected to fall below current levels over the next couple of years until new product launches make their breakthrough.

Microorganisms for industrial use

- Novozymes' market share: approx. 50%
- Anticipated annual market growth: approx. 10%
- Anticipated long-term annual sales growth: at least 10%

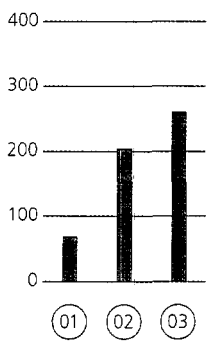
Sales of microorganisms grew by 27% in 2003, including new acquisitions in this business area. Growth was positively affected by acquisitions but negatively affected by exchange rate movements, as the bulk of sales are in USD. Read more about microorganisms on page 20.

The growth in sales was due primarily to increases in the two largest applications: industrial & household cleaning and wastewater treatment. After a series of acquisitions the focus is now on increasing profitability and organic sales growth, e.g. through geographical expansion.

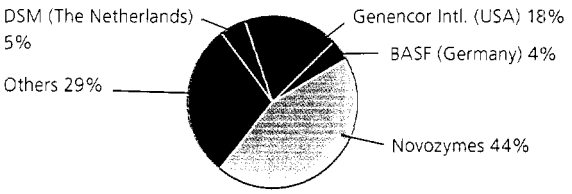
The state of competition in enzymes for industrial use

The market for industrial enzymes is served by a relatively small number of major players – such as Genencor, DSM, BASF and Novozymes – and various minor players. DSM's market share almost halved from 2002 to 2003 due to the transfer of its feed enzyme business to BASF, which thereby became a new player in the market. According to our own estimates, Novozymes increased its market share in 2003. ■

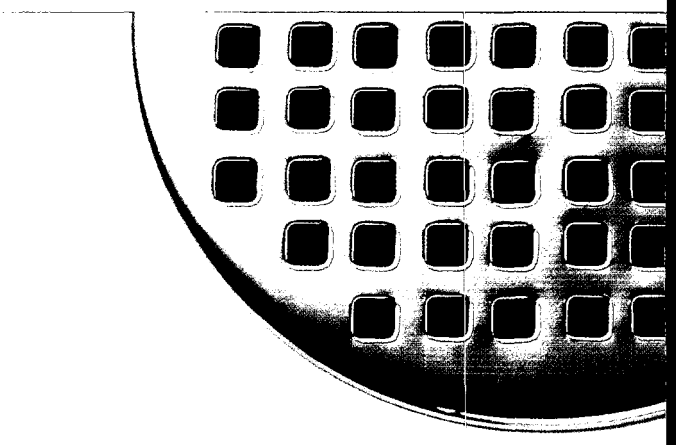
Sales of microorganisms



The state of competition in enzymes for industrial use
The world market for enzymes for industrial use was worth DKK 12.9 billion in 2003*.



** Source: Novozymes' estimate, 2004*



We anticipate continued healthy growth in other technical enzymes in 2004, especially for the fuel ethanol and textile industries.

Food enzymes

- Novozymes' market share: 30-35%
- Anticipated annual market growth: 2-4%
- Anticipated long-term annual sales growth: 10-15%

Food enzymes include products for the following industries:

- Baking
- Beverages (brewing, potable alcohol, fruit juice and wine industries)
- Other food industries, including the dairy industry and the oils and fats industry

Sales of food enzymes fell by 5% in 2003 in DKK terms, markedly affected by exchange rate movements.

The market for food enzymes is growing considerably faster than the overall market for food ingredients. The most important reason is that enzymes account for only a small part of the overall market for food ingredients and so there is still considerable potential for enzymes to replace other ingredients in food production. New applications of enzymes will also help to grow the overall market.

Enzymes for the baking industry remain the largest product area for food enzymes. This area is growing healthily, thanks to increased sales of established products and the introduction of new products.

Sales of enzymes to the beverage industry in 2003 grew weakly. The market posed several challenges during the year, including a temporary slowdown in China.

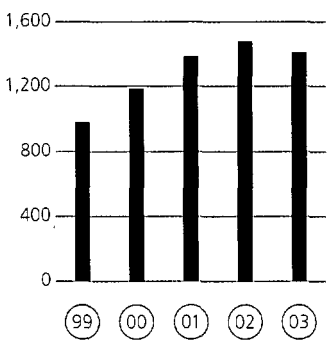
Growth in sales of food enzymes is expected to be around the lower end of the long-term target range of 10-15% in 2004.

Feed enzymes

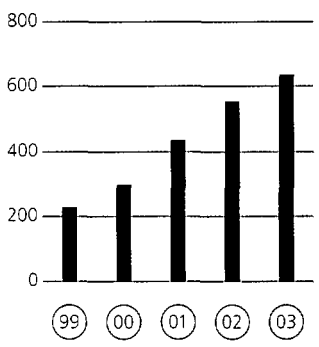
- Novozymes' market share: 45-50%
- Anticipated annual market growth: approx. 10%
- Anticipated long-term annual sales growth: 10-20%

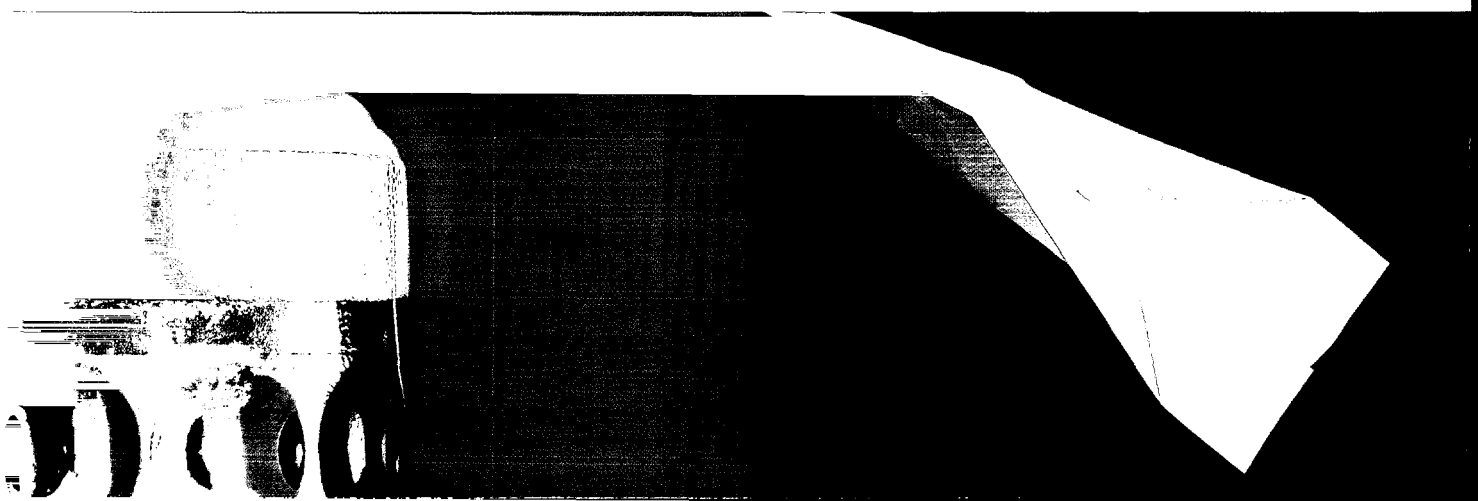
Sales of feed enzymes continued to grow fast in 2003, climbing by 15%. This growth was due primarily to the enzyme phytase making a real breakthrough in several markets outside Europe, especially in North America, Japan

Sales of food enzymes



Sales of feed enzymes





its product portfolio and expects the market situation to remain challenging.

The markets for other technical enzymes showed a high rate of growth, fuelled mainly by sharp growth in sales of enzymes to the fuel ethanol industry and healthy growth in the textile industry, while sales to the starch industry stagnated as anticipated.

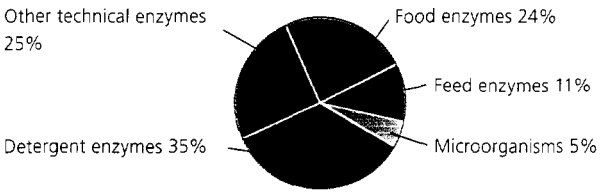
Sales of enzymes to the fuel ethanol industry are growing rapidly, due primarily to increased ethanol production in the USA. One use of ethanol is as a substitute for the chemical MTBE in gasoline. Several US states have banned the use of MTBE in gasoline and several more are expected to introduce similar bans or restrictions. Ethanol production is also set to grow in China, where several large ethanol production facilities are under construction (see also page 22).

There was continued healthy growth in the textile industry, due primarily to sales of enzymes for bleaching denim. The fashion for denim, combined with a focused drive in the Asian market, was behind the healthy performance in 2003. Other less fashion-dependent applications, especially in the textile mill industry, are also gaining ground.

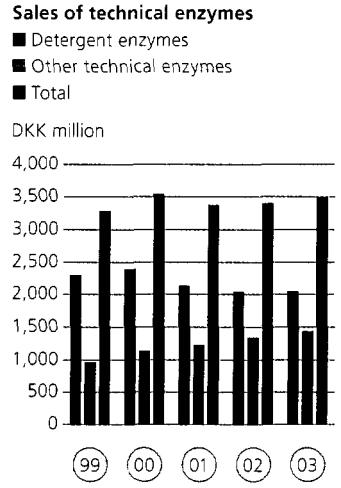
The market for enzymes for the starch industry is stagnating. This is a mature market with price pressure and low volume growth, which has led to extensive consolidation of the industry.

The market for enzymes for the pulp and paper industry, which is one of Novozymes' most recent focus areas, grew sharply despite the pulp and paper industry as a whole having a difficult year. This growth was attributable partly to the sale of new market-expanding products and partly to penetration of new markets. ▶▶

Distribution of sales in %



Sales of technical enzymes



Sales, markets and competitors

Novozymes' business activities fall into two segments: enzymes and microorganisms for industrial use.

Enzymes for industrial use
- Technical enzymes, which can be divided into detergent enzymes and other technical enzymes
- Food enzymes
- Feed enzymes

Microorganisms for industrial use
- Wastewater treatment
- Cleaning
- Biological plant care

Novozymes' sales grew by 3% to DKK 5,803 million in 2003 from DKK 5,642 million in 2002. Sales growth was negatively affected by exchange rate movements, as sales in local currency terms grew substantially more, namely by 12%.

Leading position in enzymes

Novozymes' long-term business objective is to achieve significant growth by expanding the market for industrial enzymes while maintaining its leading position in all industry areas. This objective was fully achieved in 2003. We launched six new enzyme products during the year: four technical enzymes, one food enzyme and one feed enzyme.

Microorganisms strengthened

The microorganisms segment was strengthened through two acquisitions and the launch of new products, including a new environmentally friendly biological plant care product (see page 20).

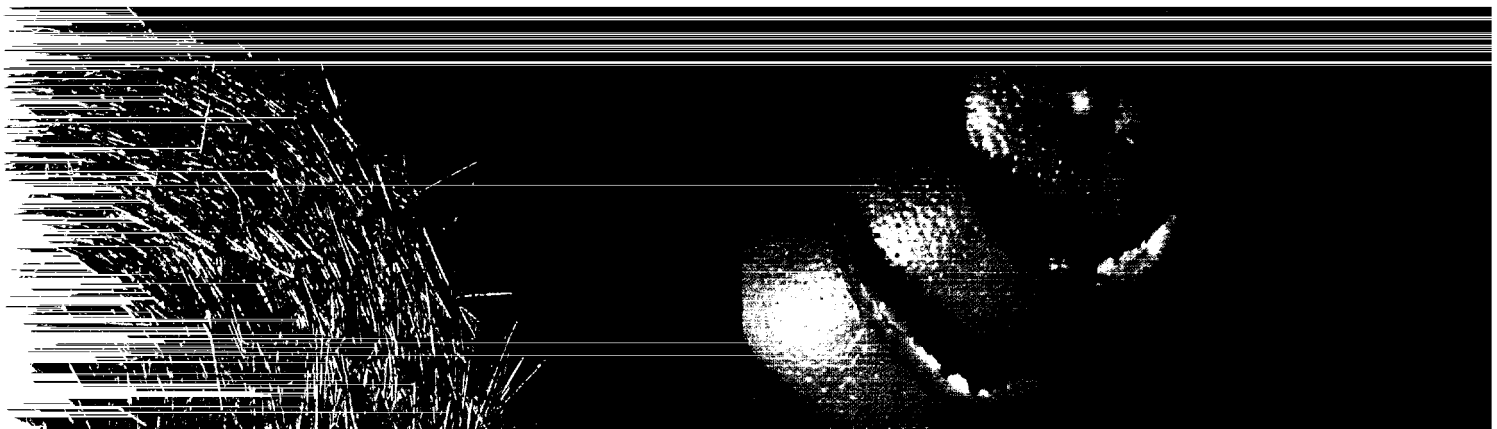
Enzymes for industrial use

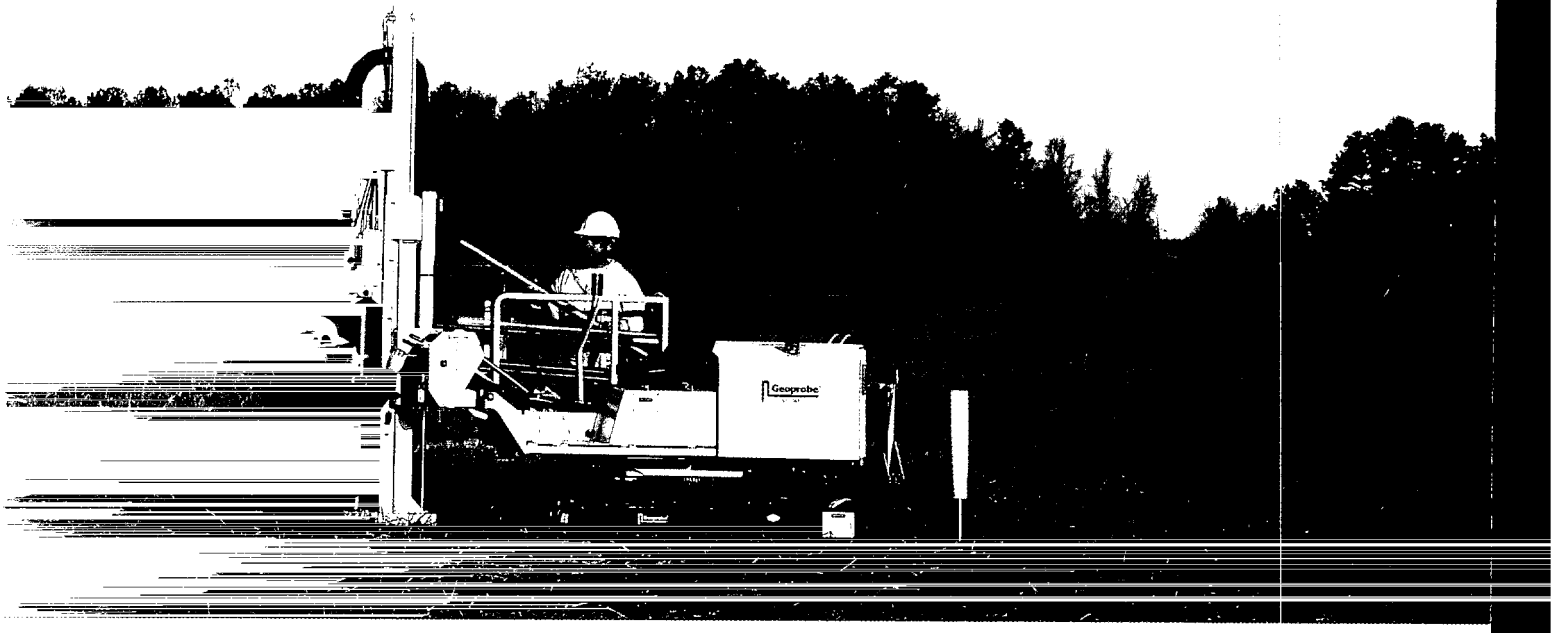
Technical enzymes
- Novozymes' market share: 45-50%
- Anticipated annual market growth: max. 5%
- Anticipated long-term annual sales growth: approx. 5%

Technical enzymes include products for:
- The detergent industry
- The starch, textile, fuel ethanol, pharmaceutical, leather and forest products industries, and other smaller technical industries
- Proteins for the pharmaceutical industry from Novozymes Biopharma AB

Sales of technical enzymes increased by 3% in 2003. Sales of detergent enzymes were flat while sales of other technical enzymes grew by 7%.

The market for detergent enzymes has been hit by generally fierce competition between the major players in an almost stagnant market for detergents. Global enzyme consumption has thus fallen over the last two years, primarily as a result of the detergent producers' focus on ingredient savings. Nonetheless Novozymes saw healthy growth in 2003 in local currency terms. This was due primarily to the launch of a series of new enzyme products winning Novozymes a growing share of the market. In 2004 Novozymes expects to continue the renewal of





Novozymes carries out checks on groundwater around our site in Franklinton, North Carolina, to monitor the level of nutrients in the water.

Approved by the authorities

Novozymes' system of applying treated wastes to local fields was developed in the late 1970s together with recognised soil scientists. Novozymes has regularly reported all applications to the local authorities ever since.

At this point we cannot eliminate Novozymes as a potential contributor to the elevated levels. However, nitrates can come from a number of sources, especially in an agricultural community like Franklin County. Nitrates naturally occur in groundwater, and agricultural fertilisers and septic systems are common sources of nitrates in groundwater.

Proactive contact with neighbours

Novozymes has a strong commitment to sustainable development – including a strong environmental profile – and we find it crucial to have good relations with the neighbours around our sites. Lee Yarbrough, who heads up Novozymes North America, says: "We contacted our neighbours as soon as we heard from the authorities that they would be carrying out tests, and we've tried to the best of our ability to help our neighbours through this difficult situation by answering questions and supplying them with bottled drinking water.

"We have also connected them to a county water supply or other clean water sources. In addition we have taken several readings of the groundwater to gain a better picture of what is happening and reported these readings to the local authorities. We also contacted the local press on our own initiative and we've informed the public of the facts regarding the situation in an advertisement in the local paper."

Working with the authorities

Novozymes is working diligently with the authorities to evaluate the extent and possible sources of the elevated levels of nitrate. A preliminary report on the situation from Novozymes was sent to the authorities at the end of the year. This preliminary report showed elevated levels of nitrates under Novozymes' fields. More testing is needed to assess the impact of nitrates beyond the company's field boundaries. A date of September 30, 2004 has been set in conjunction with regulatory authorities for completing the additional testing. □

Nitrate issue in Franklinton

Pursuant to a permit from governmental authorities, Novozymes' site in Franklinton in the USA sprays processed wastewater on agricultural fields and crops in the vicinity of the facility. We have done so with official approval ever since the facility first opened in 1979. Novozymes monitors the groundwater beneath the spray fields to evaluate nitrate levels and other parameters in accordance with permit requirements.

In 2003 levels of nitrate exceeding the North Carolina water quality standard for nitrate in drinking water were detected in wells under some of the spray fields and subsequently by the regulatory authorities in certain neighbours' supply wells. We take this very seriously and, together with the authorities and others, we will do all we can to identify the sources and the extent of any nitrates in this groundwater.

Novozymes reported elevated nitrate levels

During spring 2003 nitrate levels were determined to be trending up in a number of monitoring wells on Novozymes' site in Franklinton. Novozymes discussed this with the local authorities, which followed up by testing the water in 22 private wells in the area around the site. The results revealed that water in some of these wells had a nitrate content above the North Carolina water quality standard for nitrate in drinking water.

The number of breaches in groundwater monitoring wells at Site Franklinton was lower than in 2002. This is primarily due to additional sampling required in 2002 but not in 2003.

Recycling wastewater

Novozymes first treats and then recycles its wastewater by spraying it on nearby fields, which it has done with official approval ever since the plant first opened in 1979. This wastewater contains no sanitary wastes and therefore is free of pathogens. Recycling wastewater in this way is today an environmentally friendly solution, as the wastewater adds value to the crops and helps to recharge the limited groundwater in the region.

The fact of the matter is that water moves very slowly through the landscape in central North Carolina, so it can be many years before any residual nitrates from land application end up in groundwater. The level of nitrates that we are seeing in our monitoring wells now could be related to wastewater applied on our property ten or more years ago.

Over the years Novozymes has worked to reduce the amount of nitrates applied through the recycling process. In fact in 1998 Novozymes upgraded its wastewater treatment plant, which reduced the nitrate content by more than 75%. This upgrade resulted in the application of nitrogen to the fields at a rate considerably lower than the amount recommended by the US Department of Agriculture for healthy plant growth.

Responsible purchasing

More than a third of the revenue Novozymes generates in sales is spent on goods and services. It is therefore very important for our financial performance that purchases are managed optimally. Suppliers also play a key role when it comes to Novozymes' policy on sustainable development and taking our social responsibilities seriously. In 2003 we therefore took the first steps towards evaluating our suppliers on their social performance as well.

Price, quality and ability to deliver are important parameters when choosing a supplier. But more strategic cooperation with selected suppliers is also expected to have a growing impact on our business development in the future. Working closely together and, for example, sharing knowledge with suppliers with core expertise in specific areas will enable Novozymes to promote the development of new products and processes.

Just as suppliers are important partners when it comes to realising commercial advantages, they also play an important role in our efforts to run our business in a sustainable manner. Environmental responsibility is an established part of our systematic evaluation of suppliers, and in 2003 we included social performance for the first time. The focus was on human rights and labour standards.

Clear response on child labour

On the basis of International Labour Organization (ILO) conventions we developed a questionnaire where suppliers were asked whether they comply with fundamental international labour standards.

For example, regarding child labour, suppliers were asked to state whether all of their employees are at least 15 years old and whether they could demonstrate this in an external audit. The suppliers were also asked to confirm their willingness to undergo an external audit. A total of 53 suppliers together accounting for 35% of the value of Novozymes' purchases of raw materials for enzyme production were sent the questionnaire. In two out of three cases the responses were satisfactory, while in the remaining cases there was a need to follow up with more in-depth questions. In one case the questionnaire had yet to be returned at the end of the year. Efforts to obtain a satisfactory response from this supplier are continuing.

Questionnaires raise awareness

Novozymes is satisfied with the results. Only in a few cases did we find that our suppliers failed to comply with the standards and here the questionnaire has led to a constructive dialogue between the supplier and purchasers from Novozymes on possible solutions. Examples of this are where a supplier's collective agreement with local trade unions does not set limits for overtime, which must not exceed 12 hours a week under ILO conventions, and with other suppliers there were problems when it came to occupational health and safety. We have offered to help two suppliers with identifying and implementing health and safety improvements.

When a questionnaire cannot be answered satisfactorily, we are prepared to go to great lengths to work with the supplier to tackle any shortcomings in its practice in relation to the international minimum standards. The purpose of the questionnaire is first and foremost to increase awareness of international rules; only if dialogue fails to lead to improvements after repeated attempts will we consider the consequences for our working relationship.

Quality, environmental and social responsibility

In 2004 the social evaluation will be extended to include more suppliers, corresponding to 80% of the value of Novozymes' raw material purchases for enzyme production. This will then cover all of Novozymes' key suppliers.

The evaluation also covers various parameters relating to commercial matters, raw material quality and environmental impacts, including suppliers' environmental policies and targets, as well as the origin and composition of raw materials. ■

...ercy Taylor, purchasing manager from Novozymes in Frank-...furt, checks the quality of materials supplied for production. ...Novozymes also investigates whether suppliers are environ-...mentally and socially responsible.

20 questions for suppliers

Selected Novozymes suppliers answered 20 questions about social responsibility:

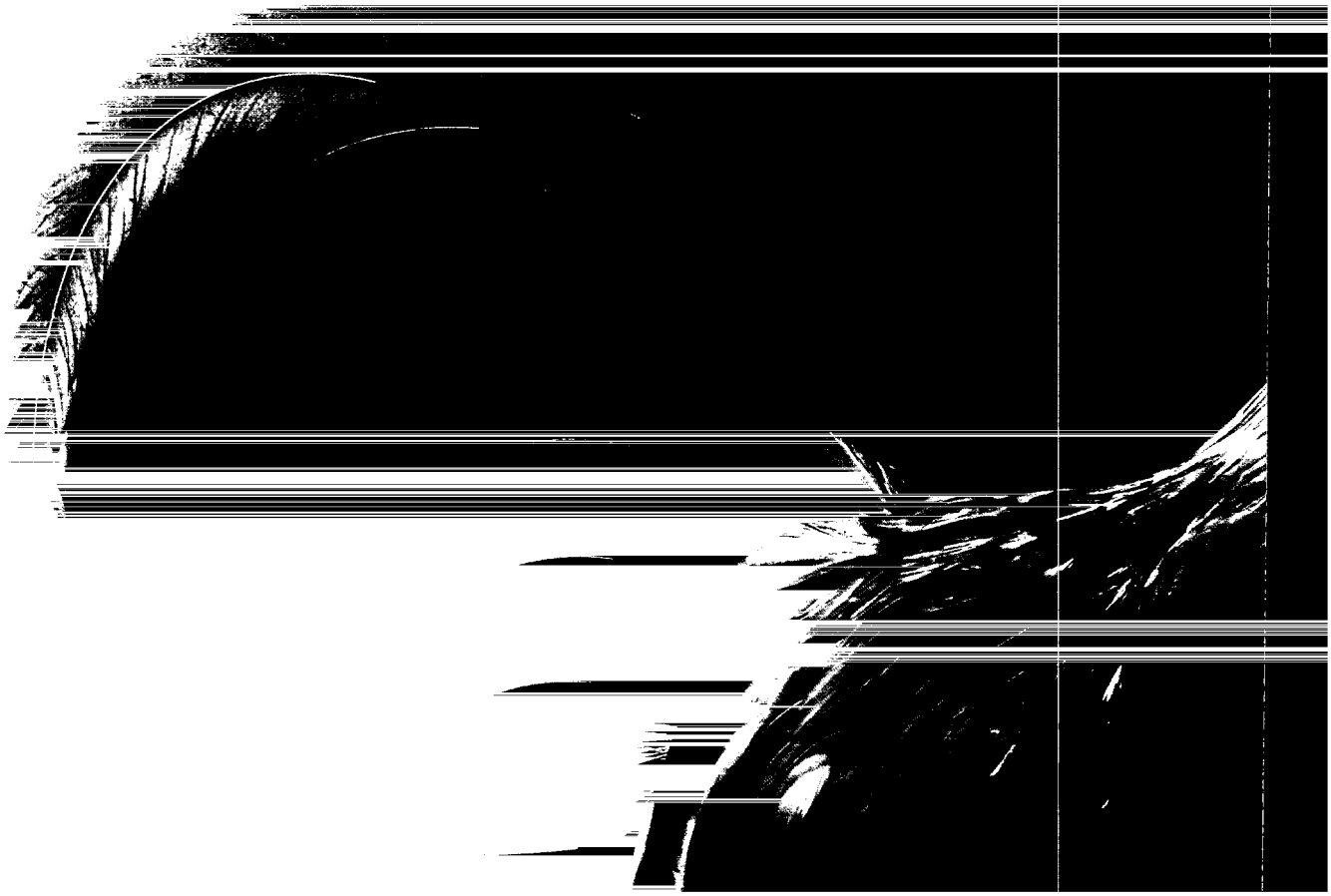
- Forced labour
- Child labour
- Occupational health and safety
- Discrimination
- Freedom of association and collective bargaining
- Disciplinary measures
- Working hours
- Wages

Suppliers were also asked how they would document their responses for an external auditor and whether they have systems in place to monitor human rights and labour standards in their own supply chains.

Read more about the social evaluation of suppliers at www.novozymes.com/sustainability.

New areas

Both DSM and Novozymes consider the alliance to be a success and are therefore keen to extend it to include new areas wherever the opportunity arises. Thus in 2003 DSM and Novozymes extended the alliance to include pet food, an area where DSM already had a strong market position thanks to its vitamin and carotenoid (see glossary) products. Novozymes produces a number of enzymes for use in pet food and DSM is now selling these. ■



Novozymes' feed enzymes are used primarily for chickens and pigs.

The DSM alliance: when one plus one makes more than two

Sales of enzymes for animal feed are accounting for an increasing proportion of Novozymes' turnover. Since 2001 this growth has been driven by a successful alliance with Roche Vitamins & Fine Chemicals, which was taken over by DSM Nutritional Products in 2003.

One key element of Novozymes' business strategy is to enter into alliances with market-leading companies in areas where this is the best way of expanding the use of enzymes. One of the finest examples of this is the three-year-old alliance with Roche Vitamins & Fine Chemicals (now DSM Nutritional Products) on the development, marketing and sale of enzymes for animal feed.

In the three years since the alliance started, sales of feed enzymes have grown by an average of 29% a year. In 2003 these sales totalled DKK 636 million, equivalent to 11% of Novozymes' overall turnover. Growth in sales of feed enzymes is expected to be slower in the coming years than in 2003.

The approval of DSM's acquisition of Roche Vitamins & Fine Chemicals by the competition authorities in the EU and then the US Federal Trade Commission in September 2003 ensured that this successful alliance can now continue.

Complementary core competences

DSM and Novozymes have decided to continue the alliance with which Roche and Novozymes enjoyed such success. The alliance still builds on a partnership where the two companies complement each other's core competences. This pooling of expertise is one of the most important reasons for the good results achieved by Roche and Novozymes. Each company is a leader in its particular field. Novozymes is contributing biotechnological research know-how, an extensive enzyme portfolio and expertise in the cost-effective production of enzymes. DSM, which, following the acquisition of Roche Vitamins & Fine Chemicals, is the world's largest producer of vitamins and has considerable expertise in animal feed, will handle the marketing and sale of enzymes to feed producers worldwide through its strong global sales organisation. The two companies are collaborating closely on the development of new products.

Major environmental benefits

Feed enzymes are used primarily in chicken and pig feed where they help the animals to make better use of the nutrients in the feed. The result is that the animals grow faster and gain more weight per kilo of feed, thus reducing expenditure on feed.

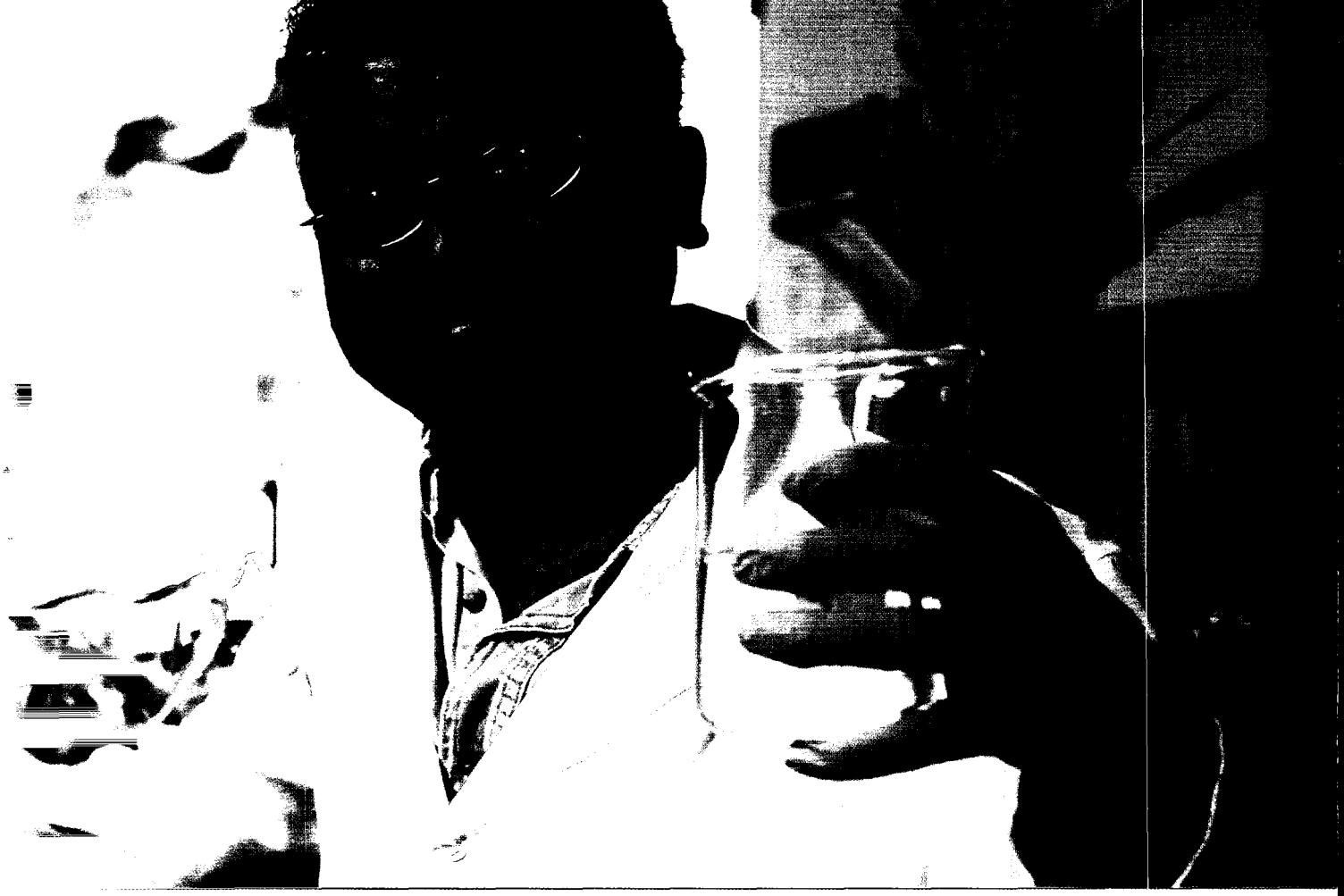
The global market for feed enzymes is estimated to be worth around DKK 1.3 billion, of which phytase products account for 60-70%. Phytase is an enzyme that enables animals to make better use of naturally occurring phosphorus in feedstuffs, making it possible to reduce the amount of mineral phosphorus added. Phosphorus is needed for the animals to build up bone mass. Adding phytase to feed also has major environmental benefits because the amount of phosphorus ending up in the environment in manure can be reduced by up to 30%. Other feed enzymes help to break down proteins and fibre in grain and so increase the uptake of nutrients.

Product development

Novozymes commands 40-45% of the world market for feed enzymes. This is a market that still has considerable growth potential since phytase is currently added to less than 30% of global feed production. Novozymes and DSM are also working hard to develop new enzymes for this market. Areas where research and development work is under way include:

- New highly effective phytase products
- Enzymes that can improve the utilisation of soy protein in feeds
- Enzymes for use in fish farming both onshore and offshore

In the long term Novozymes expects its sales of feed enzymes to grow by 10-20% a year.



Together with other researchers, Malcolm Johal from Novozymes in Davis, California, is working on the development of enzymes which can convert corn stover, for example, into fuel ethanol.

Positive expectations

Using advanced technologies such as gene chips, directed evolution and robot assays (see glossary), Novozymes is able to identify and design enzyme blends that can convert cellulose into fermentable sugars more efficiently. A change in the production process is also important for substantially reducing the cost of producing enzymes for this purpose. Novozymes believes that it will achieve the target of a ten-fold reduction in cost and thereby take a further step towards the commercialisation of this future industry: cellulosic biomass-to-fuel ethanol.

The research project was carried out with a subcontract of up to USD 14.8 million from the US Department of Energy (DoE). The final results will be published in February 2004.

Technology with potential

This work does in fact have even more far-reaching potential for the environment. In addition to agricultural waste such as corn stover and rice straw, biomass from the forest industry such as branches, sawdust and paper may one day be able to replace crude oil in the production of not only fuel ethanol but also other traditionally petrochemical products such as plastics, polymers and organic acids. □

Enzymes provide environmentally friendly fuel

Cars that run on fuel produced from agricultural waste. It sounds like an environmental pipedream, but it is in fact a possibility in the not too distant future – thanks in part to Novozymes' research into new enzymes.

Many of the cars on US highways already run on a gasoline blend where the environmentally hazardous additive MTBE has been replaced with ethanol derived primarily from corn. The ethanol, which increases the fuel's octane count in a similar manner to MTBE, is burned together with the gasoline. Ethanol is manufactured using a process where enzymes turn the starch in the corn into fermentable sugars which can then be used to produce ethanol. Novozymes is currently the world's leading producer of enzymes in this field.

Agricultural waste instead of grain

An estimated 10% of US farmland is now used to grow crops for the production of fuel ethanol. Since the market for ethanol is expected to grow by 15-20% a year, the pressure is on to find other raw materials that can replace grain in the production process.

With funding from the US Department of Energy and in collaboration with the US National Renewable Energy Laboratory, Novozymes has spent the last three years researching the development of enzymes that can profitably obtain fermentable sugars from agricultural waste such as stover, leaves and other types of cellulosic plant material. The aim of the project was to reduce the cost of enzymes in biomass-to-ethanol production ten-fold.

Greener grass with environmentally friendly microorganisms

Employees and organisation

Competence development is vital for Novozymes' continued competitiveness. Employees therefore have a personal training or development plan, which is followed up each year together with his or her manager. We constantly strive to retain existing employees and be able to attract new recruits as needed.

In 2003, as in 2001, we conducted a global working climate survey* among our employees. Following on from the launch of Novozymes' Leadership Competences in 2002, there was a special focus in the 2003 survey on employees' perception of managers' ability to share knowledge and promote employee development. 62.9% of respondents agreed with the statement "My manager encourages us to share knowledge and experience with others". Since this is the first time that knowledge sharing has been included in the working climate survey, there is no basis for comparison, but the result did meet Novozymes' internal target.

Employees share knowledge

The electronic document management system LUNA enables Novozymes' employees to share knowledge in the form of documents which are archived and can be viewed by the relevant people. Employees also share knowledge extensively through meetings, networks and the individual departments' IT systems. The use of LUNA is steadily increasing, with 2,207 users in 2003 compared with 1,972 in 2002.

An attractive workplace

In Denmark we measure our ability to attract new employees partly through the Universum survey, which asks graduating students at universities and business schools which companies would be their preferred employers. In 2003 Novozymes was the seventh most attractive potential employer for students on science and engineering courses, from which we recruit many graduates. Among business students Novozymes came in 50th. We are satisfied with our ranking in the Universum survey. Novozymes was also named the fifth best employer in China in 2003 by Hewitt Associates and Harvard Business Review China. ■

** Results for 2003 are based on the 2,787 responses received as at January 18, 2004. In 2001 3,167 responses were received.*

Knowledge management in focus

Knowledge management was a key theme at Novozymes in 2003. We carried out a project involving employees from different parts of the organisation to come up with a definition of knowledge management that suits Novozymes.

We also embarked on a series of initiatives to promote more knowledge sharing. These initiatives fall within three areas – people, processes and IT systems – and include:

- A new global employee portal
- A uniform introduction to Novozymes' business processes for new employees

To promote innovation Novozymes makes use of various ways of brainstorming.

Customers

Insight into our customers' business processes and needs is essential for us to be able to offer the right products and the right service. In 2003 we organised Novozymes' supply chain into a new organisation – Supply Chain Operations (SCO) – focusing specifically on optimising our supply chain. The key to success in this area is sharing knowledge with the customer, not only about products but also about how we can best share the workload and minimise costs in the supply chain and in the customer's use of the product. The new SCO organisation has launched various initiatives to promote the exchange of detailed information on business processes and confidential collaboration.

These initiatives include:

- Improved information for employees on how the supply chain between customers and Novozymes works and is affected by employees in the various departments.
- Establishing partnerships in the supply chain, including collaboration with customers on integrated IT systems that make it possible to plan precisely when goods should be sent out to customers.
- Involvement, together with other large companies, in a research project on supply chain communities (supply chain fora), which aims to develop ways of working together that make it possible to share problems and exchange knowledge between companies on a practical and organisational level.

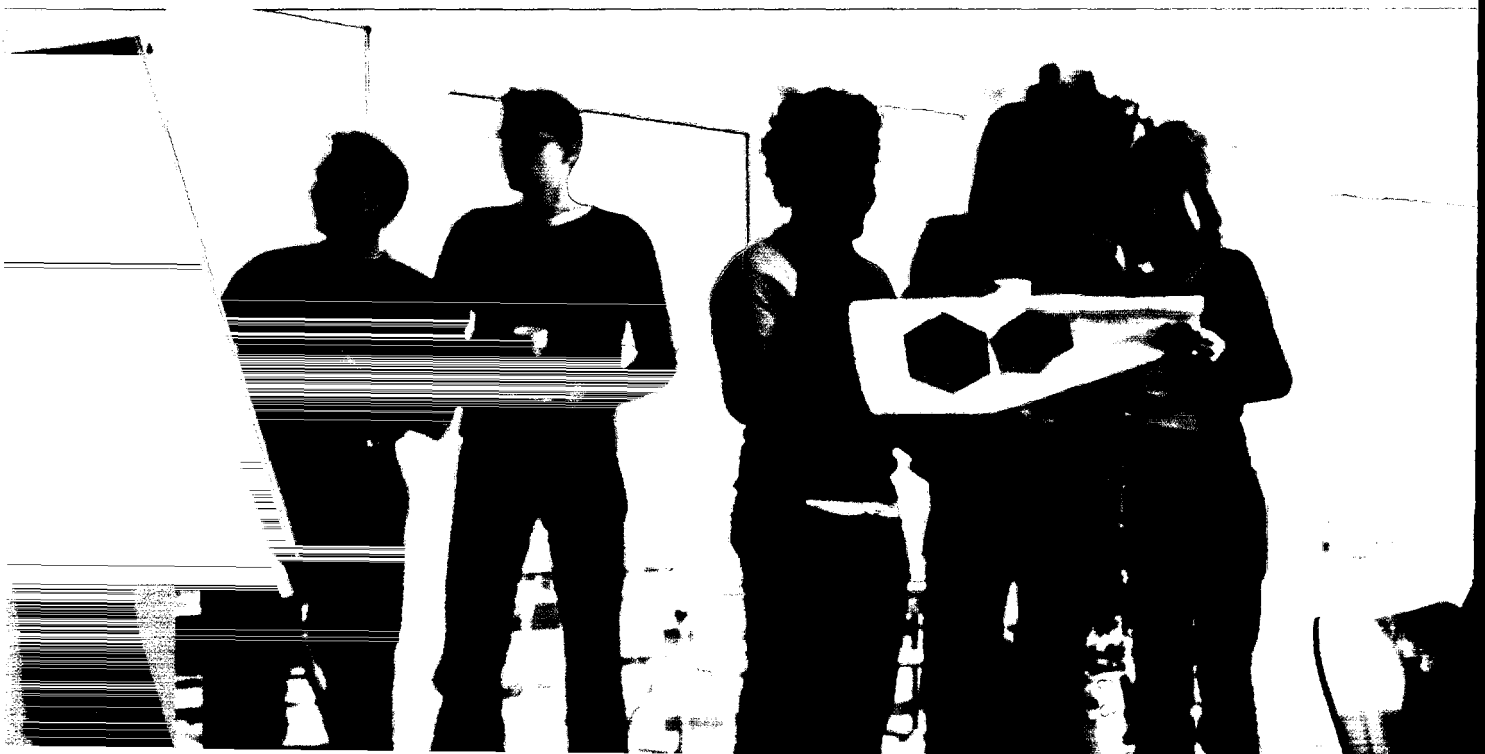
Important tools

Novozymes' customer relationship management (CRM) system is a key tool when it comes to making knowledge about customers' needs widely available in the organisation. The system includes customer plans, contact details and visit reports. The CRM system was introduced in 2001 and is used by employees in Sales & Marketing, Research & Development and Supply Chain Operations. The number of users is steadily growing, with 611 users in 2003 compared with 592 in 2002.

Novozymes constantly monitors and measures whether the company's business processes are functioning optimally, both internally and in relation to customers. This is achieved using a reporting system which gathers together information and shows how the business is performing in terms of the delivery process, complaints, product acceptance and so on. This information is collated quarterly and assessed by management with a view to making any necessary changes.

e-commerce award

Much of our communication with customers is electronic, and we are continuing to develop our e-commerce solution for Internet customers. In 2003 we launched a new customer newsletter with information on our products and markets. Novozymes also won the 2003 Danish E-commerce Award for its e-commerce solution, which features seven different language versions and information tailored to individual customers and industries. More than a third of all orders are now placed over the Internet.



Development projects

Novozymes has around 100 separate product development projects in various stages of completion, of which around 30 are in the closing phases and the remainder in the opening phases. Novozymes' future financial performance is not dependent on the outcome of any one project. However, it is still crucial that we deliver a steady stream of new products and continue to optimise our production processes.

Around 10% of our investments in research and development are in projects outside our existing business areas, including biopolymers and pharmaceutical proteins. When it comes to biopolymers, we expect to launch hyaluronate for use in e.g. cosmetics in 2004. Other projects include contract production of pharmaceutical proteins and research into antimicrobial peptides.

Patents

Novozymes protects its inventions through an active patenting strategy whereby we patent as early as possible. The total number of patents granted or pending is over 4,200. The patent portfolio is constantly pruned so that as far as possible we only hold the patents that are believed to have, or be likely to gain, commercial value. We work actively to protect our patent rights and avoid infringing those of others. By publishing our patents we are also sharing knowledge about our technology and products.

▶▶

Number of patent families per year		
2003	2002	2001
791	760	779

Selected enzyme development pipeline – supporting sales growth

Detergent enzymes	Other technical enzymes	Food enzymes	Feed enzymes
• Cellulase for enhanced fabric care • Proteases and amylases for improved stain removal • New concepts • Odour-removing enzyme	• Amylases for improved fuel ethanol production / new concepts **NEW** • Enzyme for degradation of plastics **NEW**	• Applications in food specialities (oils & fats, meat, vegetables) **NEW** • Lipase for improved dough properties / broader applicability at lower costs • Dairy applications with Chr. Hansen	• Better and more competitive phytase for increased phosphorus uptake • New concepts, e.g. in aquaculture and better utilisation of proteins in animal feed
3 special focus areas	US DoE / NREL biomass-to-ethanol project	Additional applications in paper & pulp production	New Chinese and Japanese applications

A study by students at Roskilde University Centre showed that, at Novozymes, even coffee breaks are an important opportunity for sharing knowledge, for example between laboratory technicians and researchers.

Knowledge and competences are the keys to growth

Novozymes is a knowledge-based company. Our products are based on research, produced in high-tech processes and often used by customers in complex technical contexts. It is vital that sales and marketing are based on an insight into our customers that enables us to understand and meet their needs both now and in the future.

With some 3,900 employees worldwide, it is also a challenge for the efficiency of our organisation to share relevant knowledge, both internally and with our partners, in the right way and without unnecessary delays. Hence knowledge management was a key theme at Novozymes in 2003. We carried out an internal project to come up with a definition of knowledge management that suits our particular business, and we also identified a number of initiatives to promote more knowledge sharing (see box on page 19).

This year Novozymes is again reporting on knowledge in three areas:

- Processes and technology
- Customers
- Employees and organisation

Processes and technology

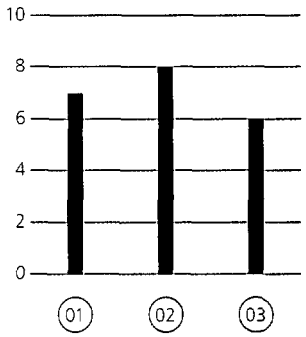
All of Novozymes' products are based on research and advanced technology. In 2003 we invested almost 13% of turnover in research and development. Research & Development has around 760 full-time employees, of whom 395 hold science degrees and around 365 have other relevant training.

A growing proportion of Novozymes' turnover stems from sales of new enzyme solutions, in other words products launched in the last five years. New products have increased their share of turnover over the years to more than 30% in 2003.

Five to seven products are typically launched each year. In 2003 we launched six new products.

Novozymes defines knowledge management as follows: "Knowledge management supports our efforts to achieve our strategic targets via people, processes and IT systems."

Product launches



We strive to be open about our use of nature's genetic resources, our research and development, and our production methods and products.

Our process

The development of a new enzyme often starts with the collection of microorganisms in nature. We search for organisms with specific properties which can be transferred to our production organisms using gene technology. We use well-known bacteria and fungi to produce our enzymes. Gene technology at Novozymes primarily entails making a microorganism capable of producing large amounts of a given enzyme, or stabilising it and giving it special properties. The microorganisms are grown in large tanks in our production plants. The enzyme production process runs for some days before the enzymes are recovered from the fermentation broth/biomass. The way in which we use gene technology is known as "contained use" (see glossary).

Many of our enzymes are produced using gene technology. Novozymes uses gene technology exclusively in the actual production process; the enzymes themselves and the products in which they are used do not contain any genetically modified organisms (GMOs).

Consumers must have access to information

Many consumers wish to know whether gene technology has been used in the production of the foods they buy and whether these contain any GMOs. Novozymes supports this kind of transparency, and the EU and an increasing number of countries have introduced rules on labelling foods in this regard.

We have ongoing discussions with food producers, retailers and other interested parties on the possibilities for providing information. Anyone interested can find information on which of our enzymes are produced using gene technology from our product sheets and on our website. ■

Lifecycle analysis

A lifecycle analysis looks at the overall impact of a product "from cradle to grave" – in other words from the utilisation of the raw materials to the production, use and ultimate disposal of the product.

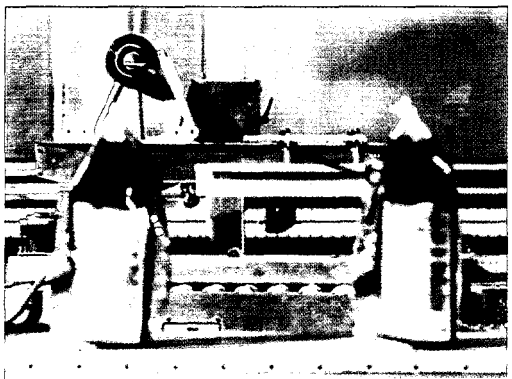
Lifecycle analyses currently focus almost exclusively on environmental impacts. In the longer term it is expected that methods will be developed for performing lifecycle analyses that also cover a product's social and economic impacts.

Novozymes will continue to develop methods for and perform lifecycle analyses of more enzyme products.

Production
The gene is transferred to another microorganism which then safely and efficiently produces large amounts of the enzyme in our fermentation tanks. The enzymes are filtered off from the GMOs and the biomass.

Enzymes improve processes
The finished enzymes make customers' production more efficient, replace chemicals and save waste, water and energy in more than 40 industries.

Better products for consumers
Enzymes improve the quality of countless products to the benefit of consumers. In detergents, for example, enzymes remove difficult stains at low temperatures.



Our biotechnology

Novozymes' goal is to use biotechnology based on nature's resources to provide industry with new and improved solutions. This is one way in which we, together with other companies, can contribute to sustainable development.

Novozymes' research leads to products and processes that provide biological solutions to many of the challenges faced by industry. We are convinced that modern biotechnology, and its approach to industrial problems, is one of the ways forward when it comes to business and sustainable development.

Cleaner cotton pre-treatment

One concrete example of how biotechnology can contribute to sustainable development is the product Scourzyme®, which Novozymes has developed for the pre-treatment of cotton in the textile industry. The renowned Öko-Institut e.V. in Germany has carried out a lifecycle analysis (see box) which shows that using Scourzyme can substantially reduce the environmental impact relative to the traditional process based on various chemicals. Treatment with Scourzyme is also cheaper.

Other examples of the potential of enzymes include the production of ethanol for gasoline and the use of phytase in animal feed. Further concrete and well-documented examples like these will help us to create increased awareness and acceptance of the benefits of modern biotechnology.

Gene technology debate presents challenges

Gene technology plays a crucial role in the development of Novozymes' products. Our use of this technology is based on a precautionary principle, which also applies when the authorities issue licences for research and production using gene technology.

As a company we face the challenge of gene technology still being viewed with a certain amount of scepticism, especially in Europe. We are therefore working to increase awareness of our activities and actively participate in the debate.

Biotechnology is used in many different fields, and part of the challenge is to explain how different uses of biotechnology and gene technology result in different environmental, social and ethical issues. Novozymes' enzymes are either used in industrial processes or added directly to a product, such as washing powder. The issues raised by these uses are different from those raised by the use of gene technology in the pharmaceutical industry or agriculture, for example.

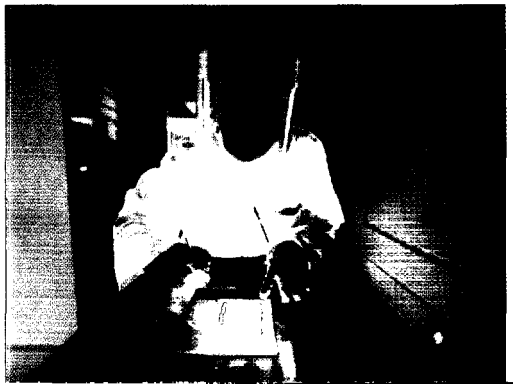
Novozymes believes gene technology to be a safe technology when used responsibly and on a scientific basis.

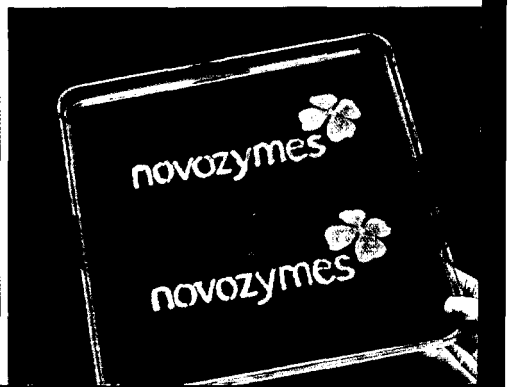
Biotechnology makes "nature's own technology" available to all

Nature's raw materials
We find the microorganism with the properties needed for our next product in a soil sample collected somewhere around the world.

The right properties
In the laboratory we identify the gene or genes that enable the microorganism to produce the desired enzyme.

Biotechnological optimisation
Gene technology enables us to make the enzyme more effective at, for example, breaking down a particular substance under certain circumstances.





New products are developed in close collaboration with customers. Novozymes' Hans Peder Christiansen (left) and Dieter Steenbuck, Production Manager from Nordisk Detergent in Hobro, Denmark.

kets, these exchange rate movements will impact significantly on its financial results in 2004.

(DKK)	**USD**	**JPY**	**CNY**
Average exchange rate for 2003	659	5.68	79.12
Spot rate on January 28, 2004	593	5.60	71.20
Change	(10%)	(1%)	(10%)

Less favourable exchange rates reduce growth in net turnover and operating profit, while net financials may be affected positively depending on how the currencies have been hedged. Assuming that exchange rates remain at their current levels for the rest of the year, especially the USD and JPY, the outlook for 2004 can be summarised as follows:

In overall terms growth in net profit after tax of approximately 4% is expected, notwithstanding the unfavourable currency situation.

This outlook is based on the following:

- Exchange rates remain at their present levels for the rest of the year, especially the USD, USD-dependent currencies and the JPY against the DKK.
- Growth in net turnover of around 4% in DKK terms and around 8% in local currency terms. Thus less favourable exchange rates are expected to reduce sales growth by a good four percentage points.
- Growth in operating profit of 4-5%. Operating profit will be affected negatively by less favourable exchange rates, since Novozymes has a higher proportion of costs than revenue denominated in DKK. Growth will be in excess of 10% in local currency terms. All other things being equal, the sensitivity of operating profit to fluctuations in exchange rates in 2004 is expected to be DKK 30-40 million for the USD and CNY together and DKK 5-15 million for the JPY, based on a 5% change in the exchange rate.
- Net financial income of DKK 0-10 million. Net financials are expected to be affected positively by currency hedging gains. The majority of net cash flows in USD and JPY have been hedged for 2004.
- Operating profit margin of around 17%.
- Net profit is expected to grow by approximately 4%.
- Free cash flow before acquisitions of DKK 750-850 million. Investments in tangible fixed assets before acquisitions are expected to be at the level of depreciation and amortisation charges for the year. This will make it the fifth successive year that investments have been held at or below the level of depreciation and amortisation charges. It is also expected that the overall investment framework in 2003-2005, excluding acquisitions, will be at or below the total level of depreciation and amortisation charges for the same period. The background to this is expectations of continuous major productivity improvements.
- Return on invested capital after tax on a par with 2003.

Novozymes' long-term financial targets are unchanged:

- Annual growth in operating profit of at least 10%
- Operating profit margin of around 17%
- Return on average invested capital after tax of at least 15%

The Financial discussion on page 36 contains further information on Novozymes' capital structure. ■

turnover. For the next couple of years the focus will be on boosting organic growth and increasing profitability.

Biopolymers and pharmaceutical proteins

It is still expected that Novozymes will launch its first hyaluronate, HyaCare™, in 2004, initially for technical applications such as cosmetics. Biopolymers may be an area for acquisitions in the future.

Pending litigation

The Danisco arbitration case also referred to in the 2002 Annual Report has yet to be resolved. Danisco is claiming that Novozymes has unlawfully appropriated certain lipase-related inventions. Novozymes still believes that it has a strong case. At the time of presenting the Annual Report for 2002, an arbitration ruling was expected at the end of 2003 or start of 2004. It is now expected at the end of 2004.

Events occurring after the close of the financial year

A new share-based incentive programme for the Management has been adopted to cover the financial years 2004-2006. A pool of 185,955 B shares from the company's own holdings has been set aside for this purpose. The release of some or all of this pool is dependent on the level of financial value added which Novozymes generates for its shareholders in the period 2004-2006. If the value added is less than DKK 500 million, no shares will be allocated. Above this level the allocation will increase in proportion to value added up to a maximum value added of DKK 1,500 million, at which level the entire pool will be paid out. Any allocations from the pool will be made to the Management as a whole in 2007.

Corporate governance

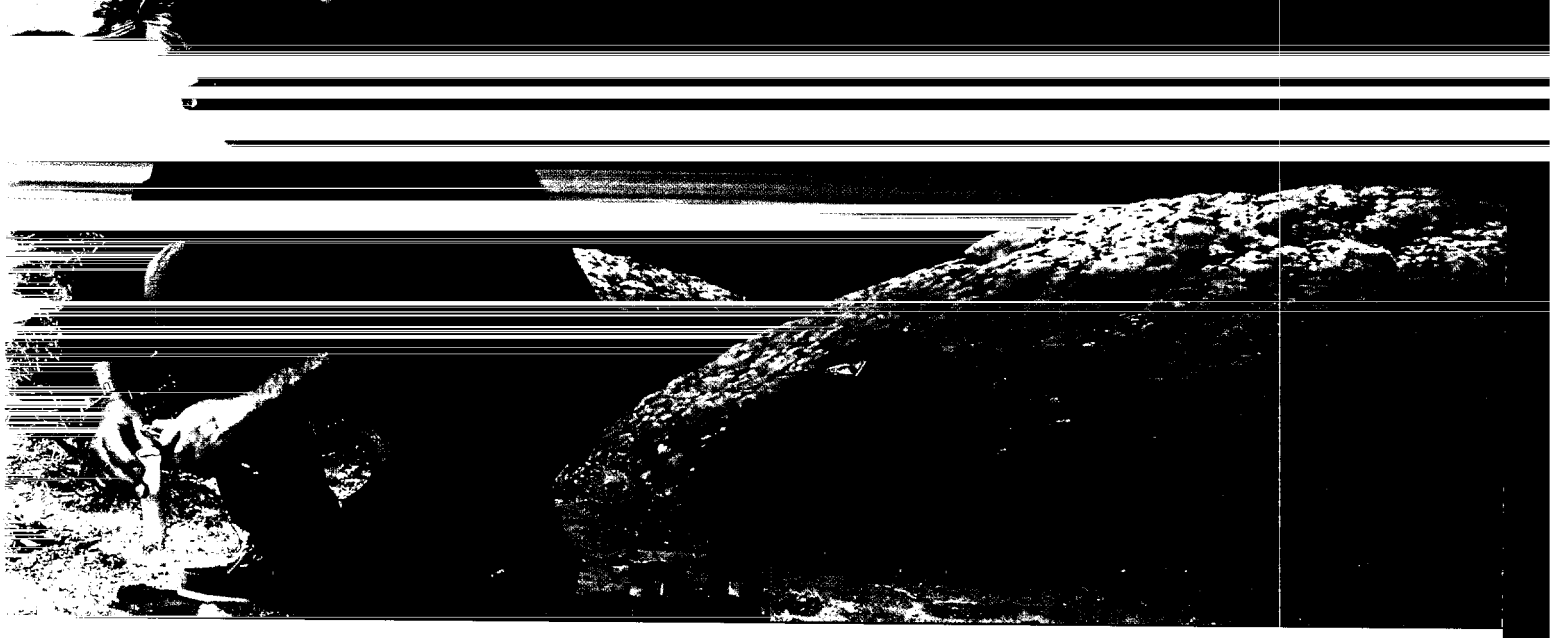
Good corporate governance is about openness and transparency since it provides our stakeholders with relevant and valuable insights for their assessment of the business. As an example of good corporate governance, in the 2002 Annual Report we described a new method for evaluating the effectiveness of cooperation between Novozymes' Board of Directors and Management. As part of the Board of Directors' annual follow-up work in 2003, the self-assessment process revealed a need for:

- A sharper focus on non-conformances and trends than on operational and financial reporting
- More in-depth reporting and testing of strategies outside the enzyme business, based on scenarios and strategic choices
- Greater insight, breadth and depth in the reporting, discussion and follow-up of organisational, environmental and social matters
- Further clarification of the roles of the Management and employee representatives in relation to the Board of Directors

Read more about Novozymes' stance on corporate governance and its management and control systems at www.novozymes.com —> About Us —> Corporate Governance.

Outlook for 2004 and long-term financial targets

The key sales currencies depreciated against the DKK in 2003 and continued to fall at the beginning of 2004. Since 96% of Novozymes' sales take place in international mar-



Novozymes finds microorganisms and enzymes in soil samples all over the world.

better than the stock market as a whole: for example, the Copenhagen Stock Exchange's KFX blue-chip index gained 22% in 2003.

In September 2003 Novozymes was ranked by Dow Jones Sustainability Indexes as the most sustainable listed healthcare/biotechnology company both in Europe and worldwide. This position underlines Novozymes' ability to generate long-term shareholder value by seizing opportunities and managing risks deriving from economic, environmental and social factors.

Novozymes made total payments to shareholders of DKK 554 million during the year, breaking down into a dividend of DKK 162 million for the 2002 financial year and a fourth share buy-back programme worth DKK 392 million. In total, shareholders were paid 76% of the year's net profit and 69% of free cash flow.

As part of the optimisation of Novozymes' capital structure, the Board of Directors has approved a multi-annual share buy-back programme through which the company plans to buy back own shares worth up to DKK 2.5 billion. Share buy-backs of up to DKK 650 million are anticipated in 2004. The Board has also resolved to increase the dividend payout ratio to at least 30% of net profit, against 25% in 2002.

At the Annual Meeting of Shareholders on March 17, 2004, the Board of Directors will recommend payment of a dividend of DKK 3.15 per share for the 2003 financial year, an increase of 40%. This is equivalent to a dividend payout ratio of 30%.

Business highlights

Enzymes for industrial use

Novozymes launched six new products for various industries. Two of these new products are a result of the venture into new growth areas launched in 2001.

In February 2003 Novozymes reached the second milestone in its contract with the US Department of Energy for the development of more effective enzymes for the production of fuel ethanol from biomass.

The ongoing collaboration between research and production units again resulted in major productivity improvements during the year, such as the development of new production strains that can produce enzymes more efficiently.

In September DSM and Novozymes announced that they would be continuing and expanding the strategic alliance in feed enzymes between Roche Vitamins & Fine Chemicals and Novozymes following the approval of DSM's takeover of Roche Vitamins & Fine Chemicals by the US Federal Trade Commission. The alliance between Roche Vitamins & Fine Chemicals and Novozymes started up in 2000 and has been a major success.

Microorganisms for industrial use

To strengthen Novozymes Biologicals, Novozymes acquired Semco Bioscience and the bulk of the activities of Roots in February and June 2003 respectively. Integration of these activities is on schedule, and microorganisms now account for more than 4% of Novozymes' business in terms of ▸▸

Report of the Board of Directors

The growth in sales continued in 2003 and the enzyme business came out of the year stronger with increased market share.

Financial results

In 2003 Novozymes achieved healthy organic sales growth in its enzyme business and strengthened its industrial microorganisms business through two further acquisitions.

Turnover grew by 3% to DKK 5,803 million, while growth in local currency terms was 12%. Thus less favourable exchange rates reduced sales growth by nine percentage points. Exchange rates also impacted very negatively on operating profit. Operating profit climbed by 4% to DKK 982 million and the operating profit margin increased to 16.9% despite the exchange rate situation. Net profit rose by 13% to DKK 726 million, which was more than expected at the beginning of the year.

The return on average invested capital (ROIC) increased from 13.1% in 2002 to 15.0% in 2003. Thus Novozymes has already succeeded in reaching the long-term ROIC target formulated at the time of its stock exchange listing in 2000.

Free cash flow came to DKK 982 million before and DKK 800 million after acquisitions, equivalent to 17% and 14% of turnover respectively.

The results achieved in 2003 are highly satisfactory.

Environmental and social results

In 2003 Novozymes again managed to improve the eco-productivity indices for water and energy. The target was an improvement of at least 5% in each, while the actual figures were 10% and 8%, which indicates a substantial improvement in the utilisation of resources.

Unfortunately 2003 was also the year when elevated nitrate levels were detected in an area around our site in the USA. Work to identify the cause is under way, including whether Novozymes is implicated.

As in 2001, an extensive working climate survey covering all employees was carried out in 2003. As an example of the results, the 2003 survey revealed a decrease in the number of people who feel stressed compared with 2001. It is rewarding to see that the initiatives launched to reduce stress levels seem to have had a positive effect.

The number of occupational accidents resulting in absence has decreased, from 55 in 2002 to 44 in 2003, but unfortunately the number of occupational diseases has increased.

Parts of the bonus scheme for the Executive Management have now been modified so that the award criteria are directly dependent on fulfilment of the targets set for the company's environmental and social responsibility.

Shareholder value

Novozymes A/S' B share ended the year at DKK 215.50, having risen by 46% over the year. The mood on the stock market was generally positive despite falling exchange rates. However, the Novozymes share fared significantly

in all markets served. Our long-term financial targets are:

- Annual growth in operating profit of at least 10%
- Operating profit margin of around 17%
- Annual return on average invested capital after tax of at least 15%

Dialogue and partnerships

Novozymes has a wide range of stakeholders inside and outside the company, and we aim to be open and to listen. Our stakeholders include customers, investors, employees, suppliers, authorities, private and public research environments, neighbours and NGOs.

Sustainable development

We aim to promote the necessary balance between better business, cleaner environment and better lives. As a company we see it as our duty to act responsibly in relation to the outside world.

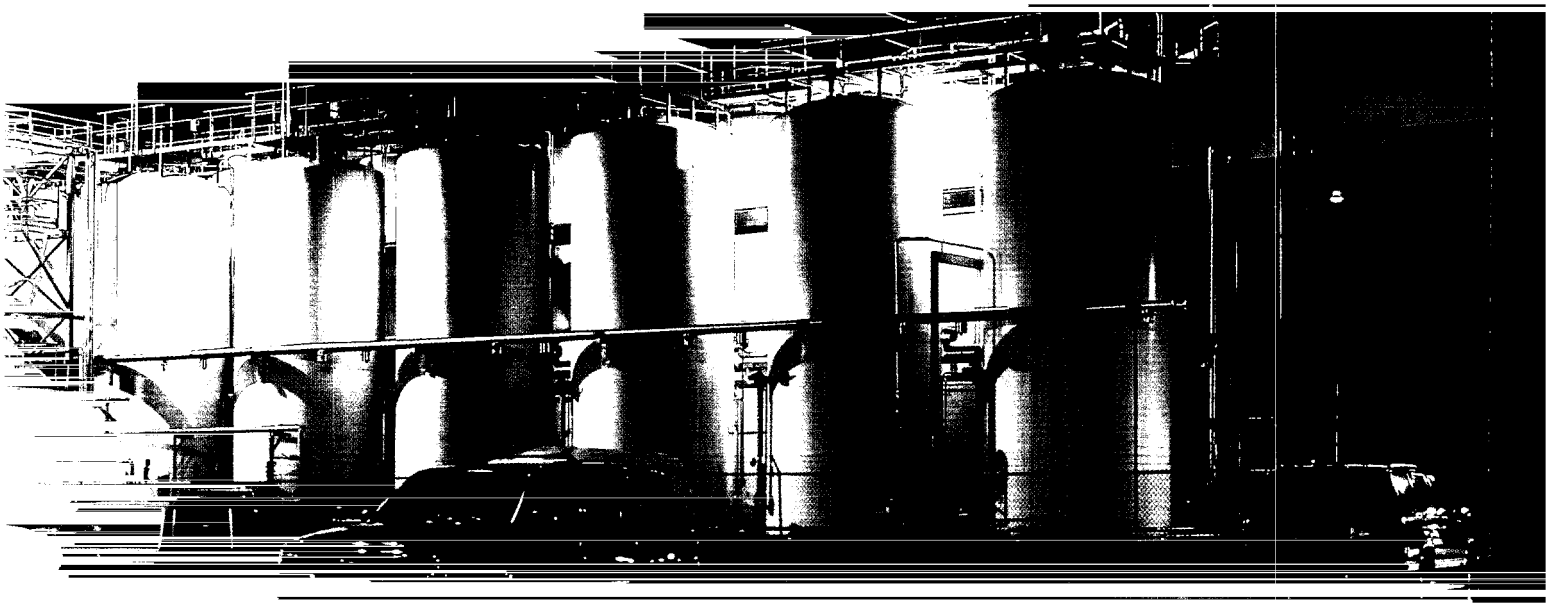
The principles of sustainable development form an increasingly integrated part of Novozymes' management systems, which build on written values, policies and standards.

Novozymes' efforts to contribute to sustainable development are headed by a strategy group (Sustainability Development Strategy Group), which reports to Executive Management and consists of top-level managers from all our line organisations and local management in Brazil, the USA, China and Denmark. The strategy group's role is to ensure that environmental and social responsibility forms part of the basis for corporate business decisions.

As part of our values and business principles we have made commitments in a number of areas. For example, we subscribe to the UN Global Compact, a set of principles in the areas of human rights, labour standards and the environment. The following pages and the brief Global Compact report on the enclosed CD-ROM provide information on our performance in relation to these commitments.

Read more about Novozymes at www.novozymes.com —> About Us. □

Novozymes manufactures its products in large tanks which provide ideal living conditions for the microorganisms, enabling them to produce large quantities of enzymes.



Novozymes in brief

Novozymes is a biotech-based world leader in enzymes and microorganisms. Our solutions build on nature's resources and on biological principles. Each and every day they help to generate growth for our customers, shareholders and employees.

In 2003 we recorded turnover of DKK 5,803 million, operating profit of DKK 982 million and an operating profit margin of 16.9%.

Products and markets

Novozymes supplies biological solutions to industrial problems. We produce and market more than 600 different products which are used by industrial companies in the production of a wide range of everyday products, including foods and beverages, clothing and detergents. Enzymes and microorganisms from Novozymes help our customers to improve their processes and the performance and quality of their products. Our products are environmentally friendly because they help to save water, energy and raw materials and to reduce the amount of waste.

Our products include:

Enzymes for industrial use:

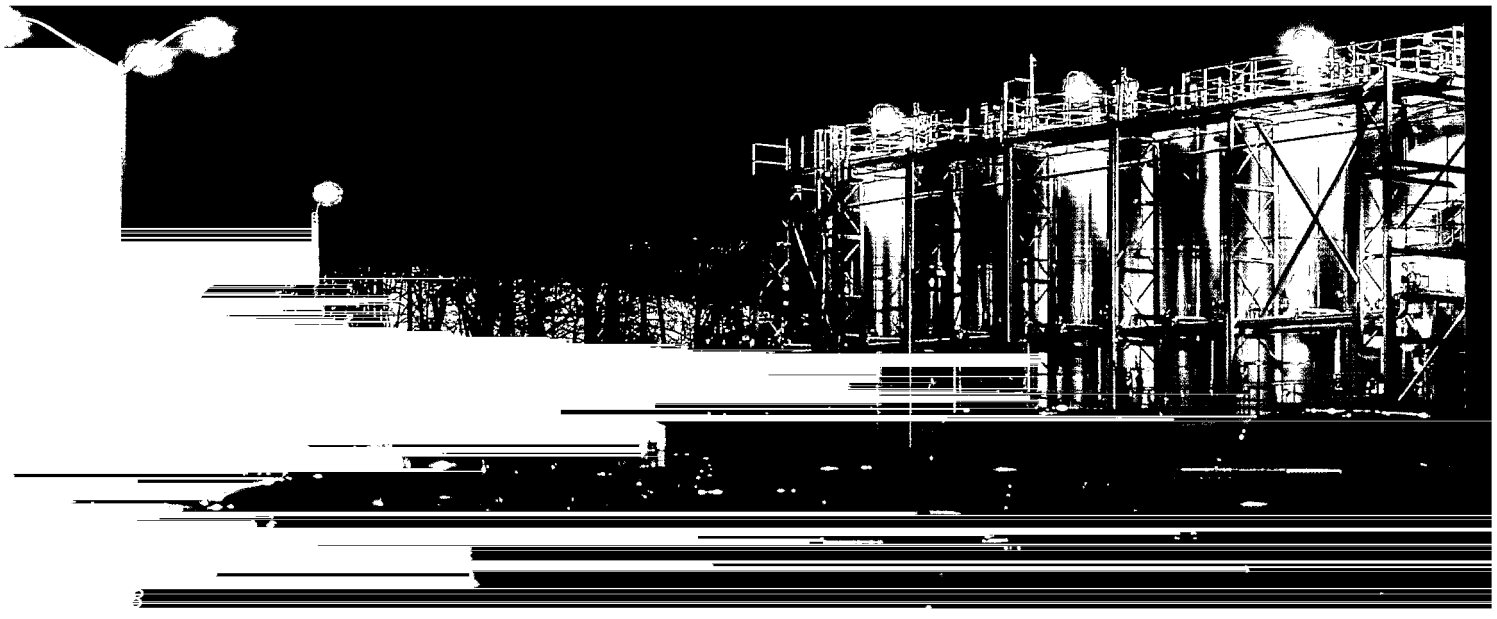
- Technical enzymes, including detergent enzymes
- Food enzymes
- Feed enzymes

Microorganisms for industrial use in wastewater treatment, cleaning and biological plant care.

Novozymes' products are sold in 130 countries. Europe, North America and Asia are our most important geographical markets.

Growth strategy

We have around 3,900 employees in more than 30 countries worldwide. Our vision is to drive a significant expansion of the market for industrial biotechnology based on enzymes and microorganisms. Outside these areas we also have research and development activities in biopolymers and pharmaceutical proteins. Novozymes aims to achieve double-digit growth with a leadership position



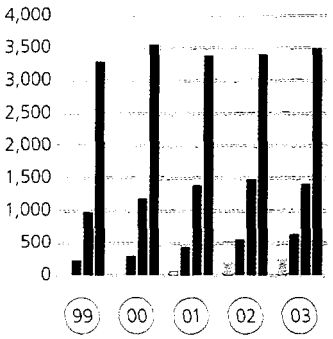
Key indicators 2003

Key figures 2003

Turnover: DKK 5,803 million
Operating profit: DKK 982 million
Net profit: DKK 726 million
Operating profit margin: 16.9%
ROIC: 15.0%
Free cash flow before acquisitions as a percentage of turnover: 16.9%
EPI, water: 110
EPI, energy: 108
Frequency of occupational accidents: 7.1
Number of new jobs: 120

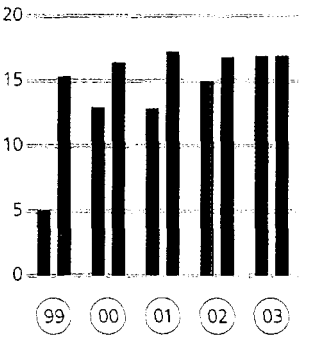
Turnover
Turnover rose by 3%, negatively affected by lower exchange rates.
- Technical enzymes
- Food enzymes
- Feed enzymes
- Microorganisms

DKK million

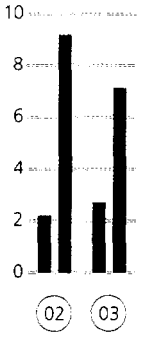


Operating profit margin and free cash flow before acquisitions as a percentage of turnover
Operating profit margin was 16.9%.
- Free cash flow before acquisitions as a percentage of turnover
- Operating profit margin

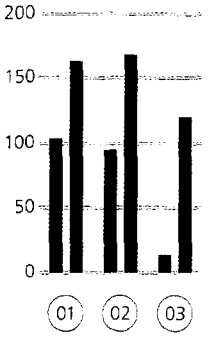
%



Occupational accidents and diseases (per million working hours)
The number of occupational accidents fell in 2003.
- Frequency of occupational diseases
- Frequency of occupational accidents

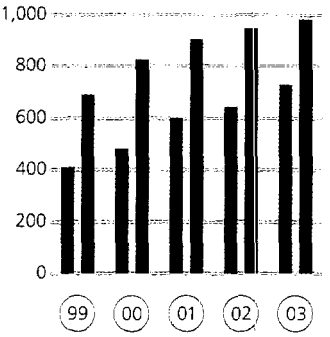


Job creation
Job creation was lower in 2003.
- Growth in number of employees, acquisitions
- Growth in number of employees, organic

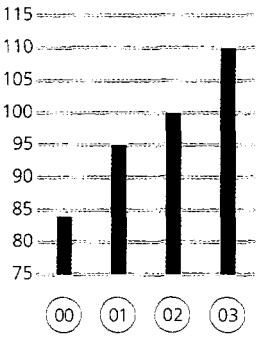


Operating profit and net profit
Operating profit rose by 4%.
- Net profit
- Operating profit

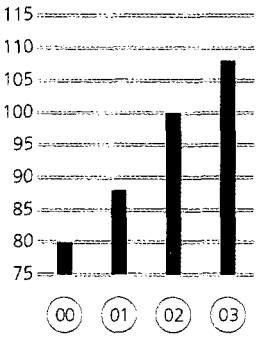
DKK million



Eco-productivity index, water
Water consumption was 10% more efficient than in 2002.

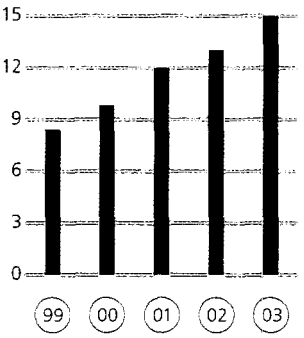


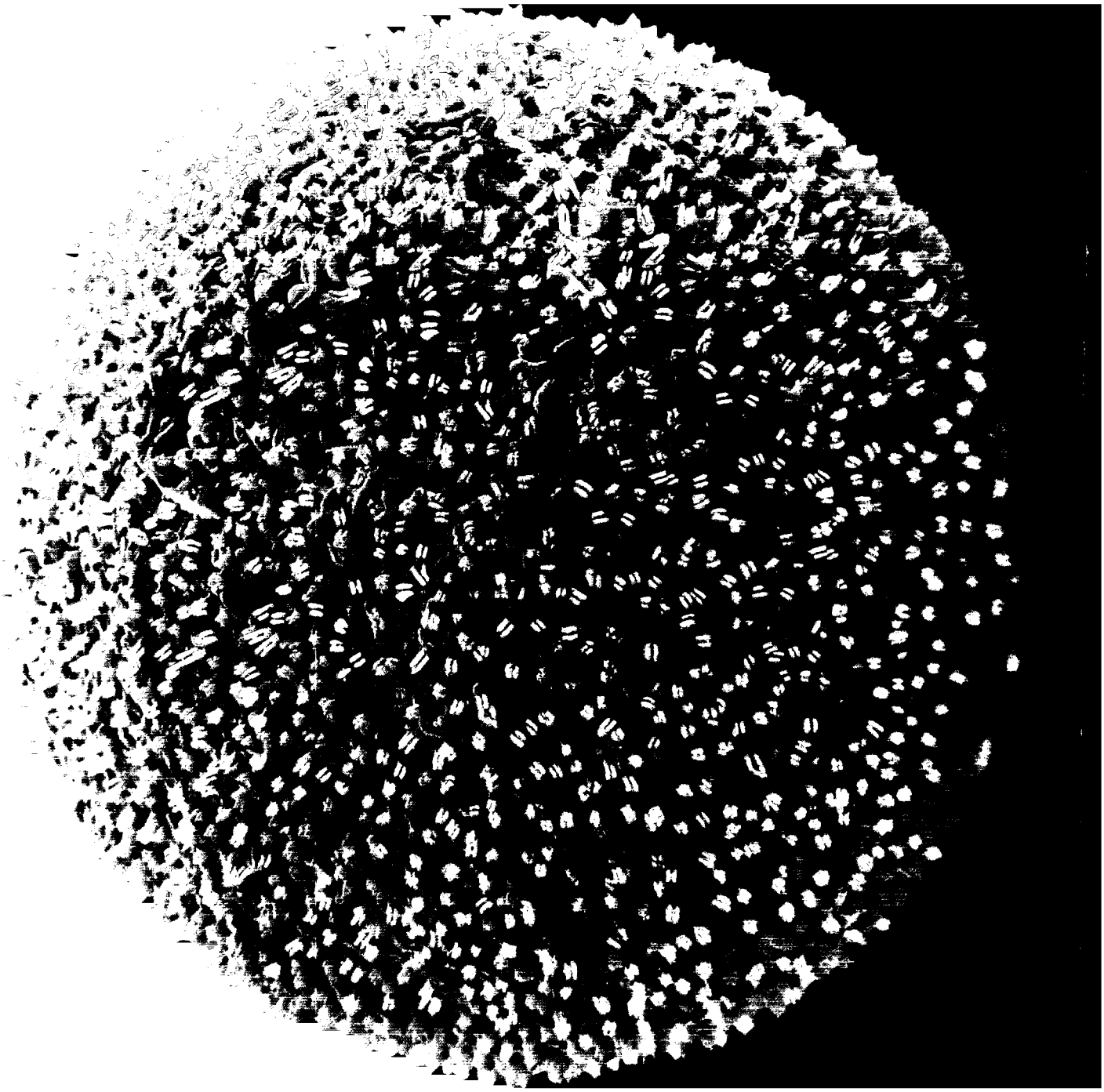
Eco-productivity index, energy
Energy consumption was 8% more efficient than in 2002.

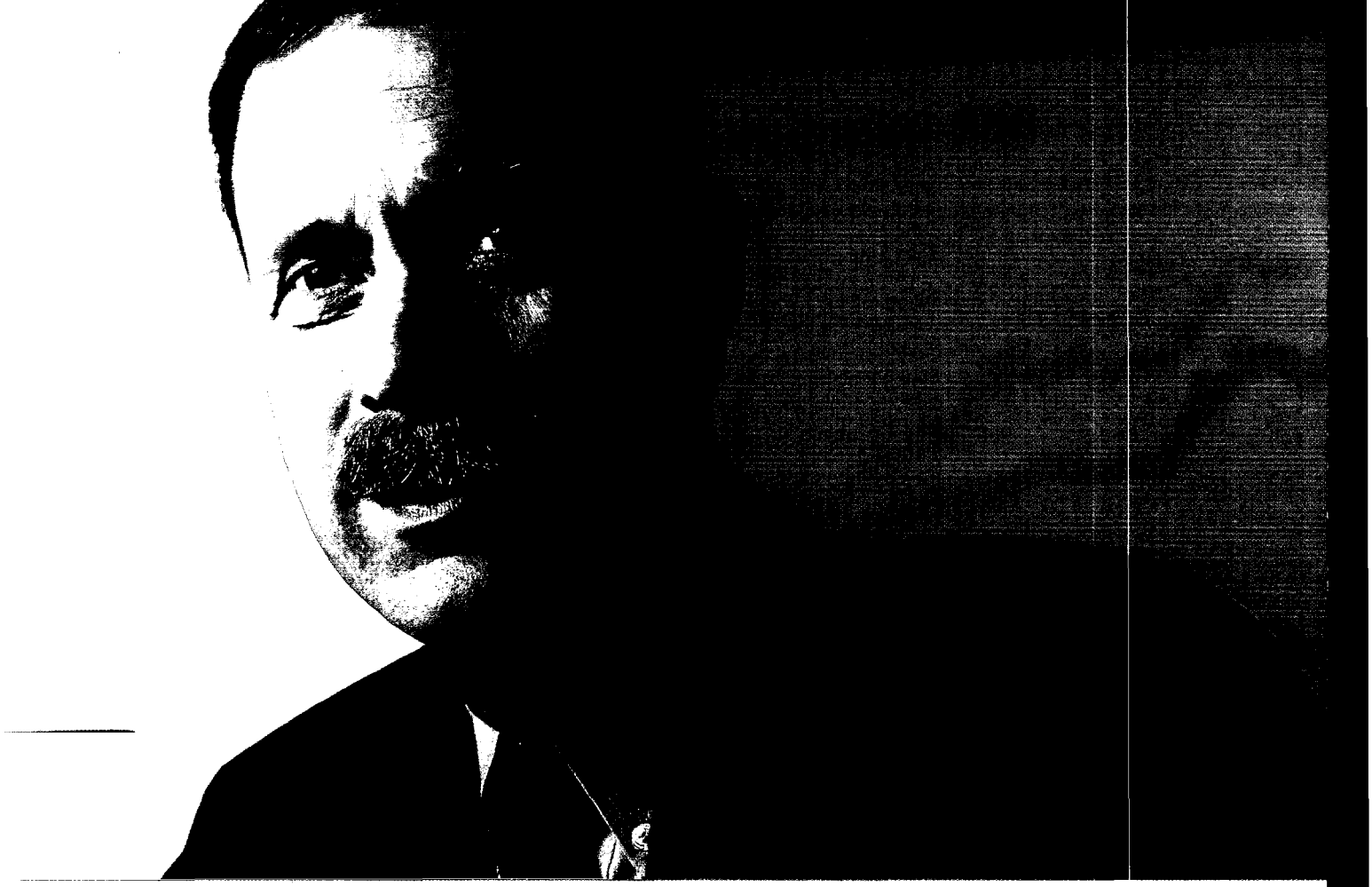


Return on invested capital (ROIC)
Return on invested capital (ROIC) rose to 15.0%.

%







Steen Riisgaard, President and CEO.

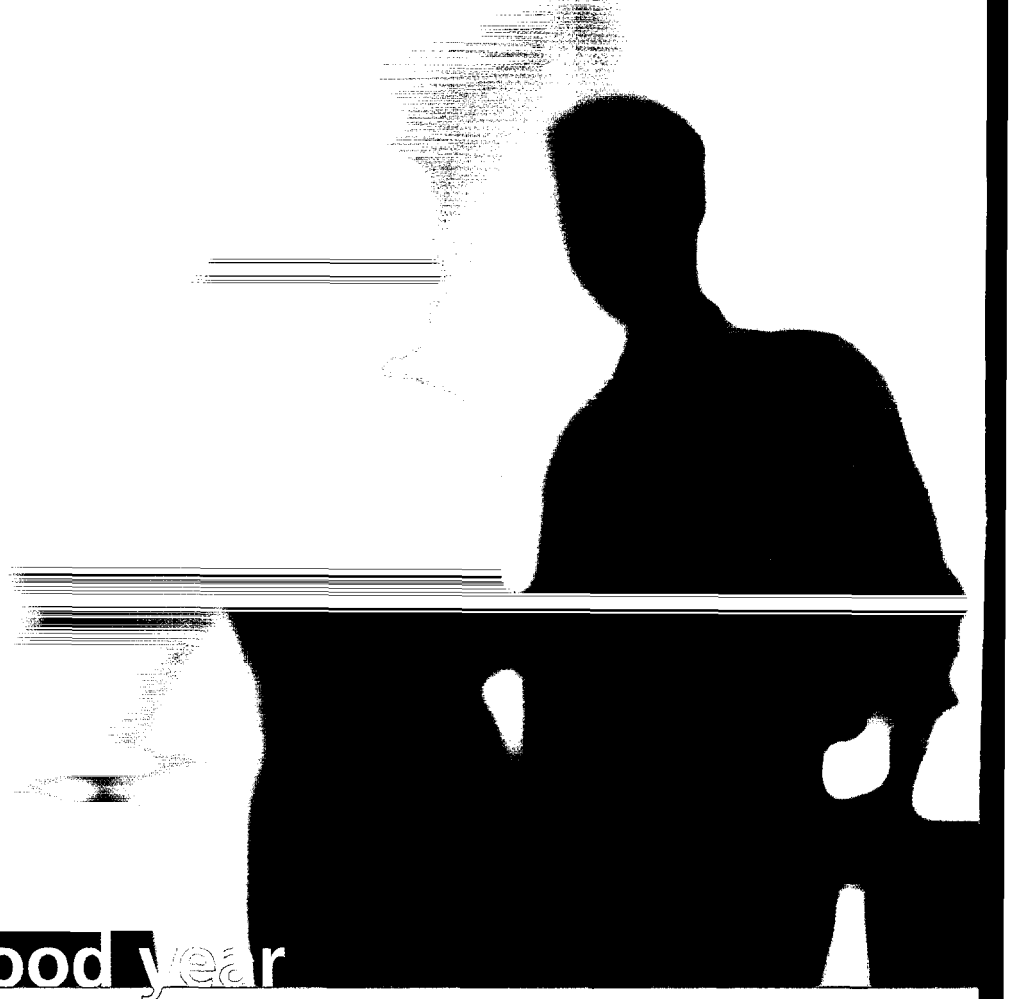
activities of Semco Bioscience and Roots. When it comes to biopolymers, we expect our hyaluronate to be ready for use in areas such as cosmetics in 2004.

Management to be assessed on responsibility

Last year we decided to take the step of integrating our annual report and our environmental and social report into a single, fully audited report. We plan to continue in this direction. The concept was warmly welcomed by our stakeholders, according to a survey we conducted, and naturally we have listened to the suggestions and views we have received on the report.

This step has also led to changes in the way we work on integrating environmental and social responsibility even further into the business. We have decided to report data on environmental and social responsibility each quarter in the future in the same way as our financial and commercial results. Novozymes' Executive Management has also agreed with the Board of Directors that from 2004 Executive Management will be assessed directly on their success in integrating environmental and social responsibility into the business. This will form part of the annual performance evaluation and bonus calculation process. These are some of the key ways in which we are ensuring that we constantly pursue Novozymes' vision of growing the business while simultaneously contributing to sustainable development.

Steen Riisgaard, President and CEO



Another good year for Novozymes

2003 was a particularly good year for Novozymes. Despite continued challenges from exchange rates, we achieved some excellent financial results while maintaining growth in sales. We also went even further when it came to integrating environmental and social responsibility into the business, although there is still work to do.

In 2003 we restored a positive trend in detergent enzymes, our largest business area. However, there are still fierce competition and big challenges in this market. Another important development is that we have resolved the future of our feed enzyme alliance. The authorities' approval of DSM's acquisition of Roche Vitamins & Fine Chemicals, with which we entered into a strategic alliance in 2000, means that we can now continue our successful collaboration on feed enzymes and perhaps even expand this partnership in the longer term.

Platform for growth

Novozymes' enzyme business has a technology base which, in principle, means we can generate growth for many years to come. This is because the possibilities for using enzymes are innumerable and because we are convinced that we can keep on optimising our production. At the beginning of 2003 we promised our shareholders that Novozymes can continue to grow for the next three years without investing more than depreciation in new production facilities and factories – and, important to note, without simply putting off necessary investments. What we can do is produce more efficiently (essentially by pushing more products through the same production equipment) in a shorter time. It is not least the high degree of innovation in our research that enables us to constantly find more efficient means of production.

Our new strategic initiatives beyond enzymes are also taking shape. This is most evident when it comes to microorganisms, which we firmly established as a new business area in 2003 with the acquisition of the business

> We imagine a future where our bio-
> logical solutions create the necessary
> balance between better business,
> cleaner environment and better lives.

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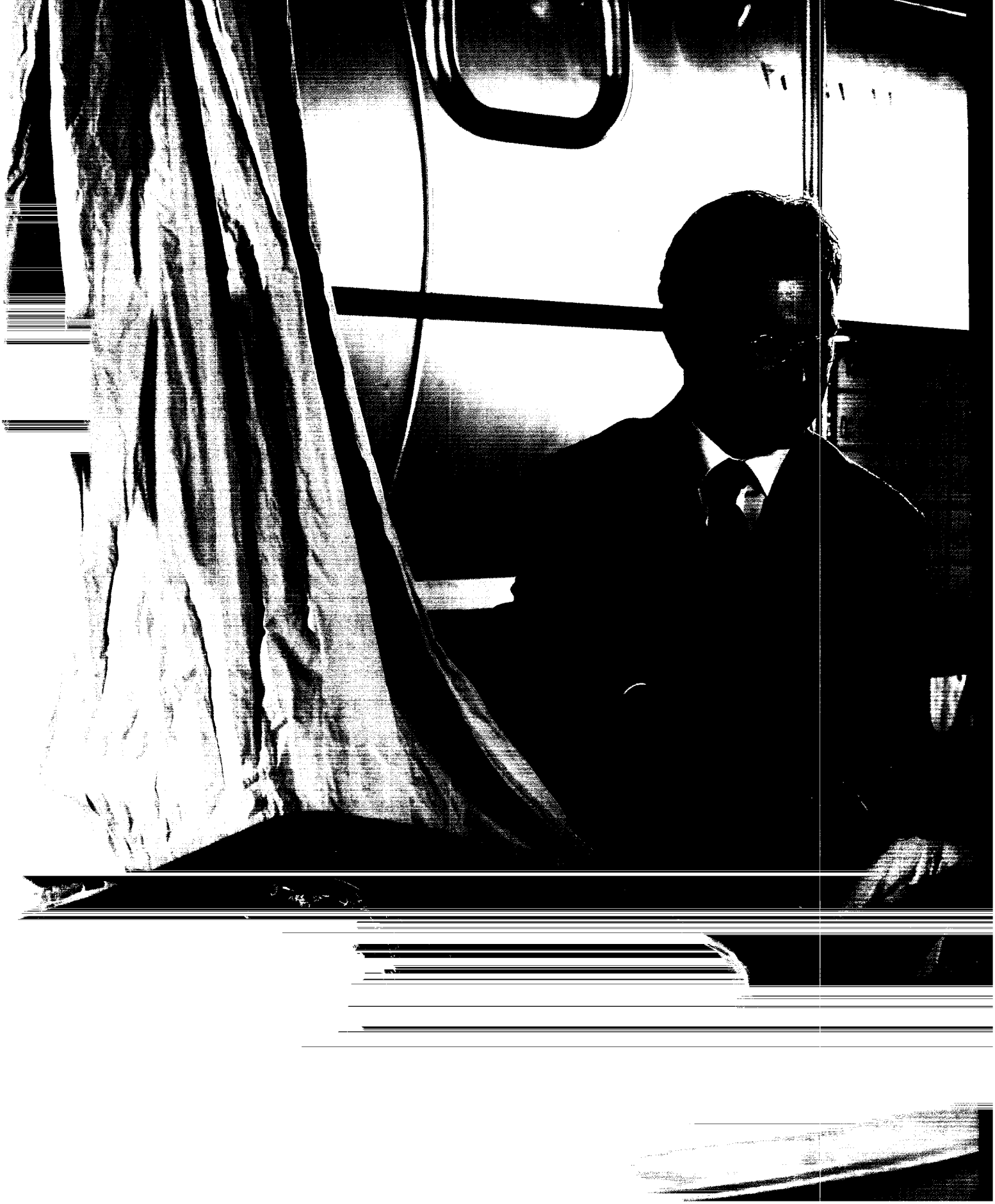
Report

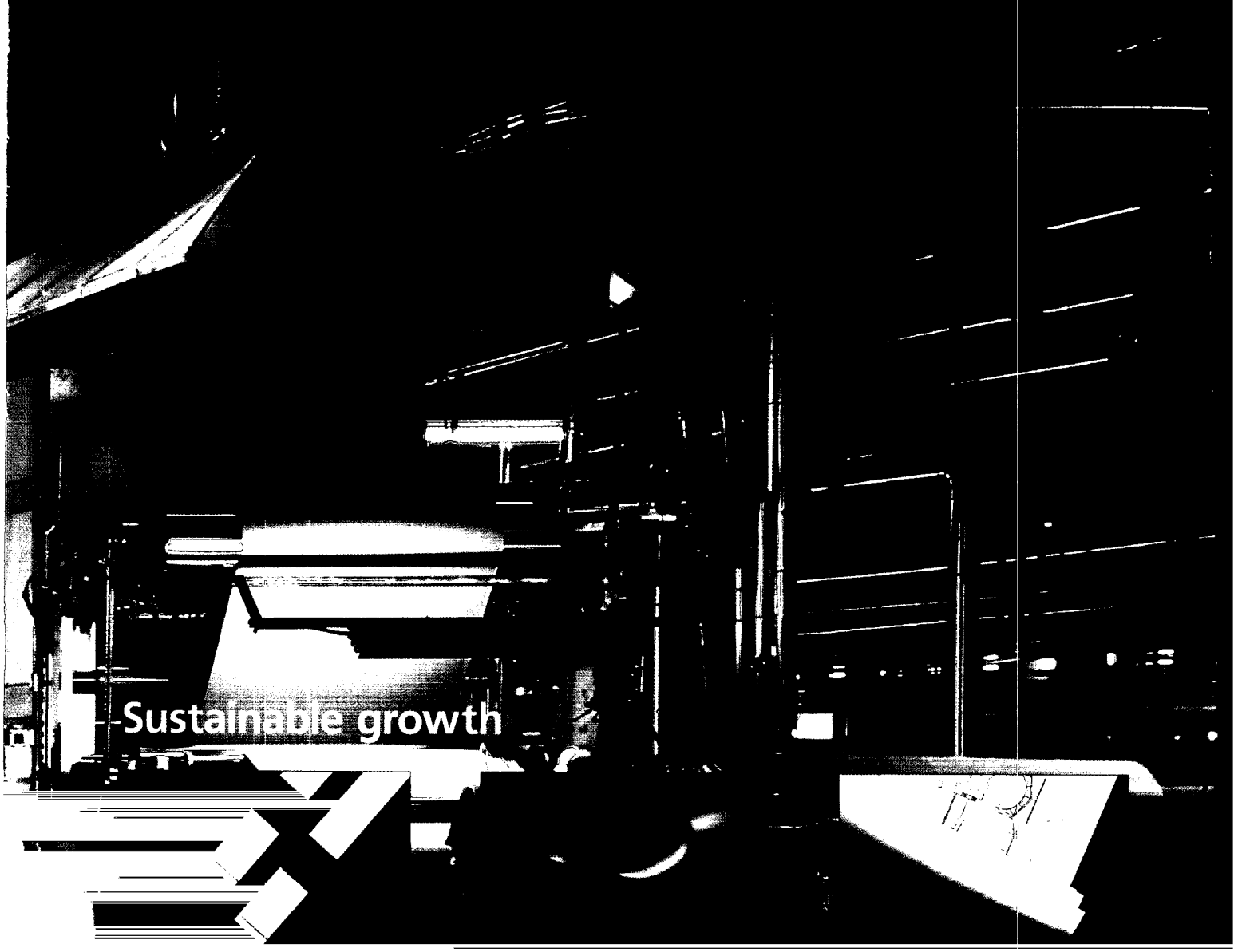
Guide to The Novozymes Report

The Novozymes Report is an integrated annual report, environmental and social report. It has three parts: Report, Accounts and Data, and a CD-ROM. The printed report contains the information we believe to be relevant for the majority of our stakeholders. The CD-ROM presents supplementary information: the accounts of the Parent Company Novozymes A/S, an overview of our use of GRI indicators, and a report on our progress with respect to the Global Compact. Further information can be found at www.novozymes.com.



10% more colour with enzymes

Novozymes' enzymes result in better products and improve the working environment in the textile industry. To ensure that a fabric dyes evenly, it is first bleached at a very high temperature. Previously, harsh chemicals were used and the fabric had to be rinsed four times to remove the bleaching agent. It can now be removed at room temperature and in a single rinse, saving both water and energy. By using the enzyme Scourzyme® you can even gain up to 10% more colour and improve the quality of the fabric.



Sustainable growth

Better working environment

...h temperatures, dust and chemicals ...se a risk for workers in many indus... Our enzymes replace chemicals ... enhance industrial processes at ...om temperature. In the textile ...ustry for example, denim can be ...ven the right stonewashed look ...thout the unpleasant dust from ...mice.

Environmentally friendly solutions

Enzymes and microorganisms save water, energy, raw materials and waste. In the textile industry enzymes can also replace the chemicals normally used to remove natural impurities from cotton fibres. According to Öko-Institut e.V. in Germany, the enzyme Xpect Zyme® L reduces emissions to wastewater by 60%, and energy consumption by 25%. The process is also 20% cheaper than the alternative method.

Economic benefit

Novozymes' biological solutions help industry to generate welfare gains and growth. Enzymes enable industry to increase production and improve the natural and working environments at the same time.

Better products, cleaner environment and better working conditions

...e textile industry is growing but has traditionally been one of the more polluting industries. The replace-...ent of conventional technology with Novozymes' biological solutions is helping to create a different and ...etter basis for this growth. Production manager Cahit Taskýn (left) at Akýn Tekstil in Turkey uses several of ...ovozymes' enzymes. Enzymes make it possible to produce more fabric in less time and to make products ...ith new properties and of higher quality. The enzymes also save on water and energy, and replace a number ...f chemicals. Novozymes' technologies are not just something for the textile industry: more than 40 other ...ustries already use Novozymes' biological solutions.

Accounts and Data

Accounts and Data

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The Annual Accounts of the Parent Company Novozymes A/S are to be found on the enclosed CD-ROM.

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Statement of the Board of Directors and the Management

The Board of Directors and the Management have considered and approved the Annual Report for 2003 of Novozymes A/S.

The Annual Report has been prepared in accordance with the Danish Company Accounts Act, the current Danish accounting standards, Danish accounting standard no. 21 "Leases", Danish accounting standard no. 22, "Revenue", and the regulations of the Copenhagen Stock Exchange for the presentation of accounts by listed companies. In our opinion the accounting policies used are appropriate and the Annual Report gives a true and fair view of the Group's and the Parent Company's* assets, liabilities, financial position and net profit, and the Group's cash flows.

The Annual Report is submitted for the approval of the Annual Meeting of Shareholders.

Gladsaxe, January 29, 2004

Management:

Steen Riisgaard *President and CEO*	Per Falholt	Per Månsson	Peder Holk Nielsen	Arne W. Schmidt

Board of Directors:

Henrik Gürtler *Chairman*	Kurt Anker Nielsen *Vice chairman*	Paul Petter Aas	Jerker Hartwall	Arne Hansen
Lars Bo Køppler	Ulla Morin	Walther Thygesen	Hans Werdelin	

* *The Annual Accounts of the Parent Company Novozymes A/S are only included on the CD-ROM enclosed with the Annual Report. The Annual Accounts of the Parent Company form an integral part of the Annual Report.*

Auditors' report

We have audited the Annual Report of Novozymes A/S for 2003*.

The Annual Report is the responsibility of the Company's Board of Directors and Management. Our responsibility is to express an opinion on the Annual Report based on our audit.

Basis of opinion

We conducted our audit in accordance with International and Danish auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance that the Annual Report is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Annual Report. An audit also includes assessing the accounting policies used and significant estimates made by the Board of Directors and Management, as well as evaluating the overall Annual Report presentation. We believe that our audit provides a reasonable basis for our opinion.

Our audit did not give rise to any qualifications.

Opinion

In our opinion, the Annual Report gives a true and fair view of the Group's and the Parent Company's** assets, liabilities, shareholders' equity and financial position at December 31, 2003, and of the results of the Group's and the Parent Company's operations and consolidated cash flows for 2003 in accordance with the Danish Company Accounts Act and the accounting regulations for the companies listed on the Copenhagen Stock Exchange.

Gladsaxe, January 29, 2004

PricewaterhouseCoopers
Statsautoriseret Revisionsinteressentskab

Ernst & Young
Statsautoriseret Revisionsaktieselskab

Morten Iversen
State-Authorised Public Accountant

Lars Holtug
State-Authorised Public Accountant

Ole Neerup
State-Authorised Public Accountant

* *In addition to the statutory audit of the Annual Report comprising pages 1-43 (Report) and 1-47 (Accounts and Data), PriceWaterhouseCoopers has performed a separate review and assessment of qualitative and quantitative aspects of Environmental and Social Responsibility in the Annual Report, and provided the separate statement thereon published on page 6 (Accounts and Data).*

** *The Annual Accounts of the Parent Company Novozymes A/S are only included on the CD-ROM enclosed with the Annual Report. The Annual Accounts of the Parent Company form an integral part of the Annual Report.*

Statement from PricewaterhouseCoopers on Environmental and Social Responsibility comprised by the Annual Report of Novozymes for 2003

As independent auditors, we have, in addition to our audit of the Annual Report and at the request of the Management, reviewed and assessed the description of Environmental and Social Responsibility in the Annual Report. The quantitative and qualitative aspects on which this statement is based are also comprised by our audit of the Annual Report. Moreover, we have reviewed and assessed management systems, processes and competences supporting Novozymes' performance in these areas. Company Management is responsible for the Annual Report. It is our responsibility, on the basis of the AA1000 Assurance Standard, to conclude whether Novozymes complies with the overall principles hereof.

Basis of Conclusion

We have performed our work in accordance with ISA 100 Assurance Engagements and the AA1000 Assurance Standard with a view to obtaining reasonable assurance that the Annual Report provides a reliable, accurate and balanced representation as regards Novozymes' work with respect to Environmental and Social Responsibility.
On the basis of an assessment of materiality and risk, our work has comprised a review of management and reporting systems as well as internal control systems, interviews with members of the Executive Management, the Sustainability Development Strategy Group, as well as Management representatives and employees at selected reporting units (Tianjin, China; Franklinton, USA; Kalundborg and Bagsværd, Denmark). Moreover, we have analysed and tested documentation relating to representations made. We have on a test basis reviewed data and underlying documentation and checked whether data has been reported in accordance with the accounting policies applied. Finally, we have assessed the overall presentation. In our opinion, the work performed provides a reasonable basis for our conclusion.

Conclusion, Improvements and Recommendations

We hereby state that:

- in our opinion, Novozymes has identified material stakeholders as well as environmental and social aspects relating to the Company's activities. In our assessment, proposals and wishes put forward by important stakeholders are heard;
- the Annual Report provides the most important, known information concerning Environmental and Social Responsibility, and the information provides a reliable, accurate and balanced representation of Novozymes' work with the activities stated in the section "Accounting policies";
- this Report will be made available to all Novozymes' stakeholders;
- the existing management and reporting systems as well as the internal control systems support the reliability of the information in the Annual Report.

Our recommendations in our Statement in the Annual Report for 2002 have been addressed by Novozymes as follows:

- Novozymes identifies stakeholders systematically and efficiently. The identification process takes place at the business units, which report on key stakeholders and aspects to Stakeholder Communications and the Sustainability Development Strategy Group, who coordinate the dialogue.
- During 2003, Novozymes further integrated Environmental and Social Responsibility work into the business by establishing the Sustainability Development Strategy Group. The Group reports directly to the Executive Management and consists of, among others, managements of the business units and of the companies in China, USA and Brazil.

We recommend that Novozymes:

- explain, to an increased extent, how embedding of Environmental and Social Responsibility into the business creates value;
- assess the possibility of using a set of indicators showing the extent to which procedures and measures communicated are implemented and observed;
- conclude the examination as to whether Novozymes may, to an increased extent, achieve benchmarking against other enterprises.

Gladsaxe, January 29, 2004

PricewaterhouseCoopers AG, Switzerland
Thomas Scheiwiller, *Dr. Sc.nat.*

PricewaterhouseCoopers, Statsautoriseret Revisionsinteressentskab
Helle Bank Jørgensen, *State-Authorised Public Accountant*

Risk factors

Financial risk factors

Novozymes' international operations mean that its profit and loss account and balance sheet are exposed to a number of financial risk factors. Financial risks are managed centrally by the Group finance function. The use of financial instruments is governed by the treasury policy approved by Novozymes' Board of Directors. This policy contains rules on the financial instruments that can be used for hedging, the counterparties that can be used and the risk profile that is to be applied. Financial instruments are used to hedge existing assets and liabilities or expected future net cash flow.

Currency exposure

Currency exposure arises due to imbalances between income and costs in each particular currency and because Novozymes has net assets in foreign subsidiaries.

Operating profit is most exposed to the EUR, USD – including the effect of the Chinese renminbi (CNY) – and JPY. A 2.25% movement in the EUR would, other things being equal, result in a change in operating profit of around DKK 40-50 million. A movement of 5% in the USD – including CNY – would result in a change in operating profit in the region of DKK 30-40 million. A movement of 5% in the JPY would result in a change in the region of DKK 5-15 million.

Novozymes' policy is to hedge existing net current assets in foreign currencies and expected future net exposure from the company's operations. Hedging is carried out through a combination of currency loans, forward exchange contracts, currency swaps and options. The hedging transactions are based on Novozymes' expectations of future exchange rate fluctuations.

Currency exposure relating to investments in foreign subsidiaries is hedged where this is deemed appropriate. Currency exposure is managed primarily by taking out currency loans and entering into currency swaps. Currency swaps, which are used to hedge participating interests, generally have a maturity period of over 12 months.

Interest rate exposure

Interest rate exposure arises in relation to interest-bearing assets and liabilities. A change of one percentage point in the average interest rate on Novozymes' net interest-bearing liabilities would have an effect on profit before tax of DKK 3.5 million. 36% of the loan portfolio at year-end 2003 was at fixed rates of interest. According to Novozymes' treasury policy, free funds may only be invested in government bonds, extremely liquid domestic mortgage-credit bonds and money-market deposits.

Credit risk

The Group does not have a significant concentration of credit risk. Credit risk is managed by dealing in financial instruments and placing deposits only with banks having a satisfactory credit rating from one or more of the recognised rating agencies. Credit risk is calculated on the basis of net market values and is governed by the company's treasury policy.

Liquidity risk

In connection with the Group's ongoing financing of operations, including refinancing risk, the finance function shall ensure adequate and flexible liquidity. This is guaranteed by placing deposits in cash and extremely liquid negotiable instruments, and using binding credit facilities.

Enzymes produced using genetically modified organisms (GMOs)

Novozymes produces a growing number of enzymes using genetically modified organisms. Without this technology it would be necessary to use larger quantities of raw materials, water and energy, and in many cases commercial production of an enzyme would not be profitable.

In recent years the use of gene technology and GMOs in relation to foods has been the subject of debate, mainly concerning foods containing GMOs. Novozymes' use of gene technology has only featured in the debate to a very limited degree.

However, it is possible that Novozymes' production and sales to the food and animal feed industries may be affected by the public debate on gene technology and the impact this may have on consumer demand.

Read more about Novozymes' use of gene technology on page 14 of the Report and at www.novozymes.com. ■

Accounting policies

Accounts for 2003

The Annual Report for 2003 of Novozymes A/S has been prepared in accordance with the Danish Company Accounts Act (accounting class D), current Danish accounting standards, Danish accounting standard no. 21, "Leases", Danish accounting standard no. 22, "Revenue", as well as the regulations of the Copenhagen Stock Exchange on the presentation of accounts by listed companies. The accounting policies are unchanged from last year with the exception of a few amendments regarding environmental and social responsibility and knowledge, see page 13.

Completed IT development projects, which was previously included in Tangible fixed assets, is now included in Intangible fixed assets. Comparative figures have been restated accordingly.

Novozymes plans to apply the International Financial Reporting Standards (IFRS) from January 1, 2005. Novozymes has carried out an analysis to assess the differences between its accounting policies and the current IFRS. No material differences were identified concerning recognition and measurement, so Novozymes expects the transition to IFRS to have only a limited effect on operating profit. However, approval of Exposure Draft 2, concerning recognition of share-based remuneration, in its present form could have a significant impact on operating profit, as Novozymes has a considerable number of allocated share options. See Note 21 for further information on the Group's share option programme.

In view of international developments in the presentation of company accounts, a sharper focus on Group-related data has been adopted. As a result, the annual accounts of the parent company, Novozymes A/S, are only included on the enclosed CD-ROM and not in the printed version. The annual accounts are considered to be an integrated part of the Annual Report.

Data for environmental and social responsibility and knowledge has been selected on the basis of an assessment of which data is of particular significance for Novozymes' long-term earnings capacity. We also believe that it is this data which is of greatest relevance to our key stakeholders.

Data for environmental and social responsibility and knowledge is included as an integrated part of the Annual Report and is covered by the audit performed by the auditors elected by the Annual Meeting of Shareholders.

Accounting policies for financial information

Recognition and measurement in general

As revenue is earned it is recognised in the profit and loss account. This includes value adjustment of financial assets and liabilities that are measured at fair value or amortised cost. All costs incurred in generating the year's earnings, including depreciation, amortisation and write-downs, are likewise recognised in the profit and loss account.

Assets are recognised in the balance sheet when it is considered probable that future economic benefits will accrue to the Group, and the value of the asset can be measured on a reliable basis. Liabilities are recognised in the balance sheet when they are considered probable and can be measured on a reliable basis. When first recognised, assets and liabilities are measured at cost. Thereafter assets and liabilities are measured as described below for each item of the accounts.

The recognition and measurement principles take due account of predictable losses and risks occurring prior to the presentation of the Annual Report that confirm or refute the conditions prevailing on the balance sheet date.

Basis of consolidation

The consolidated accounts comprise the accounts of Novozymes A/S (the parent company) and all the companies in which the Group owns more than 50% of the voting rights or otherwise has a controlling influence (subsidiaries), as well as joint ventures.

The consolidated accounts are based on the accounts for the parent company and for the subsidiaries, and are prepared by combining items of a uniform nature and subsequently eliminating intercompany transactions, internal shareholdings and balances, as well as unrealised intercompany profits. All accounts used for consolidation are prepared in accordance with the Group's accounting policies.

The Group's holdings in joint ventures are accounted for using the proportionate consolidation method by including its proportional share of their assets, liabilities, income and expenses line by line.

The purchase method is applied to acquisition of new activities. The assets and liabilities of each new activity are thus restated at fair value at the time of acquisition. Goodwill is recognised as an asset in the balance sheet and amortised over the expected economic life. Goodwill from acquisitions is adjusted for changes in recognition and measurement of net assets until one full financial year after the date of acquisition. Amortisation of goodwill is allocated in the Consolidated Accounts to the functions to which it relates. Newly acquired activities are recognised as from the date of acquisition and no adjustment is made to comparative figures.

Translation of foreign currencies

Transactions in foreign currencies are translated into Danish kroner at the rates of exchange on the transaction date. Monetary items denominated in foreign currencies are translated into Danish kroner at the rates of exchange on the balance sheet date. Accounts of foreign subsidiaries that are separate entities are translated into Danish kroner using exchange rates on the balance sheet date for assets and liabilities, and average exchange rates for profit and loss items.

Goodwill arising on the acquisition of new activities is treated as an asset belonging to the foreign subsidiaries and translated into Danish kroner at the rates of exchange on the balance sheet date.

Realised and unrealised foreign exchange gains and losses are recognised in the profit and loss account under financial items, with the exception of the following exchange rate differences recognised directly in Other comprehensive income under shareholders' equity:

- Translation of the net assets of foreign subsidiaries at January 1 at the closing rates on December 31.
- Translation of the profit and loss accounts of foreign subsidiaries from average exchange rates to the exchange rates on the balance sheet date.
- Translation of long-term intercompany loans, which are considered as an addition to net assets in subsidiaries, at the exchange rates on the balance sheet date.
- Translation of currency swaps contracted to hedge net assets in subsidiaries at the exchange rates on the balance sheet date.

For subsidiaries in high-inflation countries adjustments are made for inflation before translation of items of the accounts at the exchange rates on the balance sheet date.

Derivative financial instruments

Forward exchange contracts and currency options hedging receivables and debt in foreign currency are measured at fair value on the balance sheet date, and value adjustments are recognised in the profit and loss account under financial items.

Forward exchange contracts and currency options hedging future income and expenses are measured at fair value on the balance sheet date, and value adjustments are recognised directly in Shareholders' equity.

Currency swaps are used to hedge net investments in subsidiary companies. Currency swaps are measured on the basis of the difference between the swap rate and the rate on the balance sheet date, and the value adjustment is recognised directly in Shareholders' equity.

Derivative financial instruments used to hedge the interest rate exposure on financial assets and liabilities are first recognised in the balance sheet at cost and are thereafter measured at fair value. All value adjustments are recognised directly in Shareholders' equity. Revenue and costs related to such hedging transactions are transferred from Shareholders' equity on realisation of the hedged asset and are recognised under financial items.

Positive and negative fair values of derivative financial instruments are recognised under Other debtors and Other creditors respectively.

All derivative financial instruments are recognised on the settlement date, while all other financial instruments are recognised on the transaction date.

Share-based remuneration

Share options issued to the employees of the Novozymes Group are not recognised in the balance sheet or the profit and loss account if they are hedged by the holding of ►►

own participating interests. The Novozymes Group intends to hedge issued share options on an ongoing basis by acquiring own participating interests. Subsequent value adjustments of the share options are considered to be hedged by the equivalent change in the value of the holding of own participating interests. The market value of the issued share options is assessed using the Black-Scholes model.

Grants

Grants received which relate to research and development are recognised under Licence fees and Other operating income, net, based on the percentage completion of the projects. Grants received which relate to investments are recognised under liabilities on receipt and thereafter under Licence fees and Other operating income, net, in step with use of the assets for which the grants are made.

Segmented data

The Novozymes Group's activities comprise two segments: enzymes and microorganisms. The Group is managed primarily on the basis of a customer focus in relation to a number of strategic and local customers, so business activities are considered to be the primary segment. Data is also provided on the secondary geographical segment.

Items included in net profit are segmented where they can be attributed directly or indirectly to the different segments. The segmented assets in the Notes comprise the fixed and current assets which are applied directly to the operations of the segment, including Intangible fixed assets, Tangible fixed assets, Stocks, Trade debtors and Other debtors. Segmented liabilities comprise liabilities derived from the operations of the segment, including certain Provisions, Trade creditors and Other creditors.

Key figures

Key figures are mainly prepared in accordance with the "Recommendations and Key Figures" of the Danish Society of Financial Analysts, although certain key figures are adapted to the Novozymes Group, including ROIC. The key figures stated in the Summary and key figures of the Novozymes Group are calculated as described in the glossary on the inner cover of the report.

Computation of the diluted effect of the number of shares outstanding has been changed compared with last year. Previously this was adjusted for the number of shares in-the-money but has now been changed such that the diluted effect is calculated as the difference between the exercise and market prices on the balance sheet date. This change affects only the key figures based on diluted shares. The comparative figures for 2002 have been adjusted accordingly.

Profit and loss account

Net turnover

Net turnover represents the sales invoiced for the year after deduction of goods returned, trade discounts and allowances. Sales are recognised at the time of risk transfer related to the goods sold provided that the income can be measured on a reliable basis and is expected to be received.

The Group has entered into few agreements where the other contracting party undertakes sales to third parties and the profit is distributed between the Group and the other contracting party on the basis of a predetermined formula. Sales are recognised on an ongoing basis on the basis of information on the other contracting party's realised sales, and an ongoing obligation is recognised for the distribution of the profit, which is calculated and settled with final effect once a year.

The Group has entered into commission agreements where agents undertake sales to third parties in return for commission on realised sales. These sales are recognised when they are realised and the commission is recognised as a liability. Similarly, a liability is recognised where it is permitted for goods to be returned.

Research and development costs

Research costs are recognised as expenses as incurred.

Development costs pertaining to ongoing optimisation of production processes for existing products, or to development of new products where lack of approval by the authorities, approval by customers and other factors of uncertainty mean we do not consider development costs to fulfil the criteria for recognition in the balance sheet, are recognised as expenses as incurred.

Licence fees and Other operating income, net

Licence fees and Other operating income, net, primarily

comprise licence fees, grants from public authorities to research projects and investments, and income, net, of a secondary nature in relation to the main activities in the Group. The item also includes one-off income items, net, in respect of outlicensing, etc.

Tax

Tax payable for the year, comprising the current tax liability, the change in deferred tax for the year and any adjustments relating to previous years, is recognised in the profit and loss account at the amount attributable to the net profit, and directly in Shareholders' equity at the amount attributable to items recognised directly in Shareholders' equity. Tax payable for the year is recognised in Current liabilities, and deferred tax is recognised in Provisions.

Deferred tax is measured using the liability method, and comprises all temporary differences between the accounting and tax values of assets and liabilities. No deferred tax is recognised for goodwill, unless amortisation of goodwill for tax purposes is allowed. Deferred tax is measured and recognised for retaxation of losses realised in jointly taxed foreign subsidiaries, if the retaxation is expected to be realised on the sale of shares or the company's withdrawal from the Danish joint taxation scheme.

Tax losses carried forward are included in the calculation of deferred tax to the extent that the tax losses can be expected to be utilised in the future. Deferred tax is measured according to current tax rules and at the tax rate expected to be in force at the time of elimination of the temporary differences. Changes in deferred tax due to tax rate adjustments are recognised in the profit and loss account.

Novozymes A/S is jointly taxed with a number of its domestic and foreign subsidiaries. The parent company provides for the aggregate Danish tax payable on the taxable income of these subsidiaries, and for deferred tax for the Danish companies. The jointly taxed companies are included in the scheme for payment of tax on account.

Balance sheet

Intangible fixed assets

Intangible fixed assets are measured at cost less accumulated amortisation and write-downs.

Where costs associated with large IT projects for the development of software for internal use are incurred with a view to developing new or improved systems, these are capitalised as Completed IT development projects.

Amortisation is based on the straight-line method over the expected economic lives of the assets, as follows:

- Completed IT development projects are amortised over the expected useful life, not exceeding 5 years. Booked IT development assets are amortised over 5 years.
- Acquired patents, licences and know-how are amortised over their duration, not exceeding 20 years. Patents are amortised over their duration, which is normally identical to the patent period, and licences are amortised over the agreement period. Booked patents, licences and know-how are amortised over 7-20 years.
- Goodwill is amortised over the expected economic life, not exceeding 20 years. Booked goodwill is amortised over 5-15 years.

Tangible fixed assets

Tangible fixed assets are measured at cost less accumulated depreciation and write-downs. Cost includes capitalised interest in respect of construction of assets.

Depreciation is based on the straight-line method over the expected useful lives of the assets, as follows:

- Buildings, 12-50 years
- Production plant and machinery, 5-16 years
- Other equipment, 3-16 years

Gains and losses on the sale or disposal of assets are recognised in the profit and loss account under the same items as the associated depreciation charges.

Write-down of fixed assets

The accounting value of both intangible and tangible fixed assets is reviewed when there are indications that an asset or group of assets has diminished in value beyond the level of normal depreciation, although the impairment test is performed as a minimum once a year.

If the asset or group of assets has diminished in value, it is written down to the lower recoverable value.

►►

Financial fixed assets
In the parent company's annual accounts, participating interests in subsidiaries are recognised using the equity method, i.e. at the respective proportion of the shareholders' equity of subsidiaries with addition of goodwill.

The parent company's share of the net profits of subsidiaries less unrealised intercompany profits on stocks is recognised in the profit and loss account of the parent company. If the shareholders' equity of subsidiaries is negative, receivables from the subsidiaries will be set off against the parent company's share of the negative equity on the basis of a concrete assessment. If the parent company has a legal or constructive obligation to cover the company's negative equity, a provision is recognised.

To the extent that it exceeds dividends received from such subsidiaries, net revaluation of participating interests in subsidiaries is recognised under the Net revaluation reserve under Shareholders' equity.

Other securities and participating interests comprise debt instruments acquired for permanent ownership. These are measured at cost less repayments and write-downs for diminuition of value. Write-downs are recognised in the profit and loss account under financial items.

Stocks
Stocks are measured at cost determined on a first-in first-out basis. In cases where cost exceeds net realisable value, stocks are written down to this lower value.

Work in progress and Finished goods are measured at cost including direct and indirect production costs.

Debtors
Debtors are measured at amortised cost or at a lower net realisable value equivalent to nominal value, less write-downs for losses on doubtful debts.

Securities
Securities recognised as current assets are measured at fair value on the balance sheet date. Realised and unrealised foreign exchange gains and losses are included in the profit and loss account under financial items.

From the time of the Demerger, shares in Novo Nordisk A/S are recognised in the balance sheet as Securities under Current assets. Shares in Novo Nordisk A/S are used to hedge share option commitments for which Novozymes A/S is liable, and are recognised at the option prices.

Dividend
The dividend proposed for the financial year is shown as a separate item under Shareholders' equity.

Own participating interests
The cost price and proceeds from the sale of own participating interests are recognised directly in Shareholders' equity. Own participating interests in Novozymes A/S are perceived as a *de facto* capital reduction and the cost price is therefore deducted directly from Shareholders' equity. The company's holdings of own participating interests are used primarily to hedge issued share options.

Provisions
Provisions are recognised when the Group has a legal or constructive obligation as a consequence of past events, and it is considered probable that fulfilment of this obligation will require an outflow of financial resources.

Provisions are measured at the present value of the anticipated liabilities.

Liabilities
Fixed-interest loans expected to be held to maturity are initially recognised as the proceeds received less transaction costs incurred. The loans are subsequently measured at amortised cost, corresponding to their capitalised value using the effective interest, whereby the difference between proceeds and nominal value is recognised in the profit and loss account over the term of the loan.

Other liabilities are measured at amortised cost, which essentially corresponds to their nominal value.

Pension obligations
The Group has established pension agreements with a significant proportion of its employees.

Costs related to defined-contribution plans are recognised in the profit and loss account, and any amounts payable

are recognised in the balance sheet under Other creditors. The Group has no obligations other than the current fixed contributions.

Costs related to defined-benefit plans are compiled at present value and accrued over the expected period of employment. The present value of unfunded plans is provided under Provisions. The change in provisions for the year is recognised in the profit and loss account. The present value of the most significant defined-benefit plans and the related costs is calculated on an actuarial basis.

Consolidated statement of cash flows

The consolidated statement of cash flows shows cash flow for the year allocated to operating, investing and financing activities, the change in cash and cash equivalents for the year, and cash and cash equivalents at the beginning and end of the year.

Cash flow from operating activities indirectly comprises net profit adjusted for items with no effect on cash flow, interest received, interest paid and corporation tax paid.

Cash flow from investing activities comprises payments related to the acquisition and sale of activities and minority shares, and intangible and tangible fixed assets.

Cash flow from financing activities comprises the proceeds from loans, the repayment of principal on interest-bearing loans, dividends paid, the proceeds from share issues, and the purchase and sale of own participating interests and other securities.

Cash and cash equivalents comprises cash at bank and in hand and current securities with a maturity period of less than three months, less current bank loans due on demand. Financial resources comprises cash and cash equivalents plus undrawn committed credit facilities expiring in more than one year.

Accounting policies for environmental and social responsibility and knowledge

Changes to accounting policies

The accounting policies applied for environmental and social responsibility and knowledge have been amended in the following areas to improve completeness, and the comparative figures have been adjusted accordingly:

- The occupational health and safety data now covers all companies. This change has not affected the number of occupational accidents and occupational diseases in 2002. The frequency of occupational accidents and occupational diseases per million working hours in 2002 has therefore decreased from 11.3 and 2.7 to 9.2 and 2.2 respectively. Total absence in 2002 has decreased from 3.1% to 2.9% as a result of the data now covering all companies.
- The environmental data covers those activities which, based on a general environmental assessment, could have a significant impact on the environment. Thus Novozymes Biologicals, Inc. and Novozymes Biopharma AB have been included in the data for 2003. In the comparative figures for 2002 this change has led to an increase in the consumption of raw materials from 245 t.tons to 247 t.tons and an increase in the consumption of packaging from 7 t.tons to 8 t.tons. Other data has not been restated as the impact on 2002 is not material.
- The eco-productivity indices (EPIs) for water and energy now include all enzyme production facilities. Thus Suzhou Hongda Enzyme Co. Ltd. has been included, which means that the eco-productivity indices for water and energy for 2002 have fallen from 106 and 114 to 105 and 113 respectively.

The accounting policies applied for environmental and social responsibility and knowledge have been amended in the following areas to increase transparency, and the comparative figures have been adjusted accordingly:

- Treated wastewater used for irrigation is now included in wastewater with a separate note. This means that the volume of wastewater in 2002 has risen from 2,183 t.m^3 to 2,725 t.m^3. COD, nitrogen and phosphorus have also risen from 1,331 tons, 122 tons and 17 tons to 1,424 tons, 144 tons and 20 tons respectively. This has resulted in a corresponding decrease in biomass, in which these amounts were previously included.
- Average training costs are now translated into Danish kroner at the rates of exchange on the transaction date. Previously the Group's internal budget exchange rates ▸▸

were used. This change has reduced the average spent per employee in 2002 from DKK 6,099 to DKK 5,978.

Consolidation
The data in the Annual Report is based on data for the parent company and for all subsidiaries, combining items of a uniform nature compiled using the same methods.

The environmental data covers those activities which, based on an overall environmental assessment, could have a significant impact on the environment.

Environment

Water
Water includes drinking water, industrial water and steam, and is stated on the basis of the metered intake of water to Novozymes (see glossary for further information).

Internally generated energy and associated emissions
Internally generated energy is measured as fuel consumption converted to energy on the basis of lowest combustion value and weight by volume. Emissions of CO_2, SO_2 and NO_x are calculated on the basis of the amount of fuel consumed using annually determined conversion factors from Danish authorities and suppliers.

Externally generated energy and associated emissions
Externally generated energy is the input to Novozymes of externally generated electricity, heat and steam. Emissions of CO_2, SO_2 and NO_x are calculated using annually determined conversion factors from power plants or their organisations.

Raw materials and packaging
Raw materials and packaging comprises materials for production, recovery, granulation, wastewater and sludge treatment, and packaging of products. Raw materials and packaging also includes stock adjustments. Consumption of raw materials and packaging is converted into kilograms.

Wastewater
Wastewater is measured as the volume discharged by Novozymes. COD, nitrogen and phosphorus in the wastewater are measured as proportional flow, based on samples taken at point of discharge.

Biomass
Biomass is measured as the volume produced and transported from Novozymes as liquid fertiliser (Novo-Gro®) or converted to a fertiliser product with a higher dry matter content (NovoGro 30). The nitrogen and phosphorus contents in the final product are measured.

Waste
Waste is the registered volume of waste divided into hazardous and non-hazardous waste (see glossary for further information) and by disposal method.

Emissions to air of ozone-depleting substances
Emissions to air of ozone-depleting substances are measured as consumption of CFCs, HCFCs and halons.

Environmental impact potentials
The environmental impact potentials for global warming, ozone layer depletion and acidification are calculated on the basis of "Udvikling af Miljøvenlige Industri Produkter" (UMIP) published by the Institute for Product Development at the Technical University of Denmark.

Environmental compliance
Breaches of regulatory limits, accidental releases of GMOs and other accidental releases with a significant environmental impact are measured as the number of breaches reported to the authorities. Complaints are the number of registered environmental complaints.

Animals for testing
This item covers the number of animals used for all commenced testing undertaken for Novozymes.

Eco-productivity indices
The eco-productivity indices for water and energy are calculated as a ratio of total relative production output to the consumption of water and energy respectively, compared with last year's figures. The calculation of EPIs includes all enzyme production facilities (see glossary for further information). EPIs are also shown indexed in the Summary and key figures on page 7 (Report).

Social responsibility

Number of employees
The number of employees is calculated as the actual number of employees at year-end, excluding employees on unpaid or parental leave, as well as temporary hires, student interns and PhD students.

In calculating the number of full-time employees, employees with a working time ratio of 95% or over are stated as full-time employees.

Job categories
Senior management comprises the CEO, executive vice presidents, vice presidents and directors. Management comprises middle managers and specialists. Professional staff comprises employees with academic backgrounds, as well as team leaders. Administrative staff comprises administrative personnel. Skilled workers, laboratory technicians and other technicians comprises skilled workers, laboratory technicians and other technicians. Process operators comprises operators and unskilled workers.

Employee turnover
Employee turnover is measured as the number of permanent employees who left the Group during the financial year compared with the average number of permanent employees in the financial year. The average number of permanent employees is calculated as the average number of permanent employees at the end of each quarter.

Growth in number of employees, organic
The organic growth in the number of employees is measured as the number of employees at year-end less the number of employees gained via acquisitions and the number of employees at the beginning of the year.

Growth in number of employees, acquisitions
The growth in the number of employees via acquisitions is measured as the number of employees gained via acquisition of new activities.

Age and seniority
Age and seniority are calculated as the average age and seniority in whole years per employee.

Training costs
Training costs are the costs of seminars and internal and external training courses, translated into Danish kroner at the rates of exchange on the transaction date.

Occupational health and safety

Absence
Absence is stated as absence due to the employee's own illness, including pregnancy-related sick leave and occupational accidents. The rate of absence is calculated as the number of days of absence as a percentage of the total number of normal working days in one year, less holidays and public holidays.

Occupational accidents and diseases
Occupational accidents is defined as the number of reported work-related accidents resulting in at least one day's absence after the day of the accident. Occupational diseases is the number of reported new cases of work-related diseases. The consequences of occupational accidents and occupational diseases are measured by recording the work situation once the result of the incident has stabilised, e. g. whether the employee has returned to his/her previous job.

Knowledge

Number of new products
The number of products with new or improved characteristics launched during the year.

Number of active patent families
The number of inventions for which there are one or more active patent applications/active patents at year-end.

Users of the CRM system
The number of users of the CRM system at year-end.

Users retrieving documents from LUNA
The number of users searching for or retrieving documents from Novozymes' global electronic archives (LUNA). ■

Profit and loss account

	Note	2003 DKK million	2002 DKK million
Net turnover	1, 2	5,803	5,642
Production costs	3, 5	2,799	2,734
Gross profit		**3,004**	**2,908**
Sales and distribution costs	3, 5	730	729
Research and development costs	1, 3, 5	749	713
Administrative costs	3, 4, 5	587	575
Licence fees and Other operating income, net	6	44	56
Operating profit		**982**	**947**
Financial income	7	223	131
Financial costs	8	190	178
Profit before tax		**1,015**	**900**
Corporation tax	9	280	253
Profit including minority interests		**735**	**647**
Equity minority interests		(9)	(3)
Net profit		**726**	**644**
Proposed dividend per share		DKK 3.15	DKK 2.25
Earnings per share	15	DKK 10.30	DKK 8.90
Earnings per share, diluted	15	DKK 10.24	DKK 8.88

Statement of shareholders' equity

	Share capital DKK million	Other comprehensive income DKK million	Own participating interests DKK million	Retained earnings DKK million	Proposed dividend DKK million	Total DKK million
Shareholders' equity at January 1, 2003	**754**	**196**	**(630)**	**3,673**	**162**	**4,155**
Net profit				726		726
Dividend:						
Dividend paid					(162)	(162)
Proposed dividend, gross				(238)	238	–
Proposed dividend relating to own participating interests				19	(19)	–
Own participating interests:						
Purchase of own participating interests			(392)			(392)
Sale of own participating interests			4			4
Currency translation of investments in subsidiaries, etc.		(282)				(282)
Value adjustment of hedging instruments		(14)				(14)
Other adjustments				109		109
Shareholders' equity at December 31, 2003	**754**	**(100)**	**(1,018)**	**4,289**	**219**	**4,144**
Shareholders' equity at January 1, 2002	**754**	**427**	**(445)**	**3,176**	**146**	**4,058**
Net profit				644		644
Dividend:						
Dividend paid					(146)	(146)
Proposed dividend, gross				(170)	170	–
Proposed dividend relating to own participating interests				8	(8)	–
Own participating interests:						
Purchase of own participating interests			(185)			(185)
Sale of own participating interests			0			0
Currency translation of investments in subsidiaries, etc.		(237)				(237)
Value adjustment of hedging instruments		6				6
Other adjustments				15		15
Shareholders' equity at December 31, 2002	**754**	**196**	**(630)**	**3,673**	**162**	**4,155**

Purchase and sale of own participating interests during the year have no effect on tax.

Reference is made to Note 15 concerning own participating interests and average number of shares.

Assets

	Note	Dec. 31, 2003 DKK million	Dec. 31, 2002 DKK million
Completed IT development projects		97	118
Acquired patents, licences and know-how		312	297
Goodwill		125	117
Development projects in progress and payments on account for intangible fixed assets		–	20
Intangible fixed assets	10	**534**	**552**
Land and buildings		1,877	1,996
Production plant and machinery		1,090	1,211
Other equipment		342	368
Tangible fixed assets under construction and payments on account for tangible fixed assets		474	410
Tangible fixed assets	11	**3,783**	**3,985**
Other securities and participating interests		–	37
Financial fixed assets	12	–	**37**
Total fixed assets		**4,317**	**4,574**
Raw materials and consumables		168	194
Work in progress		297	339
Finished goods		652	785
Stocks		**1,117**	**1,318**
Trade debtors		865	821
Amounts owed by related parties		57	27
Tax receivable	9	202	240
Deferred tax receivable	9	24	31
Other debtors	13	365	341
Debtors		**1,513**	**1,460**
Securities	14	**115**	**166**
Cash at bank and in hand		**571**	**832**
Total current assets		**3,316**	**3,776**
Total assets		**7,633**	**8,350**

Liabilities and shareholders' equity

	Note	Dec. 31, 2003 DKK million	Dec. 31, 2002 DKK million
Share capital	15	754	754
Other comprehensive income		(100)	196
Own participating interests		(1,018)	(630)
Retained earnings		4,289	3,673
Proposed dividend		219	162
Total shareholders' equity		**4,144**	**4,155**
Minority interests	16	**31**	**93**
Provisions for pension commitments and similar obligations		20	57
Provisions for deferred tax	9, 17	874	997
Other provisions	18	20	25
Total provisions		**914**	**1,079**
Credit institutions	19	1,072	1,863
Amounts owed to related parties		23	–
Total non-current liabilities		**1,095**	**1,863**
Credit institutions	20	373	204
Trade creditors		208	255
Amounts owed to related parties		70	74
Tax payable	9	67	47
Other creditors		731	580
Total current liabilities		**1,449**	**1,160**
Total liabilities		**2,544**	**3,023**
Total liabilities and shareholders' equity		**7,633**	**8,350**

Cash flows and financial resources

	Note	2003 DKK million	2002 DKK million
Net profit		**726**	**644**
Reversals of items with no effect on cash flow	28	806	921
Corporation tax paid		(262)	(313)
Interest received		137	92
Interest paid		(178)	(140)
Cash flow before change in working capital		**1,229**	**1,204**
Change in working capital:			
(Increase)/decrease in trade debtors and other debtors		(143)	12
(Increase)/decrease in stocks		147	(20)
Increase/(decrease) in amounts owed to related parties, net		2	1
Increase/(decrease) in trade creditors and other creditors		139	(16)
Cash flow from operating activities		**1,374**	**1,181**
Investments:			
Purchase of intangible fixed assets	10	(3)	–
Sale of tangible fixed assets		6	33
Purchase of tangible fixed assets	11	(395)	(367)
Acquisition of activities	31	(123)	(272)
Purchase of minority shares		(59)	–
Cash flow from investing activities		**(574)**	**(606)**
Free cash flow		**800**	**575**
Financing:			
Non-current loan repayments		(500)	(22)
Net lending to joint ventures		–	(15)
Sale of shares in Novo Nordisk A/S		52	–
Purchase of own participating interests, net		(388)	(185)
Dividend paid		(162)	(146)
Cash flow from financing activities		**(998)**	**(368)**
Net cash flow		**(198)**	**207**
Unrealised gain/(loss) on currencies and securities included in cash and cash equivalents		6	14
Net change in cash and cash equivalents		**(192)**	**221**
Cash and cash equivalents at January 1		628	407
Cash and cash equivalents at December 31	29	**436**	**628**
Undrawn committed credit facilities	30	3,000	2,500
Financial resources at 31 December		**3,436**	**3,128**

The figures in the statement of cash flows cannot be derived directly from the consolidated accounts. The reason is that for each year, in order to present the statement of cash flows, the balance sheet at the beginning of the year is converted at the exchange rate at the end of the same year. This eliminates the changes in cash flows due to exchange rate fluctuations.

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Notes

Note 1 – Segmented data

Primary segment – Business activities

	Enzymes		Microorganisms		Group, total	
	2003 DKK million	2002 DKK million	2003 DKK million	2002 DKK million	2003 DKK million	2002 DKK million
Net turnover	5,542	5,437	261	205	5,803	5,642
Research and development costs	(719)	(690)	(30)	(23)	(749)	(713)
Operating profit before depreciation and amortisation (EBITDA)	1,470	1,449	35	30	1,505	1,479
Operating profit (EBIT)	976	937	6	10	982	947
Financial items, net					33	(47)
Profit before tax					1,015	900
Equity minority interests					(9)	(3)
Net profit					**726**	**644**
Segment fixed assets	3,940	4,267	377	307	4,317	4,574
Segment assets	6,261	6,674	460	370	6,721	7,044
Segment liabilities	1,019	964	30	27	1,049	991
Fixed asset investments	396	453	99	167	495	620
Depreciation and amortisation	494	512	29	20	523	532
Items with no effect on cash flow	776	899	30	22	806	921
EBITDA margin %	26.5	26.7	13.4	14.6	25.9	26.2
EBIT margin %	17.6	17.2	2.3	4.9	16.9	16.8
Total number of employees at year-end	3,681	3,584	191	154	3,872	3,738

Secondary segment – Geographical distribution

DKK million	2003	2002
Turnover		
Denmark	217	188
Rest of Europe, Middle East and Africa	2,428	2,266
North America	1,702	1,714
Asia Pacific	1,044	1,070
Latin America	412	404
Total	**5,803**	**5,642**

DKK million	2003	2002
Additions of fixed assets		
Denmark	222	263
Rest of Europe, Middle East and Africa	16	124
North America	175	124
Asia Pacific	77	104
Latin America	5	5
Total	**495**	**620**

Segment assets		
Denmark	4,204	4,207
Rest of Europe, Middle East and Africa	295	370
North America	1,084	1,128
Asia Pacific	1,022	1,217
Latin America	116	122
Total	**6,721**	**7,044**

The Group's business activities comprise enzymes and microorganisms. The enzymes business segment, which consists of technical enzymes, food enzymes and feed enzymes, cannot be divided up further as some production facilities are shared. In addition, research and development concerning more effective methods of production is primarily conducted jointly.

Note 1 – Segmented data (continued)

The Group's business activities are allocated to geographical markets on the basis of the Group's turnover and segment assets. The geographical distribution of turnover is based on the country in which the customer is domiciled. With a number of strategic customers, central deliveries are made to specified locations and the final recipient is unknown. The stated geographical distribution of turnover may therefore vary significantly from year to year if the delivery destination for these strategic customers changes.

Note 2 – Net turnover

DKK million	2003	2002
Technical enzymes	3,493	3,400
Food enzymes	1,413	1,482
Feed enzymes	636	555
Microorganisms	261	205
Total net turnover	**5,803**	**5,642**
Of which percentage sale to the two principal customers	22%	22%

The two principal customers are in two different business areas.

Note 3 – Employee costs

DKK million	2003	2002
Wages and salaries	1,377	1,350
Pensions – defined-contribution plans	85	69
Pensions – defined-benefit plans	16	17
Other social security costs	104	110
Other employee costs	79	81
Total employee costs	**1,661**	**1,627**
Recognised in the profit and loss account under the following functions:		
Production	715	661
Sales and distribution	296	292
Research and development	388	376
Administration	288	298
	1,687	**1,627**
Recognised in the assets as:		
Change in employee costs included in stocks	(26)	–
Total employee costs	**1,661**	**1,627**

Note 3 – Employee costs (continued)

DKK million	2003	2002
Geographical distribution:		
Denmark	1,039	968
Rest of Europe, Middle East and Africa	147	134
North America	333	368
Asia Pacific	108	120
Latin America	34	37
Total employee costs	**1,661**	**1,627**
Average number of employees in the Group	3,814	3,629
Number of employees outside Denmark as a percentage of total number of employees	45%	45%

Geographical distribution of employees, see Note 38.

Note 4 – Fees to statutory auditors

DKK million	2003	2002
Fees to the auditors elected by the Annual Meeting of Shareholders:		
Total fees to		
PricewaterhouseCoopers	15	12
Ernst & Young	1	1
of which pertaining to audit by		
PricewaterhouseCoopers	7	7
Ernst & Young	1	1

Note 5 – Depreciation, amortisation and write-downs

DKK million	2003	2002
Recognised in the profit and loss account under the following functions:		
Production	365	391
Sales and distribution	29	30
Research and development	85	71
Administration	44	40
Total depreciation, amortisation and write-downs	**523**	**532**

Of which amortisation of goodwill at DKK 12 million in 2003 is included in Sales and distribution, against DKK 6 million in 2002.

Note 6 – Licence fees and Other operating income, net

DKK million	2003	2002
Other operating income, net	34	31
Licence fees	10	25
Total licence fees and Other operating income, net	**44**	**56**

Note 7 – Financial income

DKK million	2003	2002
Interest income	136	91
Gain on securities, etc., net	6	–
Foreign exchange gain, net	81	40
Total financial income	**223**	**131**

Note 8 – Financial costs

DKK million	2003	2002
Interest costs	177	137
Loss on securities, etc., net	–	27
Other financial costs	13	14
Total financial costs	**190**	**178**
Interest costs including capitalised financing interest	178	140
Capitalised financing interest during the year under Tangible fixed assets	1	3

Capitalised financing interest has been calculated using an interest rate of 3.2% for 2003.

Note 9 – Tax

	Tax in the profit and loss account DKK million	Tax payable/ (tax receivable) DKK million	Deferred tax/ (deferred tax receivable) DKK million
At January 1, 2003		(193)	966
Currency adjustment		(8)	(43)
Tax on equity postings		(2)	(23)
Tax on the profit for the year	280	330	(50)
	280	**127**	**850**
Paid on account for 2003		(396)	
Refunded tax relating to previous years		134	
Paid for the year		**(262)**	
Tax at December 31, 2003	**280**	**(135)**	**850**
Tax receivable/deferred tax receivable		(202)	(24)
Tax payable/deferred tax		67	874
		(135)	**850**

Note 9 – Tax (continued)

	2003 DKK million	2002 DKK million
Tax can be broken down into:		
Current tax on the profit for the year	319	214
Change in deferred tax	(69)	39
Adjustments relating to previous years	30	–
Tax on the profit for the year	**280**	**253**
Computation of effective tax rate:		
Statutory corporation tax rate in Denmark	30.0%	30.0%
Non-tax deductible costs	0.3%	0.2%
Deviations in foreign subsidiary companies' tax rates	(3.7%)	(2.3%)
Other adjustments	1.0%	0.2%
Effective tax rate	**27.6%**	**28.1%**

Note 10 – Intangible fixed assets

	Completed IT development projects DKK million	Acquired patents, licences and know-how DKK million	Goodwill DKK million	Development projects in progress and payments on account for intangible fixed assets DKK million	Total DKK million
Cost at January 1, 2003	186	433	124	20	763
Currency adjustment	(2)	(1)	(11)	–	(14)
Acquisition of activities	–	59	30	–	89
Additions during the year	–	3	–	–	3
Transfer (to)/from other items	20	–	–	(20)	–
Cost at December 31, 2003	**204**	**494**	**143**	**0**	**841**
Amortisation and write-downs at January 1, 2003	68	136	7		211
Currency adjustment	(1)	(2)	(1)		(4)
Amortisation and write-downs for the year	40	48	12		100
Amortisation and write-downs at Dec. 31, 2003	**107**	**182**	**18**		**307**
Book value at December 31, 2003	**97**	**312**	**125**		**534**
Cost at January 1, 2002	–	289	43	–	332
Currency adjustment	–	(4)	(7)	–	(11)
Acquisition of activities	–	149	88	–	237
Disposals during the year	–	(1)	–	–	(1)
Transfer (to)/from other items	186	–	–	20	206
Cost at December 31, 2002	**186**	**433**	**124**	**20**	**763**
Amortisation and write-downs at January 1, 2002	–	111	1		112
Currency adjustment	–	(3)	–		(3)
Amortisation and write-downs for the year	–	29	6		35
Amortisation and write-downs eliminated on disposals during the year	–	(1)	–		(1)
Transfer (to)/from other items	68	–	–		68
Amortisation and write-downs at Dec. 31, 2002	**68**	**136**	**7**		**211**
Book value at December 31, 2002	**118**	**297**	**117**	**20**	**552**

Note 11 – Tangible fixed assets

	Land and buildings	Production plant and machinery	Other equipment	Tangible fixed assets under construction and payments on account for tangible fixed assets	Total
	DKK million	DKK million	DKK million	DKK million	DKK million
Cost at January 1, 2003	2,998	3,728	1,072	410	8,208
Currency adjustment	(161)	(164)	(46)	(15)	(386)
Acquisition of activities	–	4	3	1	8
Additions during the year	12	21	22	340	395
Disposals during the year	(42)	(82)	(39)	–	(163)
Transfer (to)/from other items	94	166	45	(262)	43
Cost at December 31, 2003	**2,901**	**3,673**	**1,057**	**474**	**8,105**
Depreciation and write-downs at January 1, 2003	1,002	2,517	704		4,223
Currency adjustment	(43)	(95)	(31)		(169)
Depreciation and write-downs for the year	97	246	80		423
Depreciation and write-downs eliminated on disposals during the year	(40)	(81)	(36)		(157)
Transfer (to)/from other items	8	(4)	(2)		2
Depreciation and write-downs at Dec. 31, 2003	**1,024**	**2,583**	**715**		**4,322**
Book value at December 31, 2003	**1,877**	**1,090**	**342**	**474**	**3,783**
Cost at January 1, 2002	3,158	3,900	1,263	512	8,833
Currency adjustment	(246)	(185)	(54)	(20)	(505)
Acquisition of activities	2	8	5	1	16
Additions during the year	9	31	26	301	367
Disposals during the year	(1)	(194)	(102)	–	(297)
Transfer (to)/from other items	76	168	(66)	(384)	(206)
Cost at December 31, 2002	**2,998**	**3,728**	**1,072**	**410**	**8,208**
Depreciation and write-downs at January 1, 2002	993	2,531	771		4,295
Currency adjustment	(91)	(102)	(38)		(231)
Depreciation and write-downs for the year	100	265	132		497
Depreciation and write-downs eliminated on disposals during the year	–	(173)	(97)		(270)
Transfer (to)/from other items	–	(4)	(64)		(68)
Depreciation and write-downs at Dec. 31, 2002	**1,002**	**2,517**	**704**		**4,223**
Book value at December 31, 2002	**1,996**	**1,211**	**368**	**410**	**3,985**

Of which commitments to third parties concerning investments in fixed assets as of December 31, 2003 amount to DKK 16 million, compared with DKK 27 million at December 31, 2002.

DKK million	2003	2002
Geographical distribution:		
Denmark	2,204	2,157
Rest of Europe, Middle East and Africa	81	88
North America	798	911
Asia Pacific	668	794
Latin America	32	35
Book value at December 31	**3,783**	**3,985**

Note 12 – Financial fixed assets

DKK million	2003	2002
Cost at January 1	37	22
Additions during the year	17	17
Disposals during the year	(2)	(2)
Transfer (to)/from other items	(52)	–
Cost at December 31	**–**	**37**
Book value at December 31	**–**	**37**

Note 13 – Other debtors

DKK million	2003	2002
Interest income	9	10
Public authorities	26	35
Deposits	17	26
Prepaid expenses	71	54
Hedging instruments	188	119
Other debtors	54	97
Total other debtors at December 31	**365**	**341**

Note 14 – Securities

DKK million	2003	2002
Shares	115	166
Total securities at December 31	**115**	**166**
At original acquisition cost	115	166

Note 15 – Shareholders' equity

DKK million	2003	2002
Shareholders' equity is distributed as follows at nominal value:		
A share capital – 10,748,720 shares of DKK 10	107	107
B share capital – 64,690,112 shares of DKK 10	647	647
Share capital at December 31	**754**	**754**

Each A share gives entitlement to 10 votes, while each B share gives entitlement to one vote.

Number of shares in circulation

Number of shares at January 1	71,759,232	72,888,832
Purchase of own participating interests	(2,271,500)	(1,132,300)
Sale of own participating interests	28,050	2,700
Number of shares at Dec. 31	**69,515,782**	**71,759,232**

Own participating interests – B shares

DKK million	2003	2002
Cost		
Cost at January 1	630	445
Additions during the year	392	185
Disposals during the year	(4)	0
Cost at December 31	**1,018**	**630**
Nominal value		
Nominal value at January 1	37	26
Additions during the year	23	11
Disposals during the year	(1)	0
Nominal value at December 31	**59**	**37**

Note 15 – Shareholders' equity (continued)

	2003	2002
Number of shares		
Number of shares at January 1	3,679,600	2,550,000
Additions during the year	2,271,500	1,132,300
Disposals during the year	(28,050)	(2,700)
Number of shares at December 31	**5,923,050**	**3,679,600**
Percentage of share capital		
Percentage of share capital at January 1	4.9%	3.4%
Additions during the year	3.0%	1.5%
Disposals during the year	(0.0)%	(0.0)%
Percentage of share capital at December 31	**7.9%**	**4.9%**

Of the holding of 5,923,050 own participating interests, 4,095,075 have been used to hedge share options.

Acquisitions of own participating interests during the year took place primarily to hedge share options.

Weighted average number of outstanding A and B shares excluding holding of own B shares:	70,460,530	72,336,740
Weighted average number of outstanding A and B shares (diluted) excluding holding of own B shares and including options in-the-money:	70,865,925	72,559,388

Note 16 – Minority interests

DKK million	2003	2002
Minority interests at January 1	93	105
Currency translation	(2)	(14)
Purchase of minority shares	(59)	–
Share of net profit	2	3
Dividend paid	(3)	(1)
Minority interests at December 31	**31**	**93**

Note 17 – Provisions for deferred tax

DKK million	2003	2002
Intangible fixed assets	55	40
Tangible fixed assets	429	466
Unrealised profit on intercompany sales	(87)	(89)
Write-down for doubtful debtors	(14)	(15)
Indirect production costs	99	124
Retaxation balance	126	125
Capitalised interest	38	42
Provisions	(62)	(53)
Other	290	357
Total provisions for deferred tax at December 31	**874**	**997**

Note 18 – Other provisions

DKK million	2003	2002
Other provisions at January 1	25	14
Currency translation	(3)	(1)
Additions during the year	2	13
Utilisation during the year	(4)	(1)
Other provisions at December 31	**20**	**25**
Other provisions broken down between current and non-current liabilities:		
Current liabilities	7	4
Non-current liabilities	13	21
Other provisions at December 31	**20**	**25**

Note 19 – Credit institutions – non-current

DKK million	2003	2002
Unsecured loans and other non-current loans with terms between 2005 and 2013 at an interest rate of 2.4-2.5%, excluding the amounts falling due within one year	1,072	1,863
Credit institutions at December 31	**1,072**	**1,863**
The debt is payable within the following periods as from the balance sheet date:		
Between 1 and 2 years	515	296
Between 2 and 3 years	–	1,010
Between 3 and 4 years	–	–
Between 4 and 5 years	–	–
After 5 years	557	557
Credit institutions at December 31	**1,072**	**1,863**
The debt is denominated in the following currencies:		
DKK	1,057	1,557
EUR	12	10
USD	3	296
Credit institutions at December 31	**1,072**	**1,863**

The interest on outstanding loans will be adjusted in 2004.

Revaluation of the above loans to market value at December 31, 2003 would not have entailed a value adjustment.

Note 20 – Credit institutions – current

DKK million	2003	2002
Credit institutions	135	204
Loans with amounts falling due within one year	238	–
Credit institutions at December 31	**373**	**204**
The debt is denominated in the following currencies:		
CNY	–	96
DKK	52	1
EUR	1	–
JPY	58	67
USD	262	39
Other	–	1
Credit institutions at December 31	**373**	**204**

Note 21 – Share-based remuneration

Allocation of share options to the Management, managerial and other staff is tied to results in achieved profits and shareholder value goals. The purpose of the share option schemes is to ensure common goals for the Management, employees and shareholders, and to attract and retain employees.

In 2003 share options were allocated to the Management, managerial and other staff. The maturity period of the options is eight years, and each option gives the holder of the option the right after three years to purchase one share at a nominal value of DKK 10 per share option.

The Management has previously been allocated share options with a maturity period of between six and eight years, which after three years give the holder of the option the right to purchase one share with a nominal value of DKK 10 per share option. Previously, share options with a maturity period of eight years have been allocated to other managerial staff. After three years, the options give the right to purchase one share with a nominal value of DKK 10 per share option.

The share option programme for other employees has run for three years, so it was possible to be allocated share options for the years 2001, 2002 and 2003. The share options have a binding period of three years and an exercise period of five years after the binding period.

All share options concerning 2003 are issued at an exercise price equal to the listed price for Novozymes' shares at January 1, 2003. Previously the options were issued at an exercise price equal to the listed price for the company's shares at the time that the options were issued, or at the time that the option scheme was announced.

At December 31, 2003 the Group's outstanding Novo Nordisk A/S options amounted to 577,960, with an average exercise price of DKK 185 per share of DKK 2 and a market value of DKK 34 million. These options are hedged by the Group's holding of Novo Nordisk A/S shares, which are recognised at an average exercise price. The Management and other managerial staff have exercised 29,040 Novo Nordisk A/S options in 2003.

The Group is obliged to divest 8,250 shares at DKK 1 million to Novo A/S with regard to options allocated to employees who were transferred to Novo A/S in connection with the Demerger. The shares shall be divested at a time when the options for these employees can be exercised, and Novozymes A/S is committed to reimburse expenses equivalent to the value of the shares at the time of the transition of the employees to Novo A/S. Of these shares, 1,050 were divested in 2003, so that the liability at December 31, 2003 totals 6,900 shares.

Note 21 – Share-based remuneration (continued)

Share options in Novozymes A/S

	The Management	Other managerial staff	Other staff	Total	Exercise price per option in DKK	Remaining term to maturity	Market value in DKK million*
Outstanding at January 1, 2002	**356,400**	**676,900**	**926,750**	**1,960,050**	**156 ****	**5**	
Allocated regarding 2002	25,700	237,850	482,575	746,125	169	7	
Options exercised in 2002		(2,400)		(2,400)			
Resignations in 2002		(26,900)	(43,800)	(70,700)			
Outstanding at December 31, 2002	**382,100**	**885,450**	**1,365,525**	**2,633,075**	**160 ****	**6**	
Allocated regarding 2003	51,600	512,000	1,016,750	1,580,350	148	8	
Options exercised in 2003	(6,300)	(21,750)		(28,050)	117		
Resignations in 2003		(41,350)	(48,950)	(90,300)			
Outstanding at December 31, 2003	**427,400**	**1,334,350**	**2,333,325**	**4,095,075**	**156 ****	**7**	
Outstanding programme 1997	1,100			1,100	97	2	0
Outstanding programme 1998	1,400	10,300		11,700	64	3	2
Outstanding programme 1999	3,300	28,100		31,400	101	4	4
Outstanding programme 2000	7,000	43,300		50,300	101	4	6
Outstanding programme 2000	312,200			312,200	101	3	36
Outstanding programme 2000		279,000		279,000	150	5	19
Outstanding programme 2001	25,100	237,900		263,000	159	6	17
Outstanding programme 2001			852,650	852,650	186	6	41
Outstanding programme 2002	25,700	223,750	463,925	713,375	169	7	47
Outstanding programme 2003	51,600	512,000	1,016,750	1,580,350	148	8	131
Outstanding at December 31, 2003	**427,400**	**1,334,350**	**2,333,325**	**4,095,075**			**303**

* The market value is calculated on the basis of the Black-Scholes model for valuation of options. For 2003, as of December 31, 2003, the calculation is based on a dividend per share of DKK 3.15 and a volatility of 24.7%. The risk-free interest is assessed at 2.9%, and the expected period of maturity is fixed at one year after the expiry of the binding period.

** The exercise price is an average of several option schemes.

Note 21 – Share-based remuneration (continued)

Holdings of and trading in Novozymes A/S shares by the Board of Directors and Management

Number of Novozymes A/S shares	Board of Directors	Management	Total
Share portfolio at January 1, 2002	13,655	81,331	94,986
Purchase of shares during the year	1,383	2,200	3,583
Share portfolio at January 1, 2003	**15,038**	**83,531**	**98,569**
Purchase of shares during the year	697	9,141	9,838
Sale of shares during the year	–	(7,208)	(7,208)
Share portfolio at December 31, 2003	**15,735**	**85,464**	**101,199**

The share portfolio had a market value of DKK 14.6 million at the beginning of the year, while the market value was DKK 21.8 million based on the listed prices at year-end 2002 and year-end 2003 respectively.

Holdings, exercise and allocations of Novozymes A/S share options for the Management

Number of share options in Novozymes A/S	Options at January 1, 2003	Exercised during the year	Allocated during the year	Options at December 31, 2003	Market value, DKK million
Steen Riisgaard	115,000	(5,000)	15,600	125,600	13.2
Per Falholt	66,300	(1,300)	9,000	74,000	7.8
Per Månsson	66,400	–	9,000	75,400	7.9
Peder Holk Nielsen	66,650	–	9,000	75,650	8.0
Arne W. Schmidt	67,750	–	9,000	76,750	8.1
Holdings of share options	**382,100**	**(6,300)**	**51,600**	**427,400**	

	2003 DKK million	2002 DKK million
Total remuneration to the Management	18	17
Total remuneration to the Board of Directors	2	2

Note 22 – Foreign currencies in the balance sheet

The table below shows the Group's assets and liabilities in foreign currency at December 31, 2003, calculated as the total of each company's assets and liabilities in a currency other than the company's own. The table also shows the financial instruments used to hedge these assets and liabilities.

Hedging of assets and liabilities in foreign currency

Million	Assets in DKK	Liabilities in DKK	Net assets in DKK	Contracted financial instruments in DKK	Net assets with transaction risk in DKK	Net assets with transaction risk in currency	Exchange rate at December 31, 2003 (for 100 units)
CHF	–	306	(306)	97	(209)	(44)	477.40
EUR	371	52	319	(319)	–	–	744.46
JPY	95	29	66	(41)	25	443	5.57
USD	574	659	(85)	–	(85)	(14)	595.76
Other	287	91	196	–	196		
	1,327	**1,137**	**190**	**(263)**	**(73)**		

Transaction risk is the possibility of gains/losses on transactions which are open on the balance sheet date as a result of subsequent exchange rate changes. The gains/losses will be recognised in the profit and loss account.

Hedging of investments in foreign subsidiaries

Million	Net investment in foreign subsidiaries in DKK	Contracted financial instruments in DKK	Net assets with translation risk in DKK	Net assets with translation risk in currency	Exchange rate at December 31, 2003 (for 100 units)
BRL	79	–	79	38	207.22
CHF	425	(286)	139	29	477.40
CNY	661	–	661	915	72.21
EUR	89	–	89	12	744.46
JPY	101	(70)	31	561	5.57
USD	935	(536)	399	67	595.76
Other	144	–	144		
	2,434	**(892)**	**1,542**		

Translation risk is the possibility of gains/losses arising from translation of net assets in subsidiaries as a result of subsequent exchange rate changes. The gains/losses will be recognised directly in Other comprehensive income under Shareholders' equity.

Note 23 – Derivative financial instruments in the Group

DKK million	Contract amount based on agreed rates	Gain/(loss) on revaluation to market value December 31, 2003	Of which included in 2003 profit and loss account	Charged directly to shareholders' equity December 31, 2003 To equity hedging	Deferred transfer to profit and loss account gain/(loss)	Interest margin p.a.	Maturity periods
Forward exchange contracts, net sales							
DKK/CHF	396	(1)	(1)				Jan.– Feb. 2004
DKK/GBP	9	–	–				Jan. 2004
DKK/USD	122	3	3				Jan.– Oct. 2004
JPY/DKK	297	8	2		6		Jan.– Dec. 2004
SEK/DKK	69	(1)	(1)				June 2004
	893	**9**	**3**	**–**	**6**		
Forward currency options, net sales							
USD/DKK	623	52	–	–	52		Jan.– Dec. 2004
	623	**52**	**–**	**–**	**52**		
Currency swaps for equity hedging							
CHF/DKK	275	(12)	1	(11)	(2)	1.7%	Sept. 2008
JPY/DKK	38	8	1	7	–	4.9%	May 2004
JPY/DKK	45	9	2	6	1	4.7%	April 2005
USD/DKK	423	126	1	125	–	0.1%	Nov. 2005
	781	**131**	**5**	**127**	**(1)**		
Currency swap for interest hedging							
EUR/DKK	500	(12)			(12)	(1.6%)	Dec. 2005
	500	**(12)**	**–**	**–**	**(12)**		
Currency loan for equity hedging							
USD	263	25	–	25	–		June 2004
	263	**25**	**–**	**25**	**–**		
Interest rate swap for currency loan hedging							
USD/USD	352	(3)	–	–	(3)	(3.7%)	June 2004
	352	**(3)**	**–**	**–**	**(3)**		
Forward Rate Agreement							
DKK	100	–	–	–	–		June 2004
	100	**–**	**–**	**–**	**–**		
	3,512	**202**	**8**	**152**	**42**		

The deferred gains and losses on forward exchange contracts and currency options at December 31, 2003 relate to the hedging of anticipated future sales in the hedged currencies. The deferred gains and losses will be transferred from shareholders' equity to the profit and loss account as these anticipated future sales are realised.

All deferred gains and losses on forward exchange contracts and currency options at December 31, 2002 have been transferred from shareholders' equity to the profit and loss account in 2003.

Note 23 – Derivative financial instruments in the Group (continued)

The Group's expected future net cash flows in major currencies are hedged as follows:

Currency	Number of months hedged
JPY	12
USD	12

As the financial instruments are entered into with major creditworthy banks, they are not considered to be subject to credit risk.

Note 24 – Contingent liabilities and pending litigation

DKK million	2003	2002
Contingent liabilities		
Rental and leasing commitments expiring within the following periods as from the balance sheet date:		
Within 1 year	34	30
Between 1 and 2 years	28	22
Between 2 and 3 years	22	17
Between 3 and 4 years	17	15
Between 4 and 5 years	15	14
After 5 years	72	85
Total contingent liabilities at December 31	**188**	**183**

Of which commitments at December 31, 2003 to related parties amount to DKK 74 million. The above rental and leasing commitments are related to non-cancellable operational leasing contracts.

The following amounts have been recognised in the consolidated profit and loss account in respect of operational leasing and rentals:	51	47

DKK million	2003	2002
Other contingent liabilities		
Contractual obligations relating to investments in tangible fixed assets, etc. to third parties	18	97
Other guarantees and commitments to related parties	94	59
Other guarantees and commitments in the Group	205	214

Pending litigation

Novozymes is a party to an arbitration case in which it is claimed by Danisco A/S that Novozymes has unlawfully appropriated certain lipase-related inventions. Novozymes evaluates its position in this case as positive and unchanged. At the time of presenting the Annual Report for 2002, an arbitration ruling was expected at the end of 2003 or start of 2004. It is now expected at the end of 2004.

In addition, Novozymes is engaged in certain other legal proceedings. In the opinion of the Board of Directors and Management, settlement or continuation of these proceedings will not have a material effect on the Group's financial position.

Liability for the debts and obligations of Novo Nordisk A/S

As a consequence of the Demerger of Novo Nordisk A/S into two companies, Novo Nordisk A/S and Novozymes A/S are jointly and severally liable in accordance with Section 136, subsection 3 of the Danish Companies Act for debt and obligations arising after January 1, 2000, but pertaining to the period before January 1, 2000, which cannot be clearly attributed to either Novo Nordisk A/S or Novozymes A/S. Liability will be distributed proportionally between the two companies.

Note 25 – Joint ventures

Novozymes A/S has interests in two joint ventures, namely two houseowners' associations run as jointly controlled entities with Novo Nordisk A/S. The objects of the associations are the operation and maintenance of common facilities.

Novozymes' share of the net profit, assets and liabilities of the two joint ventures is included in the Consolidated Accounts on a pro rata basis as follows:

DKK million	2003
Fixed assets	42
Current assets	60
Total assets	**102**
Non-current liabilities	(75)
Current liabilities	(27)
Total liabilities	**(102)**
Net profit	0

Novozymes A/S has assumed no material contingent liabilities in connection with its interests in these joint ventures.

Note 26 – Related party transactions

Related parties are considered to be the Novo Nordisk Foundation, Novo A/S, the Novo Nordisk Group, and the houseowners' associations that cooperate with the Novo Nordisk Group, the directors of these entities, and the Board of Directors and Management of Novozymes A/S, together with their immediate families. Related parties also include companies in which the above persons have significant interests. Minority shareholders in subsidiaries are also considered related parties.

The Novozymes Group has had the following transactions with related parties:

DKK million	2003 (Purchase)/ sale	2002 (Purchase)/ sale
Novo A/S (parent company)		
Stakeholder service and facilitation	(10)	(9)
Novo Nordisk Group (sister companies)		
IT services provided by NNIT A/S	(104)	(98)
Services provided by Novo Nordisk Servicepartner A/S	(139)	(153)
Services provided by Novo Nordisk Engineering A/S	(37)	(37)
Total	**(280)**	**(288)**
Purchase of materials for production from Novo Nordisk A/S	(54)	(52)
Other services provided by Novo Nordisk A/S	(32)	(42)
Total	**(366)**	**(382)**
Services provided to the Novo Nordisk Group	75	78
Sale of materials for production to the Novo Nordisk Group	80	56
Total	**155**	**134**
Sale of equipment to the Novo Nordisk Group	–	30
Minority shareholders		
Transactions with minority shareholders in subsidiaries	37	49

There have been no material transactions with the Novo Nordisk Foundation or with any director of Novozymes A/S, Novo A/S, the Novo Nordisk Foundation or the Novo Nordisk Group, other than intercompany transactions eliminated in the Consolidated Accounts and normal remuneration. The remuneration of the Board of Directors and Management is presented in Note 21.

DKK million	2003 Debtors/ (creditors)	2002 Debtors/ (creditors)
Novo A/S	(1)	(1)
The Novo Nordisk Group	(36)	(36)
Houseowners' associations	(25)	(31)
Minority interests	(1)	(1)

Note 27 – Grants

During the financial year the Novozymes Group has received grants for research and development of DKK 41 million, compared with DKK 44 million in 2002. Of this, DKK 38 million has been recognised in the profit and loss account under Licence fees and Other operating income, net, and DKK 3 million in the balance sheet under Other debtors.

Grants includes payments from the US Department of Energy for research and development costs defrayed by Novozymes in connection with the development of enzymes for the production of fuel ethanol.

Note 28 – Reversals of items with no effect on cash flow

DKK million	2003	2002
(Gain)/loss on sale of fixed assets	3	(6)
Write-down for doubtful debtors	(5)	9
Corporation tax	280	253
Depreciation, amortisation and write-downs	523	532
Unrealised (gain)/loss on securities, etc., net	–	27
Unrealised foreign exchange (gain)/loss	(14)	14
Interest income and interest costs	40	46
Other items with no effect on cash flow	(21)	46
Reversals of items with no effect on cash flow	**806**	**921**

Note 29 – Cash and cash equivalents

Cash and cash equivalents consist of cash at bank and in hand, securities and current credit institutions.

	2003 DKK million	2002 DKK million
Current credit institutions	(135)	(204)
Cash at bank and in hand	571	832
Cash and cash equivalents at December 31	**436**	**628**
Cash at bank and in hand and securities with remaining term to maturity less than three months at December 31	571	832

Note 30 – Expiration date for undrawn committed credit facilities

The current term to expiration of the undrawn committed credit facilities exceeds one year.

Note 31 – Acquisition of activities

The group acquired two activities in 2003. The total acquisition cost is DKK 123 million. The accumulated effect of the activities acquired is DKK 39 million in annual turnover.

	2003 DKK million	2002 DKK million
The acquired assets and goodwill constitute the following:		
Paid in cash and purchase costs	123	272
Total acquisition cost	**123**	**272**
Fair value of acquired net assets	89	184
Goodwill	**34**	**88**
Assets and liabilities resulting from the acquisition of activities comprise the following:		
Intangible fixed assets	59	149
Tangible fixed assets	9	16
Stocks	12	10
Receivables and accrued income	16	19
Liabilities	(7)	(10)
Fair value of acquired net assets	**89**	**184**
Goodwill on acquisition of activities	34	88
Total acquisition cost	**123**	**272**
Less:		
Cash at bank and in hand of acquired activities	–	–
Cash payments on acquisition of activities	**123**	**272**

Summary and key figures 2003-1999

		2003 DKK million	2002 DKK million	2001 DKK million	2000 DKK million	1999 DKK million
Profit and loss account						
Net turnover		5,803	5,642	5,271	5,033	4,501
Research and development costs		749	713	678	645	607
EBITDA*		1,505	1,479	1,396	1,316	1,166
Operating profit		982	947	904	825	687
Financial items, net		33	(47)	(33)	(120)	(85)
Profit before tax		1,015	900	871	705	602
Net profit		726	644	602	483	410
Balance sheet						
Fixed assets		4,317	4,574	4,780	4,586	4,584
Current assets		3,316	3,776	3,673	3,755	3,504
Total assets		7,633	8,350	8,453	8,341	8,088
Share capital		754	754	754	754	754
Shareholders' equity		4,144	4,155	4,058	3,962	3,344
Current liabilities		1,449	1,160	1,283	2,390	1,034
Non-current liabilities		1,095	1,863	1,917	927	2,790
Net interest-bearing debt*		802	1,126	1,376	1,342	1,919
Investments and cash flows						
Cash flow from operating activities		1,374	1,181	1,160	1,038	796
Cash flow from investing activities, net		(574)	(606)	(673)	(383)	(566)
Of which investments in tangible fixed assets, net		(389)	(334)	(450)	(383)	(566)
Free cash flow		800	575	487	655	230
Cash flow from financing activities		(998)	(368)	(653)	(987)	(548)
Net cash flow		(198)	207	(166)	(332)	(318)
Key figures						
Sales outside Denmark as a percentage of net turnover	%	96.3	96.7	97.7	98.5	98.1
Research and development costs as a percentage of net turnover	%	12.9	12.6	12.9	12.8	13.5
EBITDA margin*	%	25.9	26.2	26.5	26.1	25.9
Operating profit margin*	%	16.9	16.8	17.2	16.4	15.3
Net profit margin	%	12.5	11.4	11.4	9.6	9.1
Effective tax rate*	%	27.6	28.1	30.7	31.3	31.9
Equity ratio*	%	54.3	49.8	48.1	47.5	41.3
Return on equity*	%	17.5	15.7	15.0	13.2	13.6
ROIC*	%	15.0	13.1	12.0	9.8	8.4

The consolidated accounts for 1999 are derived from the annual accounts of the former Novo Nordisk Group and are based on the historical operating results, assets and liabilities in the enzyme business.

* For definitions please refer to the inner cover.

Companies in the Novozymes Group

Group companies

	Country	Activity					Issued share capital/ paid-up capital	Percentage of shares owned
Novozymes Australia Pty. Ltd.	Australia		■			AUD	500,000	100
Novozymes Austria GmbH	Austria		■			EUR	36,337	100
Novozymes Belgium BV	Belgium		■			EUR	18,600	100
Novozymes Latin America Ltda.	Brazil	●	■			BRL	23,601,906	100
Novozymes (China) Biotechnology Co. Ltd.	China	●	■			CNY	859,058,400	100
Novozymes (China) Investment Co. Ltd.	China		■			CNY	816,449,373	100
Novozymes (Shenyang) Bioprocessing Co. Ltd.	China		■			CNY	9,069,311	100
Suzhou Hongda Enzyme Co. Ltd.	China	●	■			CNY	34,769,000	62
Novozymes A/S	Denmark	●	■	▲	★	DKK	754,388,320	100
Novozymes Bioindustrial A/S	Denmark				★	DKK	1,000,000	100
Novozymes Bioindustrial China A/S	Denmark				★	DKK	729,700,000	100
Novozymes Biopolymer A/S	Denmark			▲		DKK	510,000	100
Novozymes Biopolymer Holding A/S	Denmark				★	DKK	510,000	100
Novozymes Biologicals France S.A.	France		■			EUR	650,000	100
Novozymes France S.A.	France		■			EUR	45,735	100
Novozymes Deutchland GmbH	Germany		■			EUR	255,646	100
Novozymes South Asia Pvt. Ltd.	India		■			INR	50,000,020	100
Novozymes Italia S.r.l.	Italy		■			EUR	10,400	100
Novozymes Biologicals Japan Ltd.	Japan		■			JPY	30,000,000	100
Novozymes Japan Ltd.	Japan		■	▲		JPY	300,000,000	60
Novozymes Property Ltd.	Japan				★	JPY	2,843,000,000	100
Novozymes Malaysia Sdn. Bhd.	Malaysia		■			MYR	6,666,414	100
Novozymes Mexico, S.A. de C.V.	Mexico		■			MXN	338,100	100
Novozymes Mexicana, S.A. de C.V.	Mexico		■			MXN	338,100	100
Novozymes Netherlands B.V.	Netherlands		■			EUR	18,000	100
Enzymes S.A. (Pty) Ltd.	South Africa		■			ZAR	100	49
Novozymes Korea Limited	South Korea		■			KRW	3,300,000,000	100
Novozymes Singapore Pte. Ltd.	Singapore		■			SGD	2,000,000	100
Novozymes Spain S.A.	Spain		■			EUR	360,607	100
Novozymes Biopharma AB	Sweden	●	■	▲		SEK	28,001,000	100
Novozymes Switzerland AG	Switzerland		■			CHF	5.000,000	100
Novozymes Switzerland Bioprocessing AG	Switzerland	●				CHF	2.500,000	100
Novozymes Switzerland Holding AG	Switzerland				★	CHF	3.000,000	100
Novozymes Enzim Dis Ticaret Limited Sirketi	Turkey		■			TRL	21,000,000,000	100
Novozymes UK Ltd.	UK		■			GBP	1,000,000	100
Novozymes North America, Inc.	USA	●	■	▲		USD	17,500,000	100
Novozymes Biologicals, Inc.	USA	●	■	▲		USD	3,000,000	100
Novozymes Biotech, Inc.	USA			▲		USD	1,000	100
Novozymes US, Inc.	USA				★	USD	115,387,497	100

Joint ventures

	Country	Activity				Proportion of ownership interest
Smørmosen houseowners' association	Denmark				★	50
Hallas Park houseowners' association	Denmark				★	50

● Production
■ Sales & Marketing
▲ Research & Development
★ Other

	Note		2003	2002
ENVIRONMENT				
Consumption of resources				
Water	32	1,000 m^3	4,196	4,080
Internally generated energy	33	1,000 GJ	718	686
Externally generated energy		1,000 GJ	2,172	2,135
Energy, total		1,000 GJ	2,890	2,821
Raw materials		1,000 tons	251	247
Packaging		1,000 tons	11	8
Efficiency				
Eco-Productivity Index (EPI), water			110	105
Eco-Productivity Index (EPI), energy			108	113
Wastewater				
Volume	34	1,000 m^3	3,113	2,725
COD		tons	1,430	1,424
Nitrogen		tons	195	144
Phosphorus		tons	30	20
Biomass				
Volume, NovoGro®		1,000 m^3	334	369
Volume, NovoGro 30		1,000 m^3	95	113
Nitrogen		tons	1,083	1,323
Phosphorus		tons	430	540
Waste				
Non-hazardous waste		tons	9,355	8,674
Hazardous waste		tons	835	1,107
Waste, total	35	tons	10,190	9,781
Percentage of total waste recycled		%	11.8	10.4
Emissions to air				
Ozone-depleting substances, HCFCs		kg	3,516	4,757
CO_2	36	1,000 tons	249	223
SO_2		tons	827	709
NO_x		tons	657	604
Environmental impact potentials				
Global warming	37	1,000 tons CO_2-eqv.	255	231
Ozone layer depletion		kg CFC_{11}-eqv.	141	190
Acidification		tons SO_2-eqv.	1,287	1,132
Environmental compliance				
Breaches of regulatory limits, groundwater		no.	16	35
Breaches of regulatory limits, other		no.	3	7
Accidental releases of GMOs		no.	0	0
Accidental releases with significant environmental impact		no.	0	0
Complaints		no.	17	18
Animals for testing				
Animals for testing		no.	1,456	1,712

Data for Environmental and Social Responsibility and Knowledge

	Note		2003	2002
SOCIAL				
Employee statistics				
Employees, total	38	no.	3,872	3,738
Women	39	%	34.3	33.7
Men		%	65.7	66.3
Rate of employee turnover	40	%	4.3	5.8
Average age		years	39.4	39.1
Seniority		years	8.8	8.5
Training costs				
Average spent per employee		DKK	6,121	5,978
HEALTH AND SAFETY				
Rate of absence	41	%	3.1	2.9
Accidents with absence	42	no.	44	55
Occupational diseases	43	no.	17	13
Frequency of occupational accidents			7.1	9.2
Frequency of occupational diseases			2.7	2.2
KNOWLEDGE				
Processes and technology				
New products		no.	6	8
Active patent families		no.	791	760
Customers				
Users of CRM	44	no.	611	592
Employees and organisation				
Users retrieving documents in LUNA		no.	2,207	1,972

Note 32 – Water allocated to primary source

	2003 1,000 m³	2002 1,000 m³
Drinking water	2,688	2,824
Industrial water	1,275	1,016
Steam	233	240
Water, total	**4,196**	**4,080**

Note 33 – Internally generated energy allocated to primary source

	2003 1,000 GJ	2002 1,000 GJ
Gas oil	73	32
Heavy fuel oil	180	161
Light fuel oil	12	16
Natural gas	453	477
Internally generated energy, total	**718**	**686**

Note 34 – Treated wastewater for irrigation

	2003 1,000 m³	2002 1,000 m³
Volume	682	542
Nitrogen, tons	43	22
Phosphorus, tons	5	2

Note 35 – Total waste volume by disposal method

	2003 Tons	2002 Tons
Incineration	4,783	3,777
Landfilling	3,750	4,345
Recycling	1,201	1,017
Other	456	642
Waste, total	**10,190**	**9,781**

Note 36 – CO_2 emissions by internally and externally generated energy

	2003 1,000 tons	2002 1,000 tons
Internally generated energy	47	43
Externally generated energy	202	180
CO_2 emissions, total	**249**	**223**

Note 37 – Global warming, CO_2-equivalents

	2003 1,000 tons	2002 1,000 tons
Internally generated energy	47	43
Externally generated energy	202	180
Ozone-depleting substances	6	8
CO_2-equivalents, total	**255**	**231**

Note 38 – Employee statistics

	2003 No.	2002 No.
Women	1,330	1,258
Men	2,542	2,480
Employees, total	**3,872**	**3,738**
Full-time employees	3,629	3,517
Part-time employees	243	221
Employees, total	**3,872**	**3,738**
Denmark	2,120	2,069
Rest of Europe, Middle East and Africa	292	286
North America	625	577
Asia Pacific	657	630
Latin America	178	176
Employees, total	**3,872**	**3,738**
Senior management	119	108
Management	420	353
Professional	969	939
Administrative	495	479
Skilled workers, laboratory technicians and other technicians	713	711
Process operators	1,156	1,148
Employees, total	**3,872**	**3,738**

Note 39 – Percentage of women by job category

	2003 %	2002 %
Senior management	12.6	10.2
Management	26.0	25.5

As there is a particular focus on the percentage of women at management level, the percentage of women is only reported for Senior management and Management and not for other job categories.

Note 40 – Job creation

	2003 No.	2002 No.
Growth in number of employees, organic	120	168
Growth in number of employees, acquisitions	14	95
Terminations	153	200

Note 41 – Rate of absence by job category

	2003 %	2002 %
Senior management, Management, professional and administrative	1.6	1.5
Skilled workers, laboratory technicians, other technicians and process operators	4.8	4.3

Rate of absence has been broken down by grouped job categories based on whether the work carried out is primarily office based, and is therefore not stated per job category.

Note 42 – Consequences of occupational accidents

	2003 No.	2002 No.
Return to normal job	39	54
Out of work or early retirement	1	1
Case pending	4	0
Occupational accidents, total	**44**	**55**
Total days of absence	570	1,039

Note 43 – Consequences of occupational diseases

	2003 No.	2002 No.
Return to normal job	6	6
Return to a different job in the same department	2	2
Transfer to a different job in another department	7	1
No longer employed by Novozymes but still able to work	1	1
Out of work or early retirement	0	2
Case pending	1	1
Occupational diseases, total	**17**	**13**
Total days of absence	36	445

Note 44 – Distribution of users of CRM

	2003 No.	2002 No.
Sales & Marketing	439	425
Research & Development	118	144
Other	54	23
Users of CRM	**611**	**592**

Share information

The Novozymes share in 2003

The price of the Novozymes B share closed the year at DKK 215.50, up DKK 67.50 or 46% from the beginning of the year. This positive performance came despite unfavourable exchange rate movements for Novozymes, especially in the case of the USD.

The Novozymes share performed 24 percentage points better than the Copenhagen Stock Exchange's KFX blue-chip index, which climbed 22% during the year and was favoured particularly strongly by the performance of the A.P. Møller-Mærsk share. Relative to other relevant stock indices the trend was again for the Novozymes share to gain more than the average.

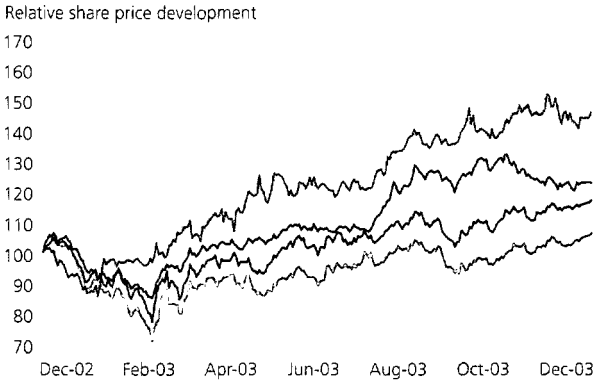
In September 2003 Dow Jones Sustainability Indexes again named Novozymes as the listed healthcare/ biotechnology company with the greatest capacity, both in Europe and worldwide, to generate long-term shareholder value by seizing opportunities and managing risks deriving from economic, environmental and social factors.

Novozymes' market capitalisation at the end of the year was DKK 16.2 billion. The share was the 13th most traded on the Copenhagen Stock Exchange, placing it midway up the KFX index. Share turnover was fairly stable during the year. On an average day over 146,000 shares were traded, equivalent to 1.8% of the value of trading in all KFX shares.

Novozymes invested DKK 392 million in share buy-backs in 2003, and holdings of own shares comprised 7.9% of its total share capital at year-end.

Novozymes' B share in 2003 – relative share price performance versus relevant indexes

— Novozymes A/S B
— KFX index
— Dow Jones STOXX Sustainability Index
— Dow Jones Chemicals Europe



Share-related key ratios

	2003	2002
Share price (DKK)		
– high	225.00	184.00
– low	125.00	134.50
– year-end	215.50	148.00
Year-end market capitalisation and turnover (DKK billion)		
– A shares	2.3	1.6
– B shares	13.9	9.6
– total	16.2	11.2
Turnover, all trades	6.3	4.7
No. of shares, average (million)		
– diluted	70.9	72.6
No. of shares, year-end (million)		
– issued	75.4	75.4
– outstanding	69.5	71.8
– diluted	70.7	71.9

►►

	2003	2002
Shares not strategically owned (free float)		
– all shares	74.5%	74.9%
– B shares	86.8%	87.3%
Key figures		
Earnings per share, diluted (DKK)	10.24	8.88
Cash flow from operating activities per share, diluted (DKK)	19.39	16.28
Dividend per share (DKK)	3.15	2.25
Year-end dividend yield (%)	1.5	1.5

The way in which "No. of shares – diluted" is calculated has been changed from previous years, see the accounting policies on page 10. The figures for 2002 have been restated.

Share information

Novozymes A/S' B shares are listed on the Copenhagen Stock Exchange and are traded under ticker code NZYM B and ISIN DK0010272129. They have a nominal value of DKK 10 each.

Share capital and voting rights

	Share capital (DKK)	Votes	% votes
A shares	107,487,200	1,074,872,000	62.4
B shares	646,901,120	646,901,120	37.6
Total	754,388,320	1,721,773,120	100.0

The A share capital is held by Novo A/S, which is wholly owned by the Novo Nordisk Foundation. In addition, Novo A/S holds 8,541,280 B shares, which overall gives Novo A/S 25.5% of the total share capital and 67.4% of the votes, which is why Novozymes is included in the consolidated accounts of the Novo Nordisk Foundation. Novo A/S is domiciled in Gladsaxe, Denmark.

Novozymes' holding of own shares has been included when calculating the numbers and percentages of votes held.

Breakdown of shareholders

Name	% of B share capital	% of total share capital
Novo A/S, Gladsaxe, Denmark	13%	26%
Novozymes A/S, Gladsaxe, Denmark	9%	8%
Danish ATP, Hillerød, Denmark	7%	6%
Fidelity Investments, USA	6%	5%
Other institutional investors, etc.	Approx. 54%	Approx. 46%
Private	Approx. 11%	Approx. 9%
Total	**100%**	**100%**

"Other institutional investors, etc." includes two foreign funds, each with just under 5% of the total share capital.

It is estimated that the number of private shareholders is 55,000, of whom 33,000 are registered by name.

Geographical distribution of shareholders

Country/region	% of B share capital	% of total share capital
Denmark	50%	57%
North America	18%	15%
UK	14%	12%
Rest of Europe	9%	8%
Asia Pacific, etc.	9%	8%
Total	**100%**	**100%**

Further information about the Novozymes share can be found at www.novozymes.com —> Investor Zone —> Share Info.

Dividend

The Board of Directors proposes payment of a dividend of DKK 3.15 per share for 2003, compared with DKK 2.25 per share for 2002.

Dividend is disbursed in DKK less the statutory 28% deduction of Danish withholding tax. Shareholders resident in certain countries are eligible for a refund of withholding tax deducted in Denmark, subject to the double taxation agreements in force between Denmark and the countries concerned.

Dividend dates

Resolution adopted at the Annual Meeting of Shareholders	March 17, 2004
Last day of trading with right to dividend for 2003	March 17, 2004
First day of trading without right to dividend for 2003	March 18, 2004
Dividend cut-off date	March 22, 2004
Disbursement of dividend	March 23, 2004

Financial calendar

March 17, 2004	Annual Meeting of Shareholders Bella Center, Center Boulevard 4, 2300 Copenhagen S, Denmark
April 29, 2004	First quarter 2004 Group financial statement
August 4, 2004	First half 2004 Group financial statement
October 27, 2004	First nine months 2004 Group financial statement

Shareholder magazine and annual report

The shareholder magazine *The Zymes* is distributed to all shareholders registered by name in connection with the notice convening the Annual Meeting of Shareholders. The annual report is available by contacting Novozymes or on Novozymes' website.

Equity analysts and investor relations guidelines

A detailed list of the equity analysts covering Novozymes can be found on the company's website at www.novozymes.com —> Investor Zone —> Share Info.

The following 20 companies were covering the company at year-end:
ABN AMRO/Alfred Berg, Alm. Brand Børs, Carnegie, Cazenove, Citigroup/Smith Barney, Crédit Agricole Indosuez Cheuvreux, Danske Equities, Deutsche Bank, Enskilda Securities, GP Børsmæglerselskab, Handelsbanken Securities, HSBC, J.P. Morgan Securities, Jyske Bank, Merrill Lynch, Nordea Securities, SG Securities, Sydbank, UBS and Vontobel.

Novozymes' investor relations guidelines can be viewed under Investor Zone —> Contacts.

Dialogue and contact

Visit the Investor Zone at www.novozymes.com for information for both private and institutional shareholders, or contact Investor Relations:

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Tel. +1 919 494 3000
Fax +1 919 494 3450
E-mail: tkla@novozymes.com

Shareholder enquiries concerning dividend payments and the Novozymes shareholder register in general (share certificates, lost shares, etc.) should be directed to:

Nordea Bank Danmark A/S
Selskabsservice, Postboks 850, 0900 Copenhagen C,
Denmark. Tel. +45 3333 3301, fax +45 3333 1031

Registration number

Novozymes A/S is registered with the Danish Commerce and Companies Agency under 10 00 71 27. ■

Seated, from the left: Lars Bo Køppler, Ulla Morin, Henrik Gürtler. Standing, from the left: Walter Thygesen, Arne Hansen, Paul Petter Aas, Hans Werdelin, Kurt Anker Nielsen, Jerker Hartwall

Henrik Gürtler
Born 1953, Chairman; CEO, Novo A/S
Other board positions:
Chairman: Center for Ledelse
Member: COWI A/S, Copenhagen Airports A/S (Københavns Lufthavne A/S) and Brødrene Hartmanns Fond

Paul Petter Aas
Born 1946
Senior Vice President, Norsk Hydro ASA, Norway

Arne Hansen
Born 1951, employee representative, Skilled worker

Jerker Hartwall
Born 1952
CEO, Karlshamns AB, Sweden

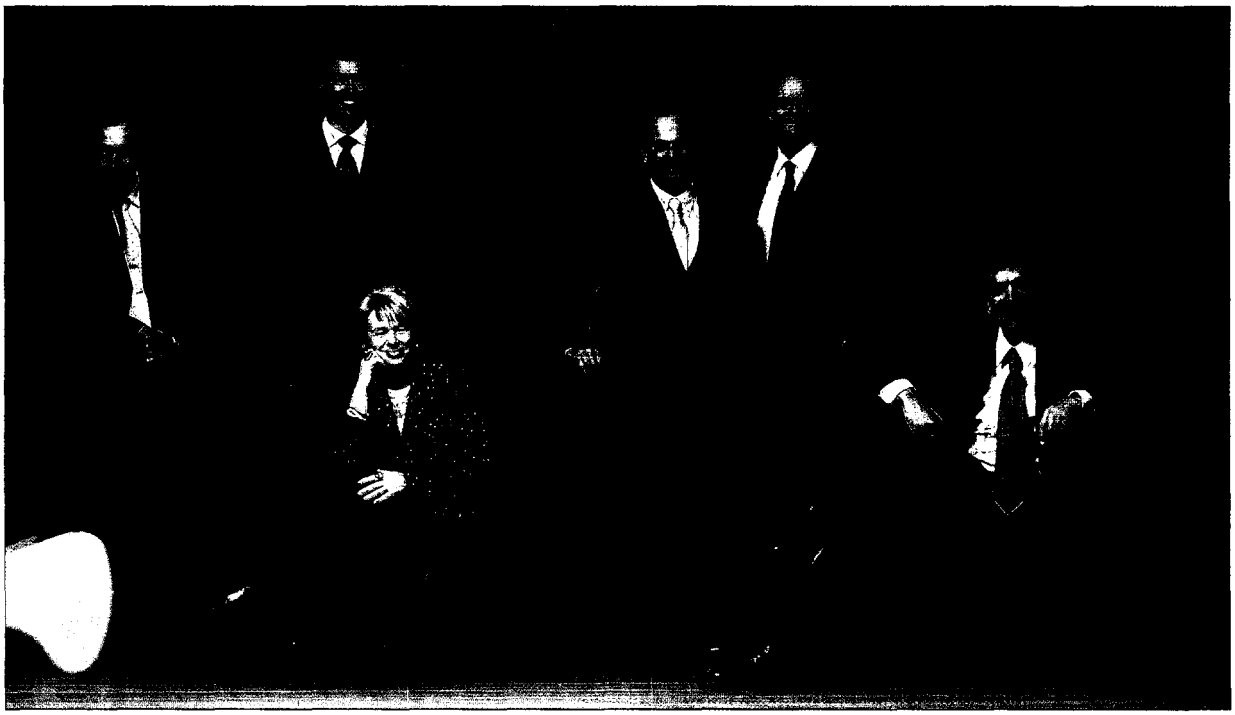
Lars Bo Køppler
Born 1962, employee representative, Technician

Ulla Morin
Born 1954, employee representative, Laboratory technician

Kurt Anker Nielsen
Born 1945, Vice Chairman
Director
Other board positions:
Vice Chairman: Novo Nordisk A/S
Member: Coloplast A/S, DakoCytomation A/S, ZymoGenetics, Inc., Novo A/S and TDC A/S

Walther Thygesen
Born 1950
General Manager and Regional Vice President, Hewlett-Packard
Other board positions:
Chairman: Twinsoft A/S
Member: Thrane & Thrane A/S

Hans Werdelin
Born 1938
Director
Other board positions:
Chairman: CW Obel A/S, Fritz Hansen A/S and Publicis A/S
Vice Chairman: Skandinavisk Holding A/S and Skandinavisk Tobakskompagni A/S
Member: Novo A/S, Lomax A/S and Laundry Systems Group NV



Seated, from the left: Anne-Marie Skov, Per Falholt. Standing, from the left: Steen Riisgaard, Peder Holk Nielsen, Per Månsson, Arne W. Schmidt

Steen Riisgaard
Born 1951
President and CEO
Other board positions:
Member: Egmont Foundation, World Wide Fund for Nature (WWF) in Denmark, and The Copenhagen Centre, New Partnerships for Social Responsibility

Per Månsson
Born 1954
Executive Vice President and CFO, IT & Legal Affairs

Per Falholt
Born 1958
Executive Vice President and CSO
Other board positions:
Member: IT Practice A/S

Peder Holk Nielsen
Born 1956
Executive Vice President, Sales & Marketing

Arne W. Schmidt
Born 1945
Executive Vice President, Development, Production & Quality

Besides the executive officers, the Executive Management also includes the vice presidents responsible for Human Resources and Stakeholder Communications:

Anne-Marie Skov
Born 1953
Vice President, Stakeholder Communications & Sustainable Development

Mette Vestergaard
Born 1966
Vice President, Human Resources
(from February 1, 2004)

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please see
www.novozymes.com

Glossary – accounts and data

Cash flow from operating activities per share (diluted)
Cash flow from operating activities divided by the weighted average number of shares outstanding (diluted).

Diluted
Average number of shares outstanding including in-the-money share options.

Earnings per share (diluted)
Net profit divided by the weighted average number of shares outstanding (diluted).

EBITDA
Operating profit excluding depreciation and amortisation.

EBITDA margin
Operating profit excluding depreciation and amortisation as a percentage of net turnover.

Eco-productivity index (EPI)
EPI for water and energy for 2003:

$$\frac{\text{production (2003)}}{\text{production (2002)}} \times \frac{\text{consumption (2002)}}{\text{consumption (2003)}} \times 100$$

Effective tax rate
Income tax on ordinary income as a percentage of ordinary profit before taxation and extraordinary income.

Equity ratio
Shareholders' equity at year-end as a percentage of total liabilities and shareholders' equity at year-end.

Free cash flow
Cash flow from operating and investing activities.

In-the-money
Share options for which the exercise price was below the market price on the balance sheet date.

Invested capital
Total assets excluding securities and cash at bank and in hand, less provisions and current liabilities excluding credit institutions.

Net interest-bearing debt
The market value of interest-bearing liabilities (non-current liabilities as well as current liabilities, including the value of any pension commitments) less the market value of cash at bank and in hand and other easily convertible interest-bearing securities.

Non-hazardous waste and hazardous waste
Non-hazardous waste comprises e.g. building waste, certain types of enzyme waste, kieselguhr and food, glass, metal, paper, cardboard and plastic waste. Hazardous waste comprises certain types of enzyme electronics and oil waste.

Occupational accidents and occupational diseases
Calculation of the frequency of occupational accidents and occupational diseases:

$$\frac{\text{no. of occupational accidents} \times 1{,}000{,}000}{\text{no. of employees} \times 1{,}600}$$

or

$$\frac{\text{no. of cases of occupational disease} \times 1{,}000{,}000}{\text{no. of employees} \times 1{,}600}$$

Operating profit margin
Operating profit as a percentage of net turnover.

Return on equity
Profit before extraordinary items as a percentage of average shareholders' equity.

Return on invested capital (ROIC)
Operating profit after tax as a percentage of average invested capital. The operating profit is adjusted for net foreign exchange gain/loss.

Share options in-the-money
The number of share options in-the-money for which the exercise price is below the market price is included in full in compiling the diluted key ratios.

Water and industrial water
Drinking water is of a quality that makes it safe for human beings to drink. Industrial water is of inferior quality to drinking water. Steam is the volume of water in externally generated steam.

Weighted average number of shares outstanding
Weighted average number of A and B shares outstanding at year-end.

Weighted average number of shares outstanding (diluted)
Weighted average number of A and B shares outstanding, excluding holding of own B shares and including share options in-the-money.

Forward-looking statements
The Annual Report for 2003 contains forward-looking statements, including the financial outlook for 2004. Forward-looking statements are by their very nature associated with risks and uncertainties that may cause actual results to differ materially from expectations. The uncertainties may include unexpected developments in the international currency exchange and securities markets, market-driven price decreases for Novozymes' products, and the introduction of competing products within Novozymes' core areas.

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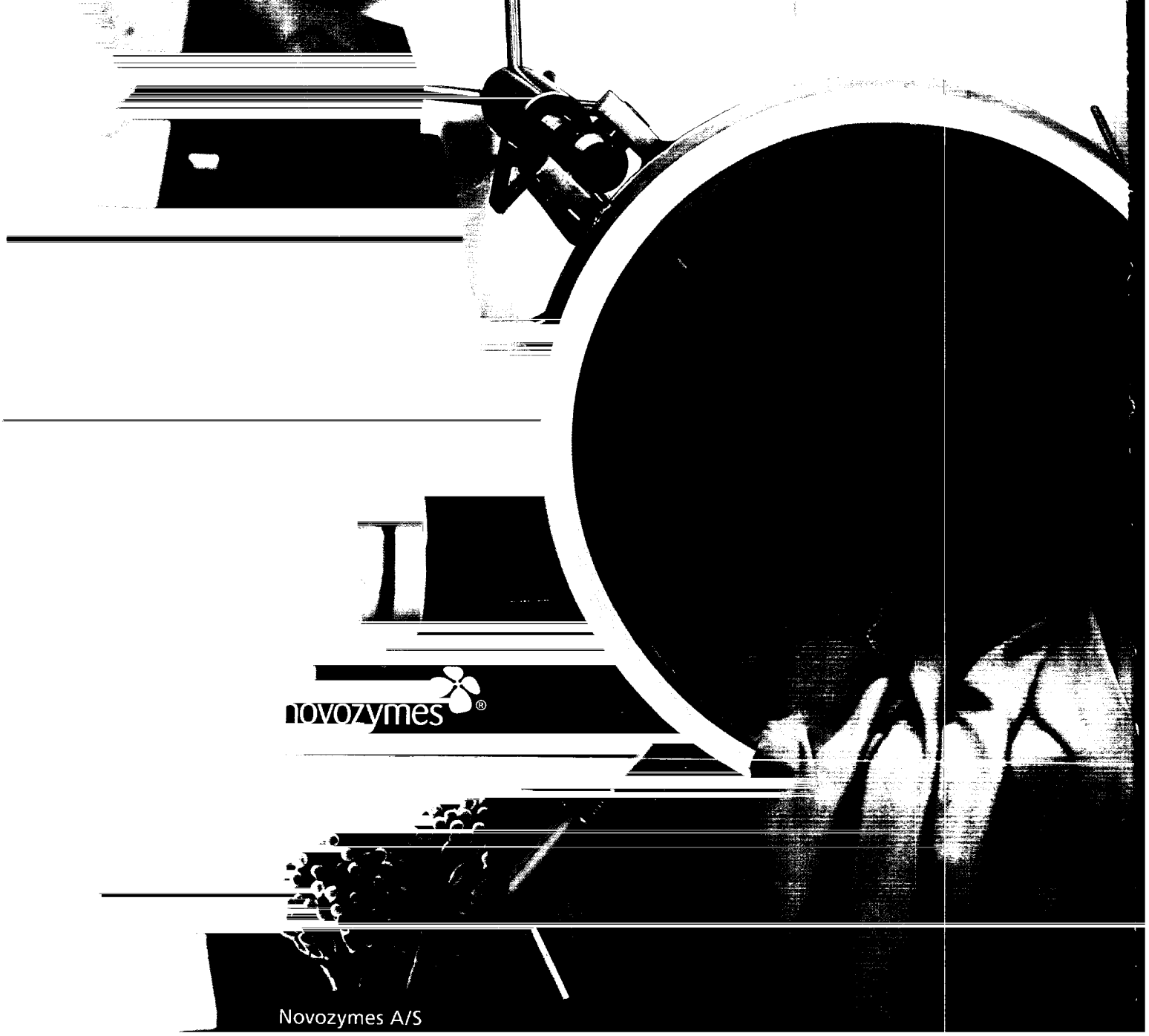

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