



Acting Responsibly – Securing the Future

2008 Sustainability Report

Key figures of Nordzucker



Economy		2003/04	2004/05	2005/06	2006/07	2007/08
Number of plants (total)		17	14	13	16	15
Number of plants (abroad)		8	6	5	9	9
Sugar beet processing	millions of tonnes	8.6	8.7	8.4	6.3	8.7
Sugar production	millions of tonnes	1.70	1.86	1.77	1.60	1.91

These figures refer to the financial year from March 1 to February 28.

Environment		2003	2004	2005	2006	2007
Beet pre-cleaning	%	92	93	94	100	100
Energy used for drying	kWh per t dg	880	804	757	762	572
CO ₂ emissions	kg CO ₂ per t beet	76.2	69.9	69.3	72.4	63.6
Total energy consumption	kWh per 100 kg beet	27.3	25.8	25.1	25.5	23.2

These figures refer to the calendar year up to the end of the campaign. dg = dry goods

Social responsibility		2003/04	2004/05	2005/06	2006/07	2007/08
Number of employees (total)	average for the year	3,758	3,458	2,820	3,616	2,861
Number of employees (abroad)	average for the year	1,864	1,540	1,023	1,959	1,349
Overtime	h	228,371	195,541	169,418	103,274	138,856
Notifiable industrial accidents	per 1,000 employees	10	4	5	4	5
Staff suggestions (net saving)	EUR	146,232	129,497	230,491	184,009	107,366

These figures refer to the financial year from March 1 to February 28. The figures on notifiable industrial accidents refer to the calendar year.



The prospect of growth

Growth is in our nature. Ten years after Nordzucker was established, we can be proud of our achievements: key financial indicators and industry figures bear testimony to our successful, sound growth path.

As a major European sugar producer, we will continue to pursue this path with prudence and determination. Focusing on producing sugar from beet gives us the strength to retain a leading role in the European sugar market in the future.

Our strategy is based on sustainable development resting on the three pillars of economic, environmental and social responsibility.

Nordzucker Group highlights



Economy

Growth in our core business

We want to become Europe's leading sugar group, so we are continuing to concentrate on substantial growth in our core business. Our aim is to grow our market share for beet and cane sugar in Europe to 20 per cent. In 2006, we ramped up our European operations by investing in Sunoko, thus gaining a foothold in Serbia in addition to our market presence in Germany, Poland, Hungary and Slovakia. Preparations are currently under way to acquire the Danish firm Danisco Sugar A/S. The vast majority of Danisco shareholders backed our plans on August 20, 2008 but we still need the approval of the competition authorities in the individual countries. We expect to be given the go-ahead in the coming months.

Strong European distribution via Eurosugar

Markets change, as do the demands customers make of us. Three strong partners – Nordzucker, Cristal Union and ED&F Man – have joined forces to establish the international distribution company Eurosugar S.A.S. based in Paris to cater for sugar sales throughout Europe. This has huge strategic advantages both for our customers and for us. European customers prefer to buy goods from highly efficient partners with international capabilities. Successful business dealings also call for reliable deliveries and high-quality products. Our European distribution cooperation offers all of this.

Environment

CO₂ reduction achieved

We have stepped up our efforts to slash our overall energy consumption. We have clearly exceeded the goal agreed with the German government – and reiterated in 2000 – of consistently further reducing energy use. Instead of the target 29 kilowatt-hours per 100 kilograms of beet, we now need just 23 kilowatt-hours. Low energy consumption has also prompted a significant reduction in CO₂.

New line of business: renewable resources

In December 2007, the bioethanol plant went into operation at our wholly owned subsidiary fuel 21 GmbH & Co. KG in Klein Wanzleben. This plant runs solely on the basis of sugar beet. Every year, some 130,000 cubic metres of bioethanol are produced from raw and thick juice. We are therefore tapping a new market with a great future, reducing CO_2 emissions and helping to lessen our dependency on crude oil imports. Bioethanol is the most widely used biofuel in the world.

Pilot project biogas

Since January 2008, a pilot plant has been running to produce biogas at the former sugar factory site in Groß Munzel. The aim of the trial phase is to establish whether biogas can be produced from sugar beet and pulp all year round and then fed into the gas network.



Social responsibility

Shift model introduced

The shift model recently introduced at our German plants has many positive outcomes. In addition to greater flexibility, these include extra days off during the campaign, which is good for workers' health. The new standby system also boosts motivation.

Socially responsible plant closures

As a result of the new European sugar market regime, we have adjusted our plant structure to reflect the current market demands. Plant closures were one of the consequences of this development. However, we do not leave our staff out in the cold. We have developed a redundancy package for all staff which is more generous than the international average and helps to cushion the financial and social impact. In this way, we have upheld our social responsibilities during all plant closures.

Minimising accidents, strengthening prevention

Our health and safety work is bearing fruit. More than half of all plants have not had a notifiable accident for over two years. With numerous healthcare campaigns addressing issues such as back pain, giving up smoking and road safety, we are raising our employees' awareness of fitness, healthy eating and accident prevention long term.

Contents

Foreword by the Management Board 4						
Profile of Nordzucker						
Economy	14					
Company policy	15					
Management system						
Raw material procurement	21					
Environment	26					
Environmental guidelines	27					
Environmental targets	29					
The sugar production process	30					
Eco-friendly production						
Other products	39					
Accumulating waste	39					
Renewable resources	40					
Renaturation	42					
International environmental policy						
Social responsibility	44					
Attractive employer	45					
Occupational health and safety	54					
Public affairs	58					
Communication and dialogue	59					
Sponsorship	63					
Factory tours	63					
Glossary	64					
Environmental declarations Inside back	cover					



Hans-Gerd Birlenberg (born 1954)

- Chairman of the Management Board of Nordzucker AG since 2007 and member of the Management Board since 2006
- Responsible for: finances and controlling, IT, corporate communication, corporate counsel, human resources, risk management, sales (Eurosugar)



Dr Henrik Einfeld (born 1945)

- Member of the Management Board of Nordzucker AG since 2007
- Responsible for: agriculture, raw material procurement (Germany and international)



Dr Martin Wienkenhöver (born 1956)

- Member of the Management Board of Nordzucker AG since April 1, 2008
- Responsible for: supply chain (purchasing, production, quality management and logistics)

Dear readers,

"Acting Responsibly – Securing the Future" is the motto for our 2008 Sustainability Report. For many years, we have been continuously setting ourselves goals to boost the sustainable development of Nordzucker. We believe in integrating economic, environmental and social considerations into our management of the company, and this also acts as a motivational force. All of this is firmly rooted in both our company policy and our Strategy Map. The latter is our company's roadmap, which lays out quantifiable economic targets as well as values and guidelines for cooperation and management, all of which must be observed by all members of staff. Ever since the first sugar factories were founded in Northern Germany, they have focused on both product quality and the economical use of resources. Today, more than 150 years later, we can proudly point to highly efficient, resource-conserving factories throughout Europe. We place our trust in technology which makes a major contribution towards cutting down on energy made using fossil fuels and thereby reducing CO₂ emissions. We also place our trust in people who work together to achieve great things and come up with ideas which move our company forwards. It is our duty and our aim to establish a trusting, motivated working environment and stimulate our employees so that they channel their efforts into safeguarding Nordzucker's future.

All aspects of our business – motivated staff, competent managers, innovative technology and efficient processes – ensure that Nordzucker is, and remains, successful. We will not rest on our laurels. We will ensure that we are still able to overcome the challenges of the European sugar market and the reformed sugar market regime successfully in future. The size and reliability of sugar suppliers are major factors which are of great importance to our customers. As market consolidation progresses, only companies who have a high profile throughout Europe will be in a strong position in the eyes of customers who also operate on a Europe-wide scale. This is why one of our targets is to achieve a market share of 20 per cent in beet and cane sugar in Europe. We are already taking our first major step towards achieving this goal. Acquiring Danisco Sugar – which at the time of going to press was still subject to the approval of the relevant countries' competition authorities – will catapult Nordzucker into the unrivalled second place within the European league.

A strong company is also an attractive company to staff and potential employees. A strong company is in a position to invest in technology and the environment. A strong company has a future and – as part of the future – is also responsible for the generations to come. In line with this, and as an industrial company, we make a sustainable contribution towards conserving resources, protecting the environment and aiding staff development.

Our 2008 Sustainability Report provides information about all of these issues. Our motto "Acting Responsibly – Securing the Future" sums it up beautifully. This is how we are laying the foundations today for tomorrow's success.

Nordzucker AG The Management Board

Hans-Gerd Birlenberg

Dr Henrik Einfeld

1. Leuis Sun 2'

Dr Martin Wienkenhöver



Profile of Nordzucker

Company development and key indicators

Ambitious company objectives

Targets, values, Strategy Map The *Strategy Map* is our strategic roadmap for the future. It is a compilation of our company's vision, mission, targets and guidelines, and it is binding for all Nordzucker Group employees. The different elements are brought together by the overarching values of courage, resultorientation, passion, sustainability, commitment and esteem.

The most important economic targets laid down in our *Strategy Map* are:

- 20 per cent market share for beet and cane sugar in Europe
- 15 per cent EBITDA margin
- 5 per cent return on revenues
- 30 per cent equity ratio
- 10 per cent *return on equity*

However, economic targets alone are not enough to ensure successful company management. The guidelines on leadership and working together shape the company's culture, both within the company and beyond. In addition to each individual's responsibility for our company's success, our priorities include sustainable management. We are aware that we have a responsibility as a part of the environment and a member of society. The sentence at the heart of our guidelines is: "Our management is sustainable because we take into account economic, environmental and social issues". Our managers make a major contribution towards giving their staff direction by identifying potential, taking time for them and recognising staff achievements.

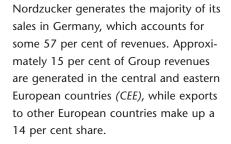
By clearly focusing on the market and our customers and therefore taking our business practices "From Good to Excellence", we believe we are well equipped to successfully master the challenges.

Revenue development and net income continuously improved

Since Nordzucker was established in 1997, its revenues and net income have increased continuously. In just over ten years, Nordzucker has developed into a major European sugar group.

In the year it was established, Nordzucker posted revenues of EUR 984 million. The following years were shaped by growth and acquisitions in the sugar business. In 1998/99, the company's revenues exceeded EUR 1 billion for the first time. In 2003/04, Nordzucker generated revenues of over EUR 1.2 billion. In the 2007/08 financial year, the figure was more than EUR 1.3 billion.

These developments are in part thanks to the company's continuous growth path in Europe. Successful acquisitions in Central and Eastern Europe (Poland, Hungary and Slovakia) and in Serbia have helped Nordzucker to become an expanding Group with an international focus.



In addition to revenues, net income has soared in recent years. In 1997/1998, the annual net income came to EUR 9 million. Just four years later, it was EUR 55 million. In 2006/07, Nordzucker posted EUR 115 million, the best result in the company's history. Most recently, consolidated net income totalled EUR 80 million.

When it comes to dividend policy, Nordzucker AG stands for continuity and reliability. Shareholders always receive an attractive return on their capital investment. In the last financial year, dividends totalled approximately EUR 23 million, equivalent to EUR 0.48 per share.

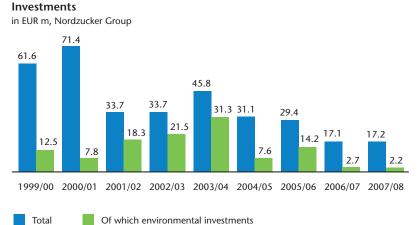
In the 2007/08 financial year, the equity ratio was around 40 per cent.

Consolidated workforce development

In the past financial year, the average number of employees at the Nordzucker Group was 2,861. That is a decrease of 755 on the previous year. This reduction was primarily due to company regulations on early retirement and further restructuring measures. Approximately half of the Group's employees worked abroad. In previous years, the headcount fluctuated dramatically. Firstly, it increased to match the Nordzucker Group's expansion. This was then counteracted by adjustments in line with political developments, which demanded a number of plant closures.

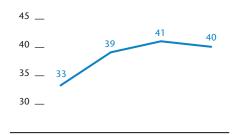
Sugar-sweet products

Nordzucker's core line of business is producing sugar from beet for trade and industry. Its main products are refined crystalline sugar, liquid sugar, inverted sugar syrup, fructose and fondant. Approximately 80 per cent of our sugar is supplied to the food industry; sales of household sugar make up some 20 per cent of our business. The company also manufactures sugar beet pellets and molasses. The production of energy from renewable resources forms another of the company's mainstays. Since December 2007, the fuel 21 bioethanol plant has been producing bioethanol using sugar beet.



Of which environmental investments

Equity ratio in per cent, Nordzucker Group



2005/06

2006/07

2007/08



2004/05

The Clauen plant was established in 1869 and employs 129 staff. It produces nothing but loose, unpacked white crystalline sugar for industrial customers. The Klein Wanzleben sugar factory was newly built between 1992 and 1994 and has a workforce of 129. In autumn 2007, the bioethanol factory owned by fuel 21 GmbH & Co. KG also became operational. Nordstemmen as the oldest factory was established in 1865, is staffed by 148 employees and is the second site to produce different grades of sugar. Since 2007, the factory has also manufactured thick juice for bioethanol production. The liquid sugar plant has been producing liquid sugar, fondant and other specialities since 2001. The Schladen plant opened in 1870 and has 133 staff. In addition to white sugar, it manufactures thick juice for bioethanol production.



Nordzucker sites -

Nordzucker grows with Europe

Nordzucker now operates five sugar factories in Germany at sites in Clauen, Klein Wanzleben, Nordstemmen, Schladen and Uelzen. In Groß Munzel and Nordstemmen, Nordzucker produces *liquid sugar*.

Ever since Nordzucker AG was established, it has focused on catering for the whole European market. The company's aim was to further grow in its core line of business, and this remains its objective. In 1997, its international expansion began with the acquisition of shares in the Czech Republic. In 1998, the company bought stakes in sugar factories in Slovakia, including the production plant Trencianska Tepla. The following year, Nordzucker acquired a majority stake in Cukrownia Opalenica S.A. in Poland and Cukrownia Wschowa S.A. with its plant in Chelmza. Nordzucker's Hungarian operations began in 2003, when the company acquired the Hatvan, Szerencs and Szolnok sites. Since 2006, Nordzucker has held a majority stake in the Sunoko Group, which operates four sugar factories in Serbia.

In 2007, Nordzucker had to cease sugar production in Hungary due to bottlenecks in beet procurement. However, Nordzucker continues to supply the market with sugar.

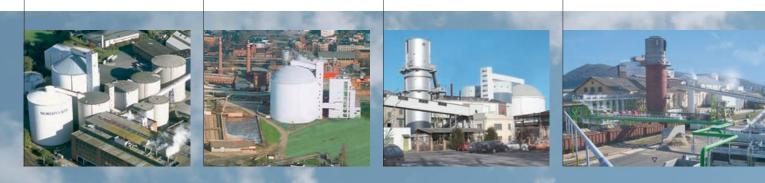
Investments

Eurosugar

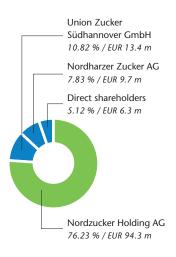
Eurosugar S.A.S., Paris, is a cooperative providing Europe-wide sugar distribution for Nordzucker AG and the French sugar manufacturer Cristal Union, Paris. Also involved in the joint venture is the London trading company ED&F Man. Eurosugar's objective is to offer comprehensive, Europe-wide sugar distribution. Its European presence, pooled sales expertise and market strength make Eurosugar one of the most important players in the sugar industry.

fuel 21 GmbH & Co. KG

Nordzucker AG took its first major step in the field of renewable energies with the construction of the fuel 21 bioethanol plant. Since December 2007, almost 400 cubic metres of beet-based *bioethanol* have been produced for the fuel industry every day. In total, up to 1.3 million tonnes of sugar beet are processed to make *bioethanol* every year. The beet is supplied by 3,600 farmers. During the process of manufacturing *bioethanol*, sugar beet vinasse is also produced, which can be used as fodder or fertiliser. Uelzen sugar factory was established in 1883. It is Nordzucker AG's largest plant, run by 194 employees. The plant produces approximately 50 per cent of the sugar supplied to retailers. The sugar factory Chelmza is located near Torun in Poland and has been in production since 1882. A total of 146 employees works there. The Chelmza plant has been converting raw cane sugar since 2008 to cater for the sugar deficit expected in Europe following the quota surrender. Also in Poland, the Opalenica plant is located near Poznan. It was established in 1884 and has a workforce of 180. Extensive investments were made at the Opalenica plant between 2000 and 2006 to improve sugar quality, customer satisfaction, environmental protection and energy efficiency. The Slovakian sugar factory in Trencianska Tepla was established in 1900. It is staffed by 164 employees. The plant is capable of processing 5,800 tonnes of beet per day.



Shareholder structure Nordzucker AG As of: July 15, 2008, Share capital EUR 123.7 m



Hübner/Medopharm

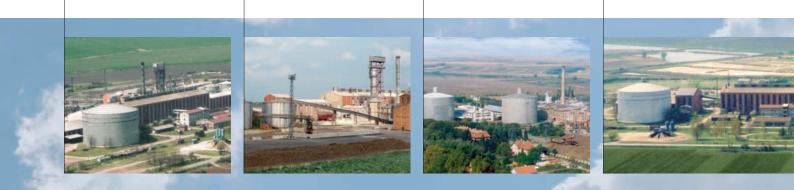
In 2000, Nordzucker AG acquired the Hübner Group, Ehrenkirchen. This medium-sized company is the second largest German manufacturer of healthcare products. With approximately 180 employees and a tradition stretching back over 70 years, Hübner markets its products throughout Germany in health food shops and pharmacies. Hübner products are also exported to 30 countries.

Hübner produces high-quality natural remedies, food supplements, medicinal goods and bodycare products based on natural ingredients. The products combine quality, effectiveness and compatibility.

Stable shareholder and company structure

Currently, Nordzucker AG's shareholders primarily hold investments in the company via the three holding companies Nordzucker Holding AG, Union Zucker Südhannover GmbH and Nordharzer Zucker AG. As the majority shareholder with more than three quarters of the shares, Nordzucker Holding AG has a special role to play. There are also direct shareholders.

The holding company structure reflects that of the former sugar factory companies. Following numerous mergers, the originally independent North German sugar factories combined their operating assets within Nordzucker AG. Jugozapadna Backa sugar factory in Bac (Serbia) was built between 1976 and 1978. It is now capable of processing on average 4,000 tonnes of beet a day. Donji Srem sugar factory in Pecinci (Serbia) was constructed between 1976 and 1978 and currently processes an average of 5,500 tonnes of beet a day. The Backa sugar factory is located in the fertile plains some three kilometres south-west of the town of Vrbas (Serbia). The factory started production in 1913 and processes 6,000 tonnes of beet a day on average. Jedinstvo sugar factory in Kovacica was built between 1976 and 1979. It is situated in the Southern part of Banat, approximately 45 kilometres from Belgrade. It currently averages 4,000 tonnes of beet per day.



Responsible management

Corporate governance describes the way in which a company is managed and controlled. Nordzucker AG is aware of the importance of efficient structures and company officers' compliance with corporate governance guidelines, and these ensure responsible management which is geared towards long-term value creation. This fosters trust in the Nordzucker Group's management and supervisory bodies on financial markets and amongst shareholders, business associates, staff and the general public.

The decision-making and control processes at Nordzucker are based on corporate governance principles. Our actions follow clearly defined guidelines based on the values of courage, focusing on results, passion, sustainability, commitment and esteem. They support the integrated processes and workflow systems. Permanently increasing the company's value via continuous growth and improving its market position are the criteria which guide every employee's actions. At the same time, the ongoing optimisation of all business processes safeguards the company's existence and its systematic long-term further development in a changing competitive environment.

As the executive body, the Management Board determines company policy. It is responsible for the company's strategic alignment, planning and setting the company's budget, allocating *resources* and monitoring business developments. In addition to this, the Board is responsible for drawing up the company's quarterly financial statements, the annual financial statements for Nordzucker AG and the consolidated financial statements. The Supervisory Board oversees and advises the Management Board on its running of the business. It regularly discusses business developments and plans along with the company's strategy and its implementation. The Supervisory Board verifies and approves the annual financial statements for Nordzucker AG and the Group as a whole, taking into account the auditor's report and the results of the *audit* conducted by the Finance and Audit Committee. Major Management Board decisions must also be approved by the Supervisory Board. The Supervisory Board currently has 21 members, of whom two thirds are shareholders and one third are employee representatives.

Beet processing and sugar production in Europe

Nordzucker is one of Europe's leading sugar manufacturers. In addition to the main product, sugar, its plants in four countries manufacture animal feed and fertiliser and generate energy from renewable resources. During the 2007 sugar beet *campaign*, a total of 1.91 million tonnes of sugar were produced by the Group as a whole. On average, the campaign lasted 117 days in Northern Germany, 94 in Poland, 68 in Hungary, 106 in Slovakia and 118 days in Serbia.

The Group-wide yield was 56.6 tonnes of beet per hectare with a sugar content of 16.8 per cent. Northern Germany and Poland achieved the best *campaign* results. In Northern Germany, the beet yield was 61.7 tonnes per hectare, while the sugar content was 17.2 per cent. This is equivalent to a sugar yield of 10.6 tonnes per hectare. With 60.5 tonnes of beet per hectare, Poland also achieved record results. Here, the sugar content was 17.7 per cent, resulting in a sugar yield per hectare of 10.7 tonnes.

Nordzucker offers sugar-processing food companies, retailers and end consumers a comprehensive range of sugar and accompanying services via the European distribution company Eurosugar S.A.S.

2006

34,500

48.4

15.2

7.3

89

2007

37,143

45.3

14.8 6.7

118

Campaign results in the Group

					Poland		2005	2006	2007	
				-	Cultivation	area (ha)	22,600	18,900	19,400	-
					Beet yield (46.3	51.4	60.5	-
				-	Sugar cont	. ,	18.7	16.4	17.7	-
	E for			-	Sugar yield	. ,	8.6	8.4	10.7	-
				-	Campaign	duration (d)	90	75	94	-
- 5	Braunschweig	Berlin		Pozn	an	Warsaw				
			<u> </u>		Slovakia		2005	2006	2007	
Germany	2005	2006	2007		Cultivation	area (ha)	11,500	10,400	11,194	•
Cultivation area (ha)	144,900	117,200	140,946		Beet yield ((t/ha)	56.3	49.3	47.0	-
Beet yield (t/ha)	58.1	54.0	61.7		Sugar cont	ent (%)	17.0	17.7	16.4	
Sugar content (%)	17.8	17.9	17.2		Sugar yield	l (t/ha)	9.6	8.7	7.7	
Sugar yield (t/ha)	10.3	9.6	10.6		Campaign	duration (d)	144	95	106	
Campaign duration	(d) 93	79	117	Bratislava	•					
					Buda	pest				
	Hungary		2005	2006	2007	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Serbia			
	Cultivation area	(ha)	19,800	16,100	18,210		Cultiva	ition area ((ha)	27
	Beet yield (t/ha)		58.2	50.5	41.9		Beet yi	eld (t/ha)		
	Sugar content (%)	16.1	17.1	16.4		Sugar	content (%	b)	
	Sugar yield (t/ha	a)	9.4	8.6	6.8		J .	yield (t/ha))	
	Campaign durat	tion (d)	103	68	68	Belgrad	e Campa	aign durati	on (d)	

Eurosugar distribution structure established

Eurosugar S.A.S. started its European sugar distribution activities on October 1, 2007. Headquartered in Paris, Eurosugar is a subsidiary of the partners Nordzucker, Cristal Union and ED&F Man. It operates throughout Europe as a trading company. Eurosugar can boast two major advantages which set it apart from most of its competitors. Firstly, Eurosugar acts as a powerful distribution network which covers almost all of Europe. Secondly, the three partners ensure that special logistical requirements are fulfilled by a single distribution company in a changing European sugar market. With the expertise of two established European sugar producers and a traditional trading company with global capabilities and the very best contacts to sugar manufactures all around the world. European customers can look forward to even more reliable sugar supplies in future. Nordzucker and Cristal Union will continue to produce sugar in strong, competitive European regions in future. ED&F Man will manage the import of cane sugar from ACP and LDC countries. This will close the gap between demand and production prompted by the reform of the sugar market regime and the resulting quota reduction. The Eurosugar distribution network will be supplemented by associated investments in companies in Ireland and Italy.

Eurosugar now has 150 employees working in eight different European countries.

The emphasis is always on customers' quality, supply and service expectations. Continuous improvements ensure that these expectations are met and at times exceeded. With a wide-ranging product portfolio, Eurosugar offers our European customers an even more extensive and even better service.

The newly founded distribution company is using interesting product innovations, long-term marketing and powerful advertising to counteract the declining use of household sugar. In doing so, Eurosugar benefits from established regional end consumer brands, such as SweetFamily in Germany and Eastern Europe or Daddy and Erstein in France. Interdisciplinary teams maintain communication between the customer and producer. Requirements are recorded centrally and fulfilled via the Eurosugar interface, in conjunction with the producers Nordzucker and Cristal Union or ED&F Man offering a single face to the customer.

Eurosugar sees the stability of its internal processes as a guarantee of long-term success. The European sugar company is one of only a few which can offer their customers a uniform process mapped in a single European IT environment, regardless of where they operate – be it Poland, Spain, Hungary or elsewhere. All business processes are mapped in a joint SAP landscape with identical release versions. There is no need to manage complex interfaces.

The business processes are highly automated using *electronic data interchange (EDI)* and harmonised with customers and producers. This results in fast workflows which require minimal manual intervention and guarantee reliable data quality.



Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Company policy

Economy

A far-sighted strategy

Nordzucker AG company policy

As a major food producer in the European Union, we work with beet farmers to supply the population with sugar and provide other industries with additional products, especially the animal feed sector. We always take a sustainable approach to business.

As a strong partner for agriculture, we also transform the energy contained in renewable resources into alternatives to fossil fuels and therefore make a major contribution towards reducing CO₂ *emissions*.

By continually expanding our portfolio of products and services and aligning all business activities with the expectations of industrial and trade customers as well as end consumers, we offer our shareholders an appropriate return on their capital investment and provide our suppliers – growers of beet and renewable resources – with appropriate remuneration. All business activities are tailored to the specific needs and expectations of external and internal customers. We gauge whether we fulfil these needs and expectations using the criteria of reliability, speed and costs whilst also fostering creativity and flexibility. Integrated procedures and systems support our business processes.

All of our activities are guided by the principles of the *German Corporate Governance Code* and complying with all applicable legal requirements, fulfilling food and animal feed quality and safety standards, conserving resources, continuously minimising and preventing environmental impact, and ensuring occupational health and safety. In particular, we prioritise the avoidance and prevention of mistakes.



The management regularly measures and evaluates business activities and the efficiency of business processes and adjusts them in line with customers' and shareholders' expectations if necessary. The Supervisory Board assesses the result and further development of the company's business activities at fixed intervals.

Ongoing improvements to all business processes by competent, highly motivated and performance-based paid staff along with target-oriented management safeguards the existence and the long-term, systematic further development of the company in a changing competitive environment. Our actions are guided by the European sugar industry's *Corporate Social Responsibility Code (CSR)*. This includes upholding minimum standards for human rights, education, training, health and safety, the relationship between social partners, fair pay, working conditions and socially responsible restructuring. We also encourage our business associates to observe these standards.

The objectives of achieving reasonable long-term profits, continuously generating internal growth and increasing market share in our lines of business determine and guide the way in which every single employee acts.

In conjunction with the environmental and product safety guidelines, Nordzucker's company policy forms the compulsory basis for all our employees' actions.

Braunschweig, Germany, June 2008

Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Company policy Management system

Management system

Nordzucker certificates (Germany)

Integrated management system

Since 1994, our quality management system has been based on the requirements of DIN EN ISO 9001. In 1996, we became one of the first companies in the food industry to have our German sites certified in line with the environmental standard DIN EN ISO 14001 and the Eco-Audit Regulation 761/2001 (EMAS II). In the following years, we added further standards in line with market conditions. such as the Q&S GmbH animal feed standard, the GMP B2 standard established by PDV (the Dutch Product Board Animal Feed), the International Food Standard (IFS) for food retailers and certification in line with the Eco-Regulation for our organic products. In 2007, all our German sites were successfully certified according to the product safety standard DIN EN ISO 22000 for the first time. All of these standards are integrated into our quality management system.

Objectives of the management system:

- Systematically recording the requirements of investors, employees and market partners (customers and suppliers), the legislator and society
- Deriving corporate objectives from these
- Determining measures to be implemented and documenting the necessary processes and procedures, monitoring the results, identifying and making potential improvements, and putting preventative measures in place to minimise damage and protect against risks



¹ Not at the liquid sugar factories

² Only at Nordstemmen, Uelzen and Nordstemmen liquid sugar plant

³ Only at Nordstemmen and Uelzen

The effectiveness of the system is verified by means of both internal and external *audits*. The objectives are pursued with the aid of our balanced scorecard. This results in measures to continually optimise our business processes.

Annual internal *environmental company audits* monitor compliance with the relevant environmental regulations. The company's environmental impact is analysed to identify potential improvements. New environmental targets and concrete measures to be implemented are subsequently defined in the environmental programmes for our German sites.

Preventing product risks

We have implemented various measures to make our products even safer and thereby protect human and animal health. The whole production chain from growing beet to delivering our products is integrated into our quality management system.

Even when choosing seed, we ensure that we use varieties which are suitable for the soil type. Only GM-free seed is used.

We have analysed the whole production process using a risk assessment and defined measures to prevent product risks from arising and/or to minimise them. During production, controls accompany each process. High temperatures and high pH values during production ensure that micro-organisms which may have entered the process via the sugar beet are reliably killed. We minimise subsequent microbial damage by means of strict hygiene.

Our materials selection procedure ensures that products are free of allergens and are not genetically modified.

Annual monitoring of all the food and animal feed we produce to examine parameters such as heavy metals, pesticides and pathogens shows that our measures are effective. Both our sugar customers and our animal fodder users can expect products of consistently high quality.

Occupational health and safety integrated

Occupational health and safety is also integrated into the management system as a top corporate priority. The right behaviour, personal protective equipment and the safe use of plants and machinery is documented in writing for all employees. All members of staff are trained on the basis of these guidelines.

Environmental protection firmly anchored

Environmental protection is of great importance to us. A healthy environment is crucial for growing sugar beet and producing sugar. For environmental protection measures to be effectively devised and implemented, a company must have the right organisational structure. Our management system provides an ideal basis for ongoing improvements.

Organisation and coordination

Measures which are crucial to the company's success are implemented by means of close cooperation between all employees. At plant level, in addition to the industrial workers, that means the plant manager, the production and technology managers, and the foremen, who are assisted by several environmental, safety and management system officers. The corresponding teams at the company headquarters – consumer protection, occupational health and safety, the environment and permits, plus the management system – are responsible for the overarching organisation and coordination.

Nordzucker certificates (international)



Crisis management system implemented

We have implemented a crisis management system for unforeseeable incidents. This ensures that any possible damage will be kept to an absolute minimum.

Crisis management is the responsibility of the company management. Should a crisis occur, the Management Board decides what action to take. As preparation, we conduct a crisis exercise once a year. In addition to this, traceability is tested at each site to ensure that recalls can be carried out quickly and comprehensively in the case of a crisis. Integrating suppliers into our processes We make high demands of ourselves and our partners. This also applies to our working relationships with our suppliers. We encourage all those involved in the process to adopt an ambitious, success and target-oriented approach. We stimulate active competition between potential suppliers, demand a high level of specialist expertise and innovation, and expect creativity, flexibility, service and reliability. Integrating suppliers' know-how into our processes is of fundamental importance and helps us to further develop our company. Our choice of suppliers also contributes towards quality control. By means of our internal specifications - which are also monitored during audits - we ensure that the products and services supplied comply with our standards as regards quality, the environment, health and safety, and social issues. Our conditions of purchase and company standards apply to every procurement contract.

Special staff training

It goes without saying that we carry out training courses in all areas as required by law. In addition to this, we hold regular seminars and internal conferences on a variety of topics such as quality, laboratories, hygiene, the environment and safety.

We stimulate our staff by means of specially designed continuing professional development programmes. This ensures that we have well-trained specialists and junior members of staff and that all our employees are motivated.

Investments in international plants

We also appreciate the importance of quality, product safety, environmental protection, and occupational health and safety at our international Nordzucker plants. There too, we have succeeded in making major improvements via substantial investments, such as higher product safety and increased productivity.

In 2007, we also successfully certified our Serbian plants in accordance with *DIN EN ISO 22000* for production safety.

Ensuring customer focus

Optimum customer focus means always supplying the desired products at the requested quality and on time. The workflows within our procurement and production processes are organised, interlinked and defined in writing in line with this. The same applies to analytical manufacturing controls by our own laboratories, which carry out checks both throughout the process and on the end products.

Imported sugar monitored by Eurosugar

Eurosugar faces a particular challenge in the shape of safeguarding the guality of imported sugar and transferring our discerning customers' expectations to the producers. In conjunction with the central analytical laboratories at Nordzucker and Cristal Union, the imported goods are subjected to regular incoming goods checks and monitoring. Eurosugar works with non-European producers to constantly improve quality by continuously sharing experience and conducting regular audits. Thanks to its size, flexibility and regional presence, Eurosugar offers its customers long-term prospects. To prevent unnecessary transportation, Eurosugar coordinates sugar deliveries throughout Europe via its distribution network. Long-lasting reusable systems are also used for liquid and paste-like products.

Raw material procurement

Nordzucker produces sugar from beet in Germany, Poland, Slovakia and Serbia. By far the largest area it uses is in Germany, where the annual beet quantity totalled around eight million tonnes in recent years. The decrease in the area cultivated over the past years is due to a substantial increase in yields and the associated higher productivity per hectare. An exception was seen in 2006, when European restrictions (sugar export ban) meant that far less beet could be grown. However, since 2007 the area cultivated has risen considerably as beet is now also grown for *bioethanol* production.

Carefully coordinated process of beet growing and cultivation advice

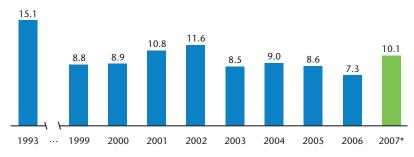
The whole process of beet cultivation and beet processing is organised in line with the principle of sustainability and starts even before the beet is sown with the *preceding crop* in the field in summer. To check the nutrients, the soil is tested to establish what fertilisation is needed and then treated accordingly. One of the substances used here is carbolime. This is a valuable fertiliser which is obtained during the sugar production process. In the sugar production process, milk of lime is added to the raw beet juice to precipitate the non-sugar substances. The precipitate is compressed and dried, leaving carbolime. This is given to the farmers and used as beet fertiliser. All of the products which leave a sugar factory can be traced back to sugar beet (fertiliser, animal feed, sugar).

Seed is also ordered well before sowing actually takes place and is coordinated with Nordzucker. The farmers' supply contracts oblige them to order exclusively those varieties which are offered by Nordzucker. This enables Nordzucker to influence the quality of the varieties and seed at the growing stage. In this context, it is very important to use sugar beet seed which has not been genetically modified, and Nordzucker asks its growers to confirm this every year. This means that Nordzucker can guarantee to its customers that all of its products are GM-free.

When the farmer orders seed, he also decides how to treat the seed against insects. Just a small amount of pesticide is needed when sowing to combat specific pests and this usually eliminates the need for further pesticides during vegetation.

In the main vegetation period from April to August, Nordzucker supports its farmers with expert growing advice covering cultivation, crop protection and fertilisation. This is provided by cultivation advisers in one-on-one or group consultations on site. Interactive decision-making aids are also offered to farmers in conjunction with the German agricultural information service for sugar beet (www.liz-online.de). So that they are always up to date, the cultivation advisers regularly take part in internal and external training courses.

Farmers, on the other hand, are obliged to document the measures they conduct on their land. This is a requirement according to the rules of good business practice, pesticide laws and *cross-compliance regulations*. Nordzucker conducts spot checks to verify compliance.



Development of total extraneous matter (soil and head)

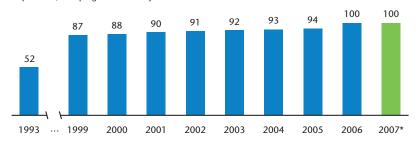
in per cent of beet (mass per 100 kilogrammes of beet), campaign in Germany

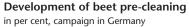


Just-in-time harvesting, pre-cleaning and logistics

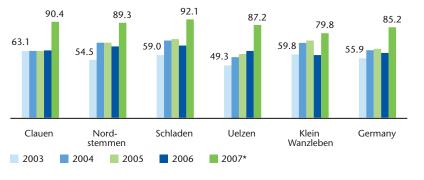
Nordzucker is guided by sustainability in all its *logistics* operations.

Sugar beet is only harvested once the fields are easily accessible with machinery and the sugar beet harvesters will not damage the fields by compacting the soil. In such good conditions, the sugar beet is pre-cleaned for the first time in the field. In the second stage, the beet is loaded at the edge of the field using "Maus" loading machines and pre-cleaned again during the process. Pre-cleaning was first used on a large scale in the early 1990s and has gradually been expanded to all beet. As a result, the soil tare has been reduced by an average of three per cent over the years. For an annual beet quantity of eight million tonnes, that is equivalent to 240,000 tonnes of soil a year which are no longer transported. This no longer contaminates the wastewater from the factories; neither does it have to be taken back to the fields. The soil stays where it belongs - on the farmers' land! Any soil which still makes it to the factory on the beet is washed off at the factory, then stored temporarily in a soil basin before being taken back to the farmers' fields to complete the cycle.





^{* 2007} incl. fuel 21 GmbH & Co. KG



Covered beet clamps (service provider and own covering) percentage of beet per factory

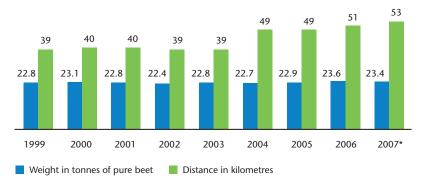
* 2007 incl. fuel 21 GmbH & Co. KG

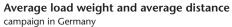
Beet transportation planning ensures that the plants run at optimum capacity while minimising the total number of transports.

Beet used to be transported in small quantities by a tractor and trailer, but modern semi-trailers are now used. These can transport more beet per vehicle than the tractors and also use less fuel. The lorries are used by supply cooperatives. These are groups of farmers who transport sugar beet to the plants just-in-time and around the clock. Many of the lorries run on biodiesel. Nordzucker supports the transport cooperatives with group buying for *biodiesel* and dedicated filling stations at the sugar factories.

Protecting beet clamps increases quality

For meteorological reasons, the sugar beet harvest ends in mid- to late November. After then, it becomes increasingly difficult for vehicles to access the fields. To ensure the factories operate at the economically ideal capacity, they process the harvest until early January. Beet which has already been harvested may be left at the edges of the fields for several weeks. To protect the fruit from extreme weather such as ice, snow and heavy rain, it is covered with protective fleece from the end of November. Nordzucker takes care of this at no cost to the farmers, thereby helping to ensure that the beet quality remains consistently high, which also ensures that it can be processed at the plants.





* 2007 incl. fuel 21 GmbH & Co. KG

Freight distances

Transport expenses make up a considerable proportion of the costs for beet as a raw material. Nordzucker is obliged to pay the cost of transportation in line with the sugar market regime. For both financial and environmental reasons, we aim to minimise transportation distances. Although the average transportation distance has risen on the whole in recent years, this was unavoidable due to necessary plant structure measures and was offset by low energy consumption in the remaining plants. The quota surrender which became necessary recently as part of the European sugar market reform was actively used to persuade farmers growing crops a considerable distance away from the closest plant to stop producing sugar beet.

According to the figures available for the 2008 *campaign* to date, the average transportation distance will drop again.

Individual beet analysis

Individual beet analysis is of great importance for payment. According to the sugar market regime, we are required to establish the sugar content of the beet supplied. For this reason, we take a beet sample from each delivery vehicle and determine the outer quality of the beet (soil, unusable heads) and its inner quality (sugar content, potassium, sodium and aminonitrogen). The figures on the inner quality serve to assess the beet material and provide information about the way in which the land is farmed. Nordzucker's cultivation advisers then use this data directly as a basis for their advice and work on potential improvements to fertilisation and cultivation methods in conjunction with the farmers. To encourage farmers to grow quality beet, Nordzucker has been paying an attractive quality bonus for several years which rewards growers producing high-quality beet.

Long-term raw material strategy

Any company which processes raw materials is reliant of a sustainable supply of those resources. That applies to beet for both sugar production and *bioethanol* production. We therefore have a great interest in establishing long-term supply relationships with beet growers. Safeguarding the raw material basis via beet supply contracts spanning several years therefore laid the foundations for construction of the *bioethanol* plant.

The supply contracts for beet used to produce sugar are negotiated on an annual basis with farmers' representatives from the umbrella organisation for North German sugar beet growers (DNZ). The contracts are drafted to make sugar beet an attractive option even when the prices for other crops are high. This prevents farmers from reducing the area they cultivate or, in extreme cases, stopping growing beet completely. We set great store by our relationship with our farmersuppliers, which rests on partnership. Since 2008, we have offered incentives including a loyalty bonus for farmers who reliably fulfil their delivery rights. This ensures that the Nordzucker plants benefit from specific quantity control and sufficient beet is available as a raw material for sugar and *bioethanol* production.

Logistics cycle – a success story in Central and Eastern Europe

We have introduced a *logistics* concept in the field of raw material procurement to conserve *resources* at the eastern European companies in which we hold an interest. This was very quickly introduced across the board. It focuses on harvesting sugar beet with a low soil tare using modern comprehensive harvesting systems and obligatory pre-cleaning of all beet at the edge of the field. By introducing these process stages at all national participations, we have virtually halved the soil tare as compared with the procedure without pre-cleaning. This has the positive consequence that fertile soil remains in the fields instead of being transported to the sugar factory unnecessarily only to be taken back to the fields after the campaign.

Another element of the *logistics* concept is organised beet transportation using high-capacity HGVs. This results in a greater payload per vehicle than if the farmers transported the beet using agricultural vehicles. It therefore reduces the load frequency and traffic to the sugar factories.

The *logistics* concept outlined above is completed by the carefully coordinated transportation of the company's other products: pressed pulp and carbolime. These are transported back from the sugar factory to the beet growers by the transporters which delivered the beet, thus eliminating additional haulage and empty trips.

The transport services therefore form a cycle between the beet growers and the sugar factory with benefits all round.





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Making sustainable use of resources

Nordzucker's Environmental Guidelines

- With our management system, we ensure that environmental protection is specified and implemented in the operative functions.
- 2. We pledge to comply with all of the relevant legislation, to save *resources*, and to avoid or reduce environmental impacts.
- 3. We cooperate with the authorities and associations such as the BDI, the VdZ and the CEFS¹ on environmental protection matters, and engage in active dialogue with the general public should problems arise. In this context, we have a right to a fair hearing and to compete on an equal playing field at a national and European level. We also advocate acceptance for the position that industry should be self-governing.
- 4. We produce and market our products in the most environmentally compatible way. We integrate our suppliers, hauliers and customers within our activities to enhance environmental protection.
- We inform our employees on all of the environmental aspects affecting our company, and motivate them to act in an environmentally compatible manner. This is achieved through various measures including training and advanced training. To strengthen the continuous improvement process, we actively involve our employees through the Nordzucker Brain Pool and quality team activities.
- We issue an annual environmental programme for all of our factories including specific targets and deadlines.
- We require our factories to submit periodical reports on the status of their environmental protection with the aim of identifying weaknesses and arranging the necessary measures.

All staff are obliged to observe Nordzucker's company policy in conjunction with its environmental and product safety guidelines.

Braunschweig, Germany, February 2008

¹ Federation of German Industries (BDI), German Sugar Industry Association (VdZ), Comité Européen des Fabricants de Sucre (CEFS) = European Committee of Sugar Producers

Organisation chart of officers' responsibilities

Management Board*	Consumer protection and manage- ment system manager/coordinator of the food safety groups	Environment and permits Reporting Environment and permits adviser	Industrial engineering chief safety officer Occupational health and safety
		proper plant operation and compliance and safety and product safety	
Plant manager**	Animal feed production manager***	Water protection officer	Radiation protection officer
	System manager	Emissions protection adviser/officer	Safety expert
	Head of the food safety group	Waste adviser	Safety officer
	Load inspectors	Hazardous materials officer	Fire protection officer
		Expert as per Sec. 19 I of the German Federal Water Act	Expert for non-stationary electrical operating agents
		Individual qualified for self- monitoring the light liquid separator	Expert for ladders/steps
			Expert for hoists/lifting tackle
			Expert for hoses/flexible lines
German Federal Emissions Contro	rd responsible for fulfilling obligations as a p J Act (BImSchG) and the Closed Substance C ties of the radiation protection officer as defi	Cycle and Waste Management	Expert for work/protective scaffolding
Ordinance (StrlSchV) ** - Radiation protection officer as p	ber Sec. 31 para. 1 StrlSchV (Radiation Protec	tion Ordinance) on site	Expert as per pressurised container regulations
Act) and Sec. 53 KrW-/AbfG (Cl - Acts as management representa		ent Act) on site	Rail operations manager
Technical responsibility for the f	nager responsible for the animal feed division ield of management system and food safety	1	Quality manager
	ield of the environment and permits ield of occupational health and safety		Lift technician

Environmental targets to conserve natural resources

Protecting the environment and conserving natural *resources* are important company objectives for us. This includes:

- Using energy and water sparingly
- Maintaining soil and soil fertility
- Reducing waste
- Energy-saving delivery of the raw material beet

We comply with the relevant laws and conditions as a matter of course. However, we also go a step further because we believe that there is more to responsible environmental protection than fulfilling legal requirements.

The Nordzucker plants derive their own environmental targets from the company's environmental policy and the annual analysis of direct and indirect environmental aspects. Every year, these are published together with an analysis of whether the previous year's objectives were fulfilled in the validated environmental declarations.

For example, our plants' environmental targets in the last three years included:

- Cutting the energy used for pulp drying by modernising and extending the pulp press units
- Reducing the amount of dust produced by encasing the pellet loading area

- Lessening noise by reducing the sources of sound in the beet yard
- Substituting diesel by promoting the use of biodiesel
- Reducing the primary energy in the boiler house by extending the evaporation plants, changing sugar-end operations or making greater use of residual heat
- Constructing co-generation power plants to use the biogas produced in the wastewater treatment plant all year round
- Reducing the number of beet vehicles on the roads by means of new *logistics* concepts
- Saving process additives by optimising various units
- Cutting the quantity of wastewater by implementing the "dry beet yard" concept

Dedicated, well-trained staff are the key to achieving this. Environmental organisation at Nordzucker is based on decentralised expertise provided by operating environmental officers.

Environmental operations are conducted by the relevant officers and staff at each individual site. These activities include monitoring limits, organising and conducting measurements, observing regulations, carrying out approval procedures, operating environmentally relevant plants, and communicating with the relevant authorities, to name but a few. The specialist environment and permits department plays a coordinating and supporting role and is also responsible for activities such as organising training sessions and conferences on environmental issues, appointing officers, helping with approvals procedures and discussions with authorities, general conditions concerning the implementation of legal regulations, producing environmental declarations, conducting the internal *environmental company audit* and supporting external certification *audits*. This specialist department also directly manages *emissions trading*.

The department is also involved in various groups and associations at local and national level as well as international groups concerned with current issues regarding environmental legislation. This forms another important aspect of the department's work. The aim of our involvement is to maintain the conditions for national and European competition and receive early notification of future requirements affecting Nordzucker so that we can implement them in good time. Currently, the most important issue is discussing implementation of the European Chemicals Policy (REACH) with our suppliers and customers. In addition, plans for the third trading period of emissions trading from 2012 are currently taking shape in Brussels. These include standardising and simplifying implementation in the member states.

Harvest New, modern beet harvesters ensure efficient harvesting. **Storage and loading** The soil stays in the fields – the beet is pre-cleaned at the edge of the field by "Maus" loading machines. **Transportation** Our logistics concepts reduce the amount of traffic.



The sugar production process

Beet reception and processing

After pre-cleaning in the fields, the beet is weighed and sampled. Then it either enters straight into the production process or is stored temporarily in the beet yard. The beet is largely transported dry via conveyor belts to be washed. Washing removes any remaining soil from the beet.

Next, the beet travels via the beet bunker to the slicing machines, where it is processed into cossettes.

The water used to wash the beet is recycled. Soil, plant material and beet fragments are removed and further processed. Soil is taken back to the fields and plant material and fragments are sold as cattle feed.

Juice extraction

The cossettes are heated to a temperature of around 70 °C, then their sugar content is extracted in a tower using continuous counter-current *extraction* with hot water. This creates a solution with approximately 15 per cent sugar – known as raw juice.

The exhausted cossettes are pressed and either passed on to farmers directly as pressed pulp or dried after adding molasses and compressed to form pellets, which are sold as animal feed.

Juice purification

In addition to sugar, the raw juice contains other substances which have dissolved in the beet's cell sap (non-sugar substances). Some of these are absorbed during juice purification by adding milk of lime. The surplus milk of lime is then precipitated as calcium carbonate by adding carbon dioxide (CO_2). This is followed by filtration, which produces a clear, pale yellow liquid – thin juice – with a dry content of 15 to 17 per cent and carbolime. The carbolime is sold to farmers as fertiliser.

The necessary quick lime and CO_2 are produced in the company's own lime kiln as the result of the lime burning process using limestone and coke or anthracite. The quick lime is then slaked with saccharine juice or *condensate* to form milk of lime, which is needed to precipitate impurities.

Evaporator station

Multiple-effect evaporation is used to extract as much water as necessary to produce juice from the clarified juice with a dry content of between 70 and 75 per cent. The *vapours* produced by each evaporator are used to preheat the next stage.

The concentrated juice – known as thick juice – is golden yellow and clear. Since 2007, we have been using some of the thick juice produced to manufacture *bioethanol.*



Crystallisation

During crystallisation, the thick juice is further condensed. Fine crystals are added to it, initiating the formation of crystals, and it is concentrated further until the crystals reach the desired size. At the end of the process, the crystalline sugar is separated from the adherent mother liquor in centrifuges. The retrieved mother liquor is subsequently used to crystallise a second batch of sugar. In the last crystallisation stage, the mother liquor is called molasses (85 per cent dry content, 53 per cent sugar). The molasses are marketed as animal feed, sold to the yeast industry, used for amino acid or citric acid production, or sold as a raw material for bioethanol production.

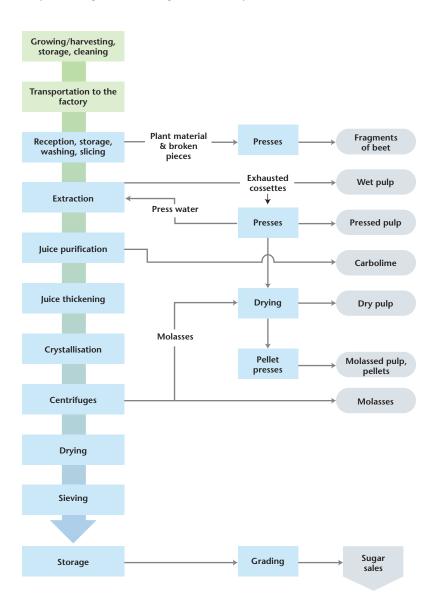
The resulting sugar is dried, cooled and temporarily stored in conditioned silos.

Sugar storage/grading

In line with customer requirements, the sugar is sieved and then marketed either loose or packed. Some of the sugar is processed into special types such as preserving sugar, sugar cubes and icing sugar or processed to make *liquid sugar* at our Nordstemmen and Groß Munzel plants.

Sugar production

simplified diagram of the sugar extraction process



Eco-friendly production

Optimising energy usage

Energy is the costliest element of processing sugar beet. We are therefore constantly striving to reduce our energy consumption for both ecological and economic reasons. We rely on fossil fuels – i.e. coal, oil and natural gas – to generate the electricity needed for preheating and evaporation during the process of sugar *extraction*. In total, we have succeeded in reducing our energy consumption to less than a third of the original figure in the past 50 years.

In recent years, we have invested heavily in technical means of reducing our primary energy consumption and *emissions* (CO₂):

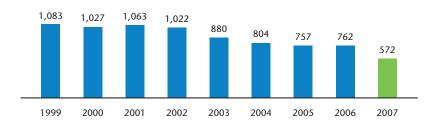
- Converting to evaporation dryers
- Extending the evaporation stations
- Optimising the pulp press units

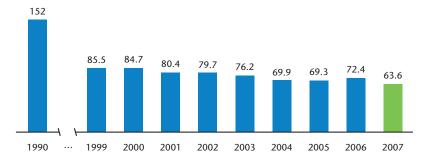
In addition, we have ensured that almost all plants are technically capable of utilising the *biogas* produced during *anaerobic* wastewater treatment as a source of energy in the boiler house or during drying. To make optimum use of *biogas* even once the beet processing *campaign* is over, *co-generation power plants* have been constructed at three plants or the "summer boilers" have been converted to *biogas*. Our investment and budget plans also focus on efforts to use energy sources sparingly and optimise the thermal cycle as much as possible.

However, we cannot rule out the possibility of *emissions* reductions stagnating as there is a limit to how much we can reduce our energy usage.

For example, to produce sugar from beet, some seven kilogrammes of water are evaporated per kilogramme of sugar. There are technical limits to the extent to which the heat needed to do this can be reused in the evaporation process. Increasing this reuse further would become increasingly complex in technical terms, yet the potential savings are marginal.

Continuous reduction of the energy for drying in kilowatt-hours per tonne of dried product, campaign in Germany





Decreasing CO₂ emissions

in kilogrammes of CO, per tonne of beet, campaign in Germany

It goes without saying that we will continue to build on the extensive investments of recent years and focus on improving and overhauling plants and process details relevant to energy use.

Fossil primary energy resources are limited. In the course of a strategic re-alignment, Nordzucker buyers face the challenge of maintaining a secure supply of primary energy to each site while complying with both ecological and economic considerations.

More than ever, this includes considering the current market situation and, in particular, the availability of these raw materials.

Energy markets are currently experiencing a previously unheard-of level of volatility as regards supply and pricing. The price rises and drastic price hikes we have seen recently pose a challenge to economies and also present the sugar industry with considerable problems as the increase in costs cannot be passed on by adjusting retail prices. We have set up power plants with *bivalent* operating systems as a minimum at all Nordzucker sites. However, we favour the use of natural gas, as this reduces both CO_2 *emissions* and the usage of CO_2 certificates.

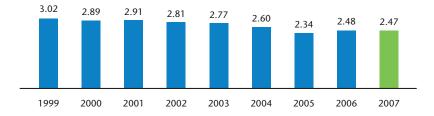
However, there are restrictions on the availability of the necessary amount of natural gas. Our production primarily takes place in autumn and winter, meaning that our needs coincide with higher general supply requirements for industries and households.

The market for *heavy heating oil* is overstretched. Despite increasing demand for good and very good quality oil, refineries are producing less and less *heavy heating oil*. This makes it difficult to procure sufficient quantities.

The German government has resolved to phase out hard coal mining by 2018 at the latest. At the same time, the growing industrialised nations of China and India are consuming more and more. It is not difficult to predict how this situation will develop.

Reduced limestone usage

in per cent compared to beet (mass corresponding to 100 kilogrammes of beet), campaign in Germany



The availability of coke, which we need for the lime burning process, is limited. For this reason, over the last three years we have converted almost all our company lime burners to use anthracite instead. Thanks to consistent savings measures such as using the LIMOS system (which involves adding lime depending on filter pressure), we have succeeded in reducing the amount of limestone we use for juice purification and thereby also cut the amount of fuel needed for the lime burning process.

In the light of this, it is particularly important to make optimum use of the *biogas* generated during *anaerobic* wastewater treatment.

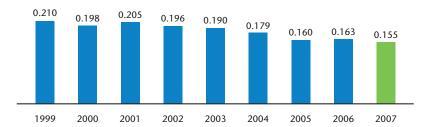
Preventing emissions

Odour *emissions* are primarily created by the accumulation of washing water in the soil basin, the output of beet soil, and at the plants which dry the beet cossettes using conventional high-temperature drying.

Three of our plants have modern evaporation dryers – an odourless, energysaving means of drying cossettes. These use superheated – i.e. non-saturated – steam which is capable of absorbing more water.

Optimised fuel consumption in the lime kiln

in per cent of beet (mass corresponding to 100 kilogrammes of beet), campaign in Germany



This draws the water out of the cossettes, thus drying them. These drying *vapours* exit the dryer as saturated steam and can be used in the sugar factory's evaporating station after being converted to heating steam.

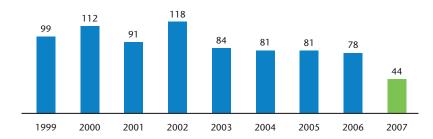
To minimise the odours of the settled washing water, all of our plants strive to treat it at their own water treatment plant as quickly as possible and add it to the main outfall or store it temporarily for subsequent spray irrigation.

This leaves topsoil (delivered with the beet), which is taken back to agricultural land. Unfortunately, it is not always possible to prevent odour *emissions* when applying this beet soil to the fields. However, by consistently pre-cleaning the beet in the fields, within the last ten years we have drastically reduced the amount of beet soil which is transported to the factories in the first place. Only if the weather conditions are very wet during harvesting is it difficult to ensure optimum pre-cleaning. The output of beet soil complies with permits and is coordinated with the relevant authorities. We always follow the applicable internal and external regulations.

To clarify the obligations arising from Sec. 5 of the German Federal Immissions Control Act (BImSchG) regarding air pollution, the German government has issued technical guidelines on air pollution abatement, which were amended in 2002 to reflect advances in technology. The deadline for implementation was 2007.

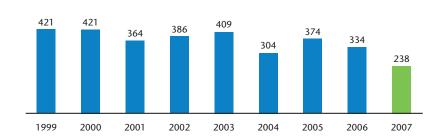
As a consequence, all our plants optimised their dust *extraction* systems for waste gases, sugar and pellets to comply with the stricter limits.

Reducing ammonia *emissions* from the juice purification operating unit posed a particular challenge for the German sugar industry. Ammonia is produced during this phase as a reaction product due to the nitrogen compounds in the beet. The different chemical and physical options were discussed with the relevant managers from the individual German sugar companies and a number of pilot projects were then conducted using specific procedures at selected sites.



Dust emissions slashed

in kilogrammes per hour, campaign in Germany



Progress on nitrogen emissions (NO_x) in kilogrammes per hour, campaign in Germany

After analysing the results, Nordzucker chose to use the option of "after-burning during drying" for all sites which use hightemperature drying. Provision was made for the relevant technical requirements, and these were then implemented or implementation was scheduled.

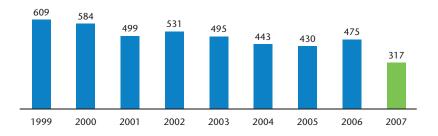
However, this procedure is not an option for plants with evaporation dryers. Here, a pilot condensation plant was operated for a number of years, but despite reducing *emissions* by over 95 per cent, it was unable to reliably comply with the defined limit of 30 milligrammes of ammonia per cubic metre. For this reason, the process of waste gas purification was chosen. Noise is also a major environmental issue for some plants, as residential developments are located nearby.

To maintain good neighbourly relations and comply with legal regulations, a whole host of noise reduction measures has been carried out at Nordzucker's plants.

Sonic prognoses are always produced when planning new facilities or making major changes to existing plants and buildings. This guarantees that immission standards are met in future.

Of course, constant reductions in noise *emissions* are also an important target as regards occupational health and safety.

Sulphur oxide emissions (SO_x) still decreasing in kilogrammes per hour, campaign in Germany



Total energy consumption slashed

Nordzucker is leading the way within the German sugar industry in the implementation of the *Kyoto Protocol* by voluntarily reducing its total CO_2 *emissions* by more than 45 per cent since 1990.

The first trading period (2005 to 2007) has now finished. At the end of 2007, we applied for certificates for the second trading period, which started on January 1, 2008 and lasts until the end of 2012.

As was previously the case, only some plants in Germany are covered by the Greenhouse Gas Emissions Trading Act. Emissions from the power-generating plants and lime kiln are affected, while conventional cossette drying and small, summer kilns are not usually relevant. This discourages the use of modern evaporation dryers as they do not need their own furnace but are supplied with the necessary steam by the boiler house, which makes them subject to emissions trading. It is not possible to compare the emissions in the emissions reports for emissions trading with Nordzucker's longstanding reporting in its environmental declarations because these always record the total energy consumption for the calendar year.

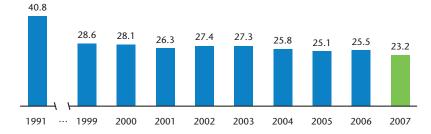
The same applies to the total energy consumption, which is published as part of German businesses' voluntary agreement on climate protection. In 1996, the sugar industry pledged to reduce its specific energy needs from around 36 kilowatt-hours per 100 kilogrammes of beet in 1990 to 29 kilowatt-hours per 100 kilogrammes of beet in 2005 and thereby contribute towards cutting CO₂ emissions.

Nordzucker's figures have been below this target for several years.

However, it is clear that we cannot keep reducing CO_2 *emissions* at the same rate in future; instead, they will settle at the level stated in the sugar industry's declaration.

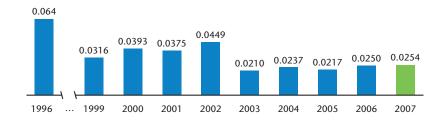
Increased efficiency in total energy consumption

in kilowatt-hours per 100 kilogrammes of beet, campaign in Germany



Low drinking water consumption

in cubic metres per tonne of sugar beet, campaign in Germany



Technological advances in water usage

Water plays an important role in sugar extraction. Firstly, sugar beet primarily consists of water, and secondly, this inherent water can be put to excellent use in the production process. Technological advances and intelligent solutions now help us to conserve this precious resource and return it to nature. The actual process of extracting sugar is now conducted using virtually no fresh water.

Drinking water is almost exclusively used to supply our sanitary facilities and laboratories.

We have also reduced the amount of cooling water we use from wells or outfalls by more than half. Our target is to further cut this consumption by constantly optimising our internal water cycles.

The wastewater produced by sugar factories consists of the water used to wash the beet and the condensate from the vapour which precipitates when the sugar solutions are steamed. Consistent recycling means that the substances in this process wastewater are highly concentrated.

Nordzucker has implemented its "dry beet yard" concept at all its plants, which involves a complete transition to dry beet transportation. This reduces the length of time which the beet spends in contact with water, preventing unnecessary sugar losses and the ensuing higher levels of wastewater contamination.

in cubic metres per tonne of sugar beet, campaign in Germany 0.95 0.86 0.77 0.75 0.60 0.61 0.59 0.59 0.53 1999 2000 2001 2002 2003 2004 2005 2006 2007

Reduced wastewater production

Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Eco-friendly production Other products Accumulating waste

Wastewater treatment has been a focal point of research in the sugar industry for many years. Over a century ago, producers began looking for a suitable way of treating wastewater, as the 20 cubic metres of wastewater then produced per tonne of processed beet were a major source of contamination. Nowadays, we have succeeded in reducing the amount of wastewater to be treated to approximately 0.5 cubic metres per tonne of beet.

All Nordzucker plants now have their own modern wastewater treatment plant. Here, all wastewater is cleansed before being released into the main outfall. At one plant, following temporary storage, the water is also used for spray irrigation during the vegetation period to reduce the need for groundwater irrigation.

Other products and their utilisation

All products created during the production process other than sugar are put to agricultural use as animal feed (beet fragments, plant material, pressed pulp, pellets, molasses) or fertiliser (carbolime).

Accumulating waste minimised

As all parts of the beet are completely reused, waste is only produced during maintenance and building work and by workshops, offices, kitchens and sanitary facilities. As part of this closed-loop materials system, our waste management puts waste prevention before recycling and recycling before safe disposal.

Nordzucker also takes environmental aspects into consideration when packaging its products.

The vast majority of sugar products are delivered in *silo trucks* for further industrial processing. In addition, industrial customers mainly receive their sugar in 10, 25 and 50-kilogramme paper sacks. Plastic sacks have also been recently introduced, which are made from pure polyethylene, are completely recyclable and comply with food safety laws. Moreover, each plastic sack uses less material than the paper sacks previously used as standard. In figures, this means that a plastic sack weighs 141 grams, while a multilayered valve paper sack weighs 212 grams.

This also results in logistical advantages when transporting and storing the packs. The capacity per pallet is 30 per cent higher for plastic sacks than for comparable paper sacks.

In line with our environmental guidelines, Nordzucker also expects its suppliers to use packaging with minimal environmental impact. Additives are primarily procured in large reusable drums or loose and stored in special tanks owned by the plants. Wherever possible, return freight or drop shipping is used. Fermentation

Raw juice is processed during the sugar beet campaign. After that, thick juice is used.

Additives store This is where additives for the production of bioethanol are stored. **Distillation** Alcohol is produced during distillation. It is expelled in the form of steam together with water and other volatile substances.



Renewable resources – also at Nordzucker

Successful start to bioethanol production from beet

In December 2007, production of *bioethanol* wholly from sugar beet successfully began at the first plant in Germany. Nordzucker AG entered into the bioethanol business via its subsidiary fuel 21 GmbH & Co. KG based on the clear commitment expressed by both Nordzucker and North German beet growers to the sustainable production of *biofuels* from native crops.

The aim of this move is to make an effective contribution towards climate protection and further reduce dependency on oil imports by offering sources of energy which have been produced domestically in an eco-friendly way.

Bioethanol production offers a new perspective on the restrictions imposed on beet growers by the new European *sugar market regime*. Any surplus beet which exceeds the quota can also be used. Thanks to cooperation with Klein Wanzleben sugar factory, the raw materials can be processed economically on site and supplied just-in-time for bioethanol production. Sugar beet thick juice need only be stored temporarily to operate the plant once the *campaign* is over.

The sugar factory assists *bioethanol* production by supplying steam and electricity, treating wastewater, and sharing its logistical facilities, which are used more efficiently as a result.

By 2009, capacity will be steadily increased to enable production to cater for market requirements. Depending on the plant layout, it will then be able to market a maximum of 130,000 cubic metres of *bioethanol* per annum.

Construction of the new plant has also created 47 new jobs in the Bördeland region.

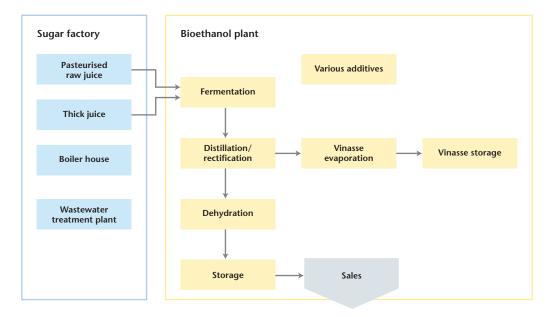


The German Federal Ministry for the Environment's preliminary political rejection of blending a maximum of ten per cent with fuel does not jeopardise fuel 21's business model.

The growing need for oil around the world and the European Union's dependency on crude oil imports along with the reduction of CO_2 emissions will mean it becomes essential to make greater use of domestically produced biofuels in future. It therefore seems inevitable that, in the long term, a higher percentage will be blended, also in order to protect the climate.

Biogas pilot project to verify the feasibility of large-scale biogas production

Since early February 2008, a pilot facility on the site of the former sugar factory in Groß Munzel has been testing the production of *biogas* using sugar beet and pressed pulp. The facility is operated by Nordzucker Bioerdgas GmbH & Co. KG, in which both Nordzucker AG and E.ON Climate & Renewables GmbH (via its subsidiary E.ON Bioerdgas GmbH) own a 50 per cent stake.



Bioethanol production diagram

The plant is testing existing and new technologies for biogas production in order to gain experience of fermenting sugar beet to produce biogas at a commercial-size plant operating all year round. The aim is to purify the resulting biogas and feed it into the natural gas grid as bio-natural gas. This makes optimum use of the high calorific value per hectare achieved by sugar beet and taps additional sales opportunities for beet in the market for renewable energies. The results from the pilot plant should be available by the end of the year and will serve as a basis for deciding whether large-scale, economically viable bio-natural gas production is feasible.

Renaturation

Constructive after-use concepts offer opportunities for the future

We do not leave industrial sites to go to waste. Even if we shut down plants, we make considerable investments in dismantling and renovating the facilities in the interests of redevelopment and sustainability. In close cooperation with communities and environmental organisations, we initiate integrated concepts for new industrial and mixed-use sites or attractive residential developments. This opens up opportunities for the future and may create new jobs. There are numerous examples of the successful after-use of former sites. In recent years, Nordzucker's activities in this field have included extensive renovation of the Baddeckenstedt plant, which closed down in 2000. This was then sold to an investor and parts were handed over to the local community following joint work on a development plan. The ponds outside the town which belonged to the site were then officially transferred to the Paul Feindt Foundation in summer 2007.

The site of the Schleswig an der Schlei plant, which closed in 2003, has also been completely renovated and is now ready for redevelopment. Nordzucker has presented the town with a concrete concept for a development plan with homes and leisure facilities, which is currently under discussion. The former beet soil disposal site away from the actual manufacturing site has since been made over to the Schleswig-Holstein Foundation for Nature Conservation.

This means that we have now transferred some 412 hectares of land in 24 locations to new owners and users. In addition to communities and private proprietors, we focus in particular on environmental groups. We have long-standing relationships with the Paul Feindt Foundation in Hildesheim, the Foundation for Land Conservation in Hanover, the Natural Landscape Foundation in Hanover (a subsidiary of BUND¹), and the Schleswig-Holstein Foundation for Nature Conservation in Kiel.

¹ The registered charity Bund für Umwelt und Naturschutz Deutschland e.V. (BUND)

Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Renewable resources Renaturation International environmental policy

In addition to the land transferred from our portfolio, Nordzucker has acquired almost 45 hectares and made this over to the foundations or helped to fund their purchase. We have spent a total of EUR 390,000 on such projects.

Demolition and renovation work is almost complete at the Wierthe site, where the factory was shut down in 2005. In 2007, we transferred all the ponds previously used and extensive surrounding land with conservation potential to the Foundation for Land Conservation in Hanover.

Our long-standing, successful cooperation with the Paul Feindt Foundation started with a small project in Bockenem and then steadily expanded. Projects with the Paul Feindt Foundation have been completed at the following sites: Bockenem (3.7 hectares), Groß Lafferde (8.7), Östrum (7.1), Othfresen (5.4) and Baddeckenstedt (10.4). Nordzucker has since made over 35.3 hectares of former pond areas to the Foundation and funded the additional purchase of another 32.7 hectares at a total cost of EUR 249,000. This primarily relates to the sites in Nordstemmen, Dinklar and Baddeckenstedt.

The Natural Landscape Foundation in Hanover has now taken over 38.8 hectares of former Nordzucker land. Projects have been completed with the organisation in Barum (4.2 hectares), Goldbeck (4.6), Groß Lafferde (2.3), Groß Mahner (1.0), Hadmersleben (7.0), Klein Wanzleben (17.2), Schöppenstedt (5.8) and St Michaelisdonn (13.9).

International environmental policy

The company's policy and environmental guidelines also apply to our sites abroad, where the workflows are largely identical.

As at the German sites, the following objectives apply:

- Saving water and energy
- Reducing waste
- Minimising consumption of additives
- "Dry beet yard" concept

In recent years, various steps have been taken to implement the "dry beet yard" concept. We have also focused on closedloop water recirculation systems to reduce water usage. Drinking water consumption has been cut by more than half since 2004 and the quantities of cooling water used have also been slashed at a number of plants. Following a few initial problems, the water treatment plant constructed at our Trencianska Tepla site in Slovakia is consistently delivering very good results.

In 2007, we concentrated on improving waste gas purification at our Polish plants. Dust removal systems constructed there have reduced the dust content of waste gas emitted by heating and water supply facilities in the last *campaign* by 73 per cent compared to the previous year. Good fuel-saving results were also achieved, with a 14 per cent reduction compared to 2004.

Almost all our plants continue to suspend pulp drying. Instead, the pressed pulp is sold as animal feed straightaway, sometimes pressed into round bales.

Progress has also been recorded in the field of noise *emissions*. Cadastres have been drawn up for all sites. These have been used to implement noise reduction measures in the past and will be utilised for further projects in the future.

We have only just started integrating our Serbian plants, and this work will continue.



Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Attractive employer

Social responsibility

Duty of care to employees

Nordzucker – an attractive employer

We are laying the foundations for a successful future. Our staff are a particularly valuable asset as, in times of change, they continuously improve company processes with their expertise and experience and thereby contribute towards the company's success. Our aim is to become one of Germany's 100 best employers and thereby remain attractive to existing and potential staff in the long term.

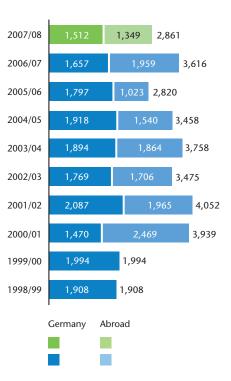
Nordzucker – A Great Place to Work

Our *Strategy Map* lays down the basis for value-oriented actions. Internal processes are strictly aligned with our customers' needs and expectations. Reliability, speed and costs play an important role here, as do creativity and flexibility. Integrated processes and systems support our workflows. Competent, highly motivated staff with target-oriented managers and performance-based pay safeguard our company's ongoing existence and long-term, systematic further development in a changing competitive environment by continuously improving all business processes. To strengthen the basis of our company's success – our staff – and retain them, we implement the principles that make up the "A Great Place to Work" model in day-to-day life at the company.

Trust between managers and staff is a key component of an attractive working environment. This trust is based on three components: credibility, respect and fairness.

Number of employees

average for the year, Nordzucker Group



A Great Place to Work



In addition to trust, pride and team spirit play a part in "A Great Place to Work". These aspects focus on the employee's attitude to their work (pride) and the relationship between individual members of staff (team spirit).

Credibility

We inform our staff about the latest company decisions and events in open discussions within the various divisions and departments. Staff meetings and brief informative meetings are regularly held. In addition to this, all staff throughout the Group are kept up to date with the latest events by email with "Nordzucker News", which is usually sent out once a week.

Respect

We value our staff and their work. In line with the workplace guidelines in our *Strategy Map*, we support our employees' continuing professional development by means of individual staff development measures, awarding responsibility and including staff in decision-making processes. The annual staff appraisal in particular is an established part of our dealings with employees. This gives us an opportunity to praise their achievements, agree targets and identify development potential in a one-on-one meeting.

Following the formula of "developing and motivating" our staff, we have provided a wide range of options for further development and extending specialist knowledge in recent years. Numerous programmes such as the Competence Development Programme (KEP), the Manager Development Programme (MEP), the Foreman Development Programme (MeiStep) and the Nordzucker training catalogue have helped many employees to gain qualifications or foster and develop their individual skills. Most recently, as part of the Competence Development Programme, we helped our specialist staff and junior managers to grow at the international companies in which we hold stakes. We will integrate our experiences into new programmes and concepts.

Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Attractive employer

Brain Pool

In 2007, 233 ideas were submitted throughout the company as part of the Brain Pool (since 2000: 5,741). That is equivalent to staff involvement of 18.1 per cent with a Brain Pool index of ten (number of suggestions accepted per 100 employees).

129 suggestions were deemed positive by the relevant line manager (since 2000: 3,020).

No less than 75 per cent of the suggestions have been implemented in day-today operations.

In addition to improvements affecting health and safety, staff satisfaction and product quality, the majority of the suggestions concerned the optimisation of production and maintenance processes.

In 2007 alone, the resulting net savings for the company came to some EUR 107,000. Savings with recurrent effects from the period 2000 to 2006 have conserved a total of approximately EUR 757,000 (grand total: EUR 864,000).

Bonuses totalling almost EUR 40,000 were distributed to Nordzucker staff in 2007.

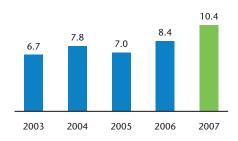
According to the latest survey conducted by the German Institute for Business Administration (dib) in 2007, Nordzucker is the best company in the food industry and its commitment to ideas management is exemplary.

Fairness

Our company's organisation gives everyone the opportunity to become specialists or managers and adopt suitable roles. When filling vacant positions, we look solely at the applicant's personality and expertise.

We offer our staff a workplace which enables them to achieve a work-life balance. First and foremost, this rests on our flexible working hours which take the form of flexitime with no core time. This set-up allows our employees to arrange childcare flexibly to suit them. We also fill positions which are temporarily available due to parental leave by restructuring internally or hiring temporary staff. With the option of part-time work during parental leave, we help our staff to go back to work more quickly and easily. We also cater for our employees' wishes regarding part-time employment following parental leave. If necessary, we help our staff to apply for child benefit and are available to answer any other questions that may arise.

Proportion of female specialist staff and managers in per cent, Nordzucker AG



We foster a working atmosphere based on partnership and see conflicts as an opportunity to find new solutions and new objectives. Back in 2005, we established a conflict resolution team and an external bullying hotline as part of our company pledge on "Working together as partners". Their tasks also include those of the ombudsman to be appointed according to the German General Equality Act. Staff who work in the internal conflict resolution team are initially coached to provide targeted help for those involved in difficult conflicts. When conflicts seem unresolvable or staff feel that they have been excluded or harassed for an extended period of time and are unable to see a way out, they can speak to someone they trust from the internal conflict resolution team or contact the external bullying hotline.

Fair Company

Nordzucker has been certified as a "Fair Company". This certification is awarded to companies who offer fair, salaried internships, giving graduates direct access to the working world. More than 1,000 companies have now joined Nordzucker in committing to the objectives of the "Fair Company" initiative.

The five rules for "Fair Companies"

FAIR COMPANY EXTENSION	 We do not substitute full-time positions with interns, supposed trainees, guest students, etc. We do not put off graduates who have applied for a full-time position with an internship
	 We do not lure interns with the vague prospect of a full-time job afterwards
	 We primarily offer internships as a form of careers guidance during the training phase
	 We pay interns an adequate allowance

Pride and team spirit

Our staff identify with their work as they take responsibility for their tasks, take decisions within their remit and make a major contribution towards the company's success. Project groups enable employees from different divisions to work together. During restructuring, staff development supports the process by means of talks and team training sessions.

Our employees were interviewed as part of our company-wide change management project "The Beet Goes On". Many of their responses to the question "What are you particularly proud of at Nordzucker?" make us proud too.

HR work as per Basel II

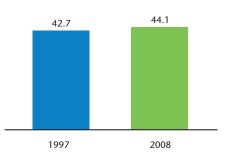
A system of objectives, management, teamwork, performance-related and results-based pay, flexible working hours, staff development and corporate culture are all important "soft factors" for us which play a part in influencing our company's creditworthiness. For our company, Basel II is not just a financial issue. Instead, the effects of these rules are having a deepseated impact on the company's management and information processes. The economic situation of a company, which is used as a benchmark for lending conditions, is also affected by the quality of its HR work. Studies show that companies which operate an innovative staff management system are much more successful, have higher productivity and are less hard hit by recession.

To ensure that the company achieves its goals, divisional objectives are derived and set as part of an annual target-setting process involving specialist staff, managers and their superiors. Any deviations are discussed during regular milestone meetings and any necessary adjustments are made accordingly. At the end of the financial year, the degree of goal accomplishment is determined. This then forms part of the variable, performance-related pay system.

Regular feedback, annual staff appraisals, awarding responsibility, providing timely, needs-based information, and communication all form part of the managerial guidelines adopted by our company. To reduce the company's dependency on key personnel, we provide preventive retraining and further training with the aid of targeted development plans.

When filling positions, we focus on relevant qualifications and try to recruit from within the company to offer existing staff development opportunities. In light of economic developments and the decline in personnel resources, we have recognised the growing need to position ourselves as an employer. Talented and motivated employees are the key to our company's success. When recruiting staff, interesting employers with a positive reputation on the labour market have crucial advantages. That is why we are working on our employer branding to focus more sharply on our image as an employer in future with the aim of positioning ourselves as a distinctive brand on the labour market.

Average age of permanent staff in years, as of March 1, Nordzucker AG



Answers to the question: "What are you particularly proud of at Nordzucker?"

"The company gave me, as a young engineer, the chance to work at such a well-run firm."

"The products I developed, such as brown sugar and brown sugar for tea."

Long-term job preservation

Changing conditions on the market and within the competition make cost-effective measures for long-term job preservation essential.

Socially responsible plant closures

We aim to transfer staff instead of making them redundant and pursue this principle when dealing with the structural upheavals associated with plant closures. We aim to offer all staff under 55 at the closing plant a job at a factory which is still operating.

If they accept our job offer, we help the employees in question, for example by organising their move and meeting the associated costs.

We create the capacity which enables us to offer jobs in this way with a generous social compensation plan covering all our sites. Of particular importance here is our corporate early retirement scheme, which offers staff the opportunity to retire early at the age of 55. We also fulfil our goal by offering employees from the age of 57 part-time work in the run-up to retirement. This is primarily operated using a block model.

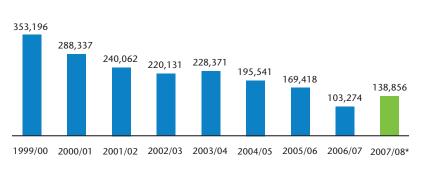
Flexible working hours

Since 2000, permanent staff on collective wage agreements at Nordzucker have increasingly been taking time off in lieu of overtime. This makes it easier to adjust working hours to the company's needs. In recent years, we have drastically cut the amount of paid overtime from approximately 288,000 hours a year in 2000 to some 15,000 hours in 2006. Since 2007, paid overtime for permanent staff at Nordzucker has been a thing of the past. In addition to this, general working hours have been made more flexible in line with company needs by introducing flexitime. We are currently negotiating with the Central Works Council to launch an annual time sheet incorporating all clocking systems. The aim is to introduce annual records of working hours throughout the company.

"It makes me proud that Nordzucker is clearly aligned towards the market and technology and that we are capable of fulfilling that."

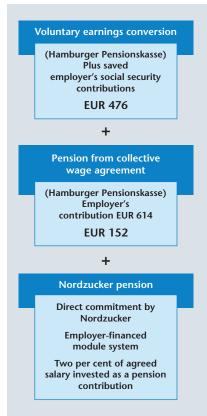
"I think it's good that the company places so much trust and confidence in my work."





* 2007 incl. fuel 21 GmbH & Co. KG

The three modules that make up Nordzucker's retirement provisions



Mathematical example:

A 35-year-old man (pay band E) who works until the age of 65 will receive an additional pension of EUR 931 if he converts the maximum percentage of his earnings. Components 1 and 2 are based on a four per cent rate of return.

Voluntary social benefits

Staff motivation and loyalty are a priority for us. We provide various social benefits which go way beyond the collective wage agreements.

Three-part pension plan

We live up to our responsibilities as an employer. As part of our defined-contribution pension plan – where the amount paid out is based on the contribution made, which in turn depends on pensionable income – we transfer a certain amount to a retirement planning account for each year of employment. This forms the basis for the subsequent company pension.

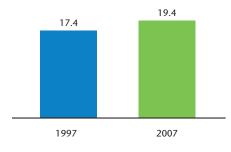
In addition to this, we have arranged within a collective wage agreement to transfer an amount to the Hamburger Pensionskasse pension fund each year for every employee covered by the agreement to promote retirement provisions and earnings conversion. This gives all staff the option of saving for retirement by converting up to four per cent of the income threshold in addition to the employer's contribution.

We also enable staff to convert their earnings into insurance cover in the form of endowment insurance.

All in all, in recent years we have offered our staff three different ways to boost their pensions and thereby ease the transition to retirement. "It makes me proud that the company keeps investing in the future."

"You have great colleagues and a brilliant working atmosphere, and you are making a wonderful, important product. Life just wouldn't be the same without sugar."

"Above all, the fact that the company is powerful and well represented on the market." Permanent employees' average length of service in years, as of March 1, Nordzucker AG



A fair share of the company's success

Together with the Central Works Council, we have revised the company agreement on voluntary social benefits for permanent staff covered by the collective wage agreement. Since the 2006/07 financial year, profit sharing has no longer been based on consolidated net income. Instead, the *dividends* per share are used, consisting of a base rate followed by proportional increases. In this way, we honour our employees' commitment in the same way as our shareholders benefit when company profits increase.

Bonuses

Employees who display a long-term commitment to the company receive an anniversary bonus after 25, 35 and 45 years at the company. This takes the form of a one-off special payment.

In addition, our employees receive payment in kind of 30 kilogrammes of sugar a year.

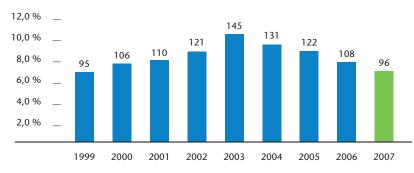
We also boost staff loyalty at our international companies in Poland, Hungary and Slovakia and our attractiveness as an employer by means of an extensive programme of voluntary social benefits.

Specialist training at Nordzucker

When we introduced and implemented our training concept for apprentices, we specialised our training courses, especially in the technical/industrial field, and intensified them by choosing to offer training in just one vocation at each site. In the technical/industrial sector, we offer courses for apprentices to become industrial mechanics, electronic engineers and mechatronics engineers. By specialising in this way, we have achieved a very high standard of training, which will be maintained and increased during an ongoing process of improvement. As well as technical/ industrial courses, we offer training in commercial and IT vocations, where we specialise in courses for industrial clerks and IT specialists in system integration and application technology. Apprentices are given a training and placement plan tailored to their course. This enables the would-be industrial clerks and IT specialists to support all company processes with their business management or computer expertise.

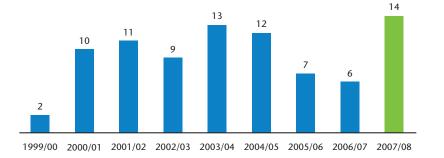
Apprentices as of September 1

number of apprentices and percentage of permanent employees, Nordzucker AG



"I am proud that I have the opportunity to work here and further develop my skills."

"It makes me proud that Nordzucker is still investing in new projects now."



Apprentices awarded a permanent contract number, Nordzucker AG

After training, all of our apprentices are given a one-year temporary contract. If we are recruiting, they may also be taken on as permanent employees.

Due to our specialisation in the technical/ industrial sector, we will face the challenge in future of ensuring that our apprentices take up temporary and permanent jobs in line with our needs. We see our potential as lying primarily in increasing flexibility by employing those who have completed their apprenticeships at a different site. Highly flexible staff mean that we will be able to put staffing measures in place quickly and as need arises in future.

We value our apprentices highly. They are the workers of tomorrow, and we aim to fill vacancies with our own junior staff by specifically developing and motivating the next generation.

Outlook for employees and managers

To become one of Germany's 100 best employers, we have identified potential in the form of involving staff covered by collective wage agreements in achieving the company's objectives. It may be feasible to introduce a target-setting system for all staff.

We see growing internationalisation as an opportunity for our specialist staff and managers to develop their flexibility, expertise and personal skills in a multicultural environment via international exchange programmes. We hope to give our HR work an international slant accordingly.

As we tackle the forthcoming challenges, our executives in particular will be expected to contribute the necessary skills and thereby boost the company's success.

To safeguard strategically important functions within the company and foster our junior staff and key personnel as part of efforts to expand internal expertise, we will continue to conduct targeted career and succession planning for employees and managers.

Occupational health and safety – focusing on prevention

Our staff face a whole host of challenges, especially as regards health issues. That is why, together with our company doctors, we have made preventive healthcare a priority. The company doctors maintain contact with every single employee, enabling them to offer individual advice on personal and occupational health problems. Company doctors are allocated to specific production sites, allowing them to build up specific knowledge and experience of health issues that arise in connection with sugar production.

As we know how important each employee's health is, our health and safety schemes go well beyond the minimum standards required by law.

All internal company organisational steps are recorded in process descriptions and instructions. These form an integral part of the Nordzucker management system and are made accessible to all staff on the intranet. Directives are coordinated with the local Works Councils and, in the case of company-wide regulations, the Central Works Council. Our measures focus on prevention.

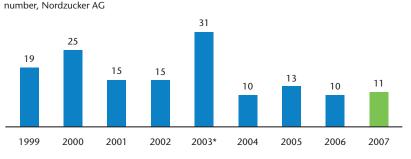
In the light of this, the following special health programmes were implemented in recent years:

- Road safety day
- Health day
- Campaign for safe driving and safe vehicles
- Skin protection campaign
- Safe cycling campaign
- Seminars on giving up smoking
- Blood screening
- Back check
- Rescue and evacuation drills
- Advice for staff from specialist suppliers of personal protective equipment and working clothes



Notifiable industrial accidents: a comparison

- German Sugar Trade Association
- Nordzucker AG



Industrial accident statistics

* from 2003 incl. Nordstemmen and CEE

Flu vaccinations and back exercise programmes are continuously on offer and all staff can attend a free road safety course for car and motorbike drivers.

Each site is equipped with defibrillators, and all first-aiders and paramedics are trained in their use. In addition to this, all staff were offered a crash course in first aid in 2006, which was attended by 110 employees.

Nordzucker provides considerable personnel resources to implement and monitor health and safety and also to propose improvements. Each site has two safety experts, usually foremen or engineers, who have received extensive training in all aspects of occupational health and safety. Each individual operating department has its own safety officer and firstaider. These measures also go well beyond the legal requirements. Our staff are active in numerous internal and external organisations which allow them to learn from each other and develop further. These include conferences for the Nordzucker safety experts and meetings of the Nordzucker working group on occupational health and safety. This group is made up of three representatives of the Central Works Council, a plant manager, an industrial worker, four safety experts and a company doctor. The working group develops further preventive measures and oversees current activities.

Externally, the company as a whole is involved in the nationwide working group for senior safety engineers from the German sugar industry, an organisation which is supported by the Sugar Trade Association (ZBG).

A whole range of measures ensure that we not only fulfil our legal duty of care, but also effectively implement voluntary internal commitments. In particular, these include training sessions and instructions based on the accident prevention guidelines and the hazardous materials ordinance. A four-stage risk assessment to be produced before work starts aims to identify potential dangers and initiate preventive measures. The senior safety officer also regularly reports to all staff and the company management. At its meetings, the occupational safety committee at the plants verifies that all guidelines have been observed and discusses potential improvements. Specific occupational safety tours are conducted with the plant manager to identify any failings and establish countermeasures.

As part of its prevention remit, the Sugar Trade Association also conducts *audits* at each site once a year.

For several years, to support our training programme, Nordzucker has been focusing on a specific occupational safety topic each month. This is supplemented by a healthcare topic every quarter. To this end, training materials are used which are developed by the safety officers and company doctors themselves by means of circulation.

To monitor the effectiveness of preventive measures, staff surveys and interviews are conducted to gauge the feeling among employees. Regular reporting is also carried out. Once a year, in conjunction with our suppliers, we assess the personal protective equipment and working clothes to identify any room for improvements. Nordzucker provides its staff with this equipment – which far exceeds the legal requirements – free of charge. For example, the company also pays for prescription goggles to be produced to ensure that our employees always have the best possible protection.

As well as working with health insurance companies and the Sugar Trade Association, all company doctors and senior safety engineers in the German sugar industry pool their expertise every two years in order to promote prevention. These meetings are initiated by the Sugar Trade Association.

The results of all these occupational health and safety measures are documented in the balanced scorecard.

Several sites across Europe have achieved the goal of "zero accidents" a year.

A bonus system rewards all staff at the sites which have a particularly good track record for occupational safety. Each employee receives a EUR 50 bonus if there are no notifiable accidents in a year. After a second accident-free year, each employee is awarded a EUR 100 for each further year. A notifiable accident is any accident which leaves an employee unable to work for more than three days.

Due to national legislation, the measures in Poland, Slovakia and Hungary are coordinated with the supervisory authorities. However, Nordzucker has defined a uniform standard for personal protective equipment.

Corporate integration management

The law to promote the training and employment of disabled people passed in 2004 further increased the requirements for corporate prevention. Prevention encompasses all measures which serve to reinstate or promote workers' health. To meet our responsibilities as an employer, the occupational health and safety working group is currently devising a way of introducing corporate integration management. There is also an annual prevention programme for health protection.

This focuses on measures which are suitable for strengthening individuals' ability to work and safeguarding the long-term employability of staff members with health problems. Our aim is to promote our employees' ability to work, prevent them from being unable to work again, and protect the relevant employee's job. We are primarily concerned about protecting and promoting our staff's health.

New shift model at the plants

A new shift model was successfully trialled and introduced in Nordzucker's German plants during the 2006 *campaign*. Working rhythms have been optimised while the use of standby workers and additional standby workers means greater flexibility when planning days off. By using the new shift model, which takes into account solid occupational health and safety findings, Nordzucker is reducing specific strains on its staff during shift work. Furthermore, additional incentives are available for staff who act as standby workers.

Nordzucker sites with no notifiable industrial accidents for over two years in years, as of August 2008



* Product development and technical servicing

- PETS Braunschweig WIE Wierthe
- HAT Hatvan
- SZE Szerencs
- FNS Liquid sugar plant,
- Nordstemmen
- NST Nordstemmen SZO Szolnok
- BS Company headquarters,
- Braunschweig
- NZP Administration office, Poland
- MUN Groß Munzel
- FGM Liquid sugar plant,
 - Groß Munzel



Foreword by the Management Board | Profile of Nordzucker | Economy | Environment | Social responsibility | Public affairs | Glossary Communication and dialogue

Public affairs

A committed member of society

Communication and dialogue

Communication and dialogue with our most important stakeholders – shareholders, beet growers, customers, employees, banks and politicians – are amongst our key tasks. It is crucial for us as a company that our partners understand us and the motivation behind our actions. In the past, we have taken numerous steps to intensify communication and stimulate dialogue.

The European sugar industry's code of conduct

Back in 2003, we signed the European sugar industry's *Corporate Social Responsibility* Code (*CSR*) via our social partners CEFS¹ and EFFAT². This code stipulates compulsory minimum standards for *corporate social responsibility* in eight fields. The European sugar industry thereby became the first sector to voluntarily establish minimum *CSR* standards on a large

scale. The aim of the *CSR* Code is to promote the development of social standards and the observation of basic rights. Every year, a report is submitted to the European Commission concerning implementation and updating the good practice examples while taking new member states into account. The minimum standards in the code cover the following eight areas:

- Human rights: All members of staff have the right to form and join trade unions. The German sugar industry is against child labour and discrimination of any kind and supports the equal treatment of men and women.
- Education, training and lifelong learning: Employees' continuous professional development contributes towards the company's competitiveness.
- Health and safety: Priority is given to eliminating hazards and implementing preventive measures.

¹ Comité Européen des Fabricants de Sucre (CEFS) = European Committee of Sugar Producers

² European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT)

- Relationship between social partners: The objective is a two-way dialogue which is officially recognised by the European Commission.
- Fair pay: This ensures employees can maintain an adequate standard of living by means of sector or industry-specific agreements or regulations.
- Working conditions: Working models should be developed which are tailored to campaign operations. Furthermore, the working conditions must be similar to those offered by comparable companies working in the same country.
- Open dialogue: The company must inform staff about restructuring early on. The sugar industry takes a socially responsible approach to restructuring.
- Business relations and choosing suppliers: The sugar industry extends the regulations in the code to its suppliers. The European sugar industry thereby contributes towards extending social responsibility on an international level and makes a concrete contribution towards combating child labour, fraud and corruption.

In its company policy, Nordzucker has pledged to observe the European sugar industry's code of conduct. In this way, we have established compulsory regulations for our staff.

We also act responsibly in our dealings with other stakeholders. To this end, in 2007 Nordzucker established the public affairs division at the organisational and structural heart of the company.

Participation in the Zoran Djindjic grants programme

In 2007, Nordzucker AG took part in the Zoran Djindjic grants programme run by German businesses for the first time. The programme aims to support business relations between Germany and Serbia. As a business enterprise, Nordzucker is active on the Serbian market with its stake in the Serbian company Sunoko and is particularly interested in young trainees from technical and agricultural disciplines. The grants programme is well organised and offers attractive cultural, linguistic and financial benefits. Of particular note are the extremely reliable Eastern Committee and the expert support provided in selecting interns. As a result of the programme, three motivated, talented and keen grant holders – who also study German language and culture in their spare time – were able to start internships at Nordzucker AG on August 1, 2007. The grant holders were deployed as production engineers and in environmental management and supported workflows in the relevant areas with a high level of commitment. Following this success, Nordzucker will participate in the programme once again in 2008 as this offers us a good opportunity to meet the talented specialists and managers of tomorrow and support their development with the relevant expertise.

Making the most of opportunities with public affairs

The public affairs division helps Nordzucker to make the most of opportunities arising in the political and social arena and to avoid risks.

There are three key areas in which the political arena is of great importance, as reflected in our strategy:

- In all aspects which deal with sugar supplies, issues concerning the *sugar market regime*, preferential arrangements for the world's poorest countries (*LDC*) or the *ACP countries*. This includes developments within the World Trade Organization (WTO).
- Anything that involves our core product, sugar – whether in connection with its image or with questions concerning health issues, nutrition and exercise. We actively accompany the drafting of laws or directives on matters such as *eco-labelling* or highlighting nutritional values by participating in relevant committees.
- Our activities also focus on aspects of our new lines of business, renewable resources. This includes topics such as climate protection targets, blending quotas for *bioethanol* as a fuel, external protection or making *bioethanol* exempt from taxation.

To enable us to prepare and accompany all relevant decisions, we follow a clear activities plan which is determined by political occurrences such as elections and decisions at national, European or international level. In addition to talks with politicians, selected events and meetings at lobbying group level form an important part of our work. We regularly involve politicians and agency representatives in our dialogue with decision makers. Every year, many of our plants hold "agency days", enabling representatives to take an extensive factory tour and discuss local and regional issues. Intensifying this dialogue fosters a greater level of understanding on both sides.

We fulfil our responsibilities as a member of society at many levels. Our magazine "Akzente" reports on all major meetings with politicians and local officials. With a circulation of 17,000, "Akzente" is widely read both within the organisation and beyond.

Addressing joint interests in trade associations

We know that the best way to address and promote joint interests is by joining forces. That is why it is so important for us to participate in trade associations. Many of our managers are involved in associations such as CEFS, WVZ¹, VdZ², BVE³ and CMA⁴ and take on central roles when specific issues arise. Major events such as the ISO⁵ conference, DLG⁶ meetings or the International Green Week in Berlin provide good platforms for discussing current issues in detail. The focus here is always on the committee's work along with analysing and extending the network. Currently, these activities are concentrating on the issues thrown up by the new sugar market regime and the changes it brings with it, and on developments affecting the European Union's preferential agreement with the ACP countries. In the medium term, we expect to shift this discussion towards topics involving the image of sugar.

¹ German Sugar Business Group (WVZ)

² German Sugar Industry Association (VdZ)

³ Federation of German Food and Drink Industries (BVE)

 ⁴ Centrale Marketing-Gesellschaft der deutschen Agrarwirtschaft mbH (CMA; Central Marketing Organisation of German Agricultural Industries)
 ⁵ International Sugar Organization (ISO)

⁶ German Agricultural Society (DLG)

Sugar under discussion

Sugar makes life more pleasurable. Sugar is energy. Sugar boosts performance. We are actively advocating objectification in the current debate about labelling all foods with their nutritional values. For us, that means clearly stating the cause and effect as regards weight gain, tooth decay and diabetes mellitus.

Focusing on nutrition – a healthy lifestyle

In principle, there is no such thing as healthy or unhealthy food – only a healthy or unhealthy lifestyle. A balanced diet and regular exercise are crucial elements of this. An imbalance between the energy consumed and that used causes people to be overweight; a single nutrient cannot be held responsible. The primary cause of weight gain is our modern lifestyle. We do not exercise enough compared to the energy we consume, so it is no surprise that the number of overweight people is growing.

Diabetes mellitus

Those who are overweight are more likely to suffer from diabetes mellitus. This illness can be hereditary, but those who are overweight and do not exercise enough are also more likely to contract it. Sugar is often associated with diabetes mellitus – however, there is no causal relationship. Insulin is produced when carbohydrates such as starch and sugar are broken down. Diabetics have problems with their insulin metabolism. To prevent insulin levels from rising too sharply, diabetics have to be careful about what they eat and choose a diet which is low in carbohydrates.

Oral hygiene and oral health

Carbohydrate levels are also an important consideration when it comes to preventing tooth decay. Sugar alone does not cause tooth decay – all fermentable carbohydrates, such as starch, are contributing factors. However, it is not the quantity of carbohydrates that matter, but the frequency with which they are consumed. Oral hygiene and a sufficient supply of fluoride to the teeth remain the most important means of preventing tooth decay.

We do not support traffic light labelling because this classifies foods as good or bad. Similarly, we do not believe it is constructive to specifically highlight sugar levels if this has no scientific basis. We support food labelling showing the classic "big four" (energy, fat, carbohydrates and protein) per 100 grams including GDA (guideline daily amount) figures for calories.

Targeted sponsorship

We use targeted forms of sponsorship which highlight our company's high level of regional importance.

Our involvement is generally at regional level but occasionally goes beyond this. Despite our strict savings drive prompted by the new *sugar market regime*, the total sponsorship budget has not changed since 2006. Each factory site can decide how to allocate its funds in line with certain specifications. Some sponsorship activities are still conducted at former sites such as Groß Munzel or Wierthe.

Our interesting regional and cross-regional projects include:

- The opening of Braunschweig castle, 2006
- The last campaign Groß Munzel book project, 2006
- Braunschweig film festival –
 Work in progress from the land of the beet, 2006
- 1,000th anniversary celebrations at the former site in Meine, 2007
- Heersum forum open-air theatre 2007/2008
- Salzwedel Hanseatic day 2008
- 10 years of the European Central Bank
 ECB cultural festival, 2008
- Groß Munzel and Klein Wanzleben beet festival – annual
- Magdeburg harvest festival annual

Our sponsorship projects primarily aim to strengthen our company's relationship with shareholders, beet growers, national and regional politicians, and our consumers. At the same time, activities in the public eye make a major contribution to our company's image as a member of society.

Factory tours for interested members of the public

For many years now, there has been a great deal of local interest in food production. We pick up on this development year after year and offer visitors over the age of 16 free tours.

During the most recent campaign, more than 10,000 people visited our plants in Germany and abroad to see what high environmental and social standards we maintain when producing sugar from locally grown beet. The largest visitor group (some 30 per cent) was made up of organisations and associations - often rural women's associations - and interested consumers. School groups accounted for some ten per cent of the visitors, followed by politicians, local authorities, other companies and groups of international delegates. Agricultural groups were another major group (five per cent). To make the tours attractive each year, we make improvements following the annual campaign in line with our plant managers' suggestions and visitors' comments.

Glossar

1,000-man quota Occupational accidents calculated per 1,000 employees.

ACP countries (Africa, Caribbean and Pacific) 77 countries – predominantly former French and British colonies – which the European government has granted easier access to the European domestic market since 1975 via a preferential agreement (Cotonou Agreement) which allows them to import 1.3 million tons of unrefined sugar duty-free.

Aerobic In the presence of oxygen.

Anaerobic In the absence of oxygen.

Audit Investigations which serve to analyse processes. They often compare original targets with what has actually been achieved. Audits play a major role in certification and maintaining management systems.

Basel II A skeleton agreement consisting of equity guidelines for banks. The aim is to strengthen and solidify the financial system. Amongst other things, it makes minimum capital requirements more heavily dependent on the risk taken than was previously the case.

Bio-natural gas Processed biogas created by fermenting biomass.

Biodiesel A fuel with similar properties to diesel which is produced using vegetable oil.

Bioethanol (agro-alcohol) Ethanol made using biomass (a renewable carbon carrier). To produce it, starch (e.g. from wheat or maize) is split into glucose using enzymes. Yeast is then added and the mixture is fermented to produce ethanol. To manufacture ethanol from sugar beet, the raw juice or thick juice – both intermediate products of sugar manufacturing – is fermented directly. Unlike fossil fuels, bioethanol is CO₂-neutral. It also offers economic advantages over fossil fuels in the long term. The Biofuel Quota Act was passed in Germany in 2007, which stipulates the quotas to be used when blending bioethanol with petrol.

Biofuels Fuels (bioethanol, biodiesel, biogas, vegetable oil) generated using biomass.

Biogas This is a combustible gas created by fermenting wastewater or renewable resources.

Bivalent Equipment, such as a heating system, which can run on two types of fuel, e.g. natural gas and oil.

Campaign Also known as the sugar beet campaign, this is the time of year when sugar beet is processed by sugar factories to produce sugar. The sugar beet campaign usually lasts from mid-September to early January.

Catch crop A crop planted between two main crops, e.g. yellow mustard or fodder radish. Catch crops are frequently used for erosion protection, mulching, or biological nematode control.

CEE Central and eastern European countries.

Clamp (beet clamp) A pile of beet in the field which is protected from the weather (covered clamps).

Co-generation The process of generating electricity while also utilising surplus heat.

Co-generation power plant A plant which generates heat and power from energy sources at the same time.

 CO_2 certificates Limited permits for CO_2 emissions (each certificate corresponds to one tonne of CO_2).

Condensate Water which becomes liquid (condensation) as it cools down following the steam phase. Condensate is used as process water when extracting sugar.

Corporate social responsibility (CSR) CSR lays the foundations for companies to integrate social and environmental considerations into their business activities and their relationships with stakeholders on a voluntary basis.

Cross-compliance regulations Standards in the fields of environmental protection, human and animal health, plant health and animal protection which farmers must observe. They are also obliged to maintain farmland in a good agricultural and ecological condition. Failure to comply means that farmers' European government subsidies are cut. The regulations have two aims: to promote greater sustainability in agriculture and align the CAP (the European Common Agricultural Policy) with the expectations of consumers and taxpayers. CSB Chemical oxygen demand. This is a way of measuring the organic contamination of water.

DEHSt German Emissions Trading Authority. A national office within the German Federal Environment Agency responsible for allocating and issuing emissions permits, monitoring and management activities, maintaining the national register and reporting at national and international level.

DIN EN ISO 9001 An internationally valid norm concerning quality management.

DIN EN ISO 14001 An internationally valid norm concerning environmental management systems.

DIN EN ISO 22000 An internationally valid norm concerning product safety.

Distillation (Lat. destillare 'drop down/away') A thermal process to separate a liquid compound into the different substances, which are soluble in one another, e.g. when distilling alcohol. Repeated distillation increases the purity of the final distillate.

Dividends The amount of a stock company's annual net profit attributable to each share. Dividends are either expressed as a percentage of the par value or in a currency figure per share (dividends per share). The annual general (shareholders') meeting passes a resolution on the distribution of dividends. In Germany, dividends are paid annually.

Dry beet yard This concept means that the beet first comes into contact with water in the washing plant. This minimises sugar losses and means that the wastewater is less contaminated.

EBITDA margin The EBITDA margin or yield provides information about a company's profitability. It expresses the relationship between earnings before interest, taxes and write-downs and total operating performance. This is a useful indicator, especially for international comparisons.

Eco-Audit Regulation See EMAS II.

Eco-labelling Used for products which are considered environmentally friendly on the basis of certain criteria. *Electronic data interchange (EDI)* This is a collective term for all asynchronous and fully automatic electronic processes used to send structured messages between application systems at different locations.

EMAS II Eco-Management and Audit Scheme – a synonym for the Eco-Audit Regulation 761/2001 passed by the European Parliament and Council on March 19, 2001. It concerns organisations voluntarily committed to a community system for environmental management and auditing (EMAS II).

Emissions Substances released into the environment.

Emissions trading The buying and selling of emission rights (pollution rights) in the European Union.

Environmental company audit A regular, objective assessment of the company's environmental achievements.

Equity ratio An indicator showing the relationship between balance sheet equity and total assets.

European Chemicals Policy (REACH) Registration, Evaluation, Authorisation and Restriction of Chemical substances. This is a European regulation which came into force on June 1, 2007.

Extraction Part of the process of extracting sugar from beet cossettes.

Extraneous matter Matter which is deducted from the beet supplied by farmers. This comprises any leftover soil and the upper part of the beet (head), which is of little use for sugar extraction.

Fermentation (Lat. fermentum: 'yeast') Transforming biological materials with the aid of bacteria, fungal or cell cultures, or by adding enzymes (ferments). The term originally stood for a biological reaction under the exclusion of air.

Fondant A malleable white mass made from sucrose, glucose and water. It consists of ultra fine sugar crystals.

Fructose A solution of at least 95 per cent fruit sugar (D-fructose). Depending on the manufacturing method, it may also contain small quantities of D-glucose and sucrose.

German Corporate Governance Code (DCGK) (Compendium of laws on company management) Guidelines and standards formulated in 2002 on the management and supervision of stock market-listed companies in Germany. The DCGK contains nationally and internationally recognised standards for responsible company management, which primarily aim to increase transparency and accountability. It stipulates the management board and supervisory board's responsibilities, and includes regulations and recommendations on protecting shareholders' rights, filling posts on executive and supervisory bodies, and appropriate remuneration for company officers. It is also recommended that non-listed companies comply with the German Corporate Governance Code.

GMP B2 (Good Manufacturing Practice B2) A Dutch standard developed by the Product Board Animal Feed (PDV Productschap Diervoeder) to control the quality of animal feed supplied by foreign companies.

Heavy heating oil A fuel for power plant operation.

IFS International Food Standard. This applies to own-label brands.

Immissions Factors which have an environmental impact. These primarily include air pollution, noise, odours, vibrations, light, radiation and heat.

Inverted sugar syrup Inverted sugar is a mixture of D-glucose and D-fructose created by hydrolysing white sugar (sucrose).

KEP Competence Development Programme – a scheme for assessing existing and up-andcoming managers' potential and developing their key skills.

Kyoto Protocol This protocol to the UN Framework Convention on Climate Change was passed at the third session of the Conference of Parties held in the Japanese city of Kyoto in 1997. It sets out compulsory limits on greenhouse gas emissions for industrialised countries for the period between 2008 and 2012. The Kyoto Protocol came into effect on February 16, 2005 for 163 signatory countries. LDC states (least developed countries) Following a European resolution in 2001, any goods except arms can be imported to Europe duty-free from the 50 least developed countries. A transitional arrangement was put in place for sugar up to 2009. From July 1, 2009, the LDC countries will be allowed to export sugar to Europe dutyfree with no restrictions on quantities.

Light heating oil A fuel for operating small and medium-sized boilers.

Liquid sugar A colourless and odourless liquid consisting of sucrose and water.

Logistics Processes associated with the flow of goods.

MeiStep Foreman Development Programme – a scheme for assessing existing and up-and-coming foremen's potential and developing their key skills.

MEP Manager Development Programme – a scheme for systematically developing and preparing potential candidates for managerial and executive roles in the future.

PDV Productschap Diervoeder – the Dutch Product Board Animal Feed.

Preceding crop In the crop rotation system, the main crop planted in the previous year.

Profit-turnover ratio An indicator which shows the relationship between the annual net income and revenues, thus providing information on the company's profitability.

Q&S standard German animal feed standard developed by Q&S-GmbH, Bonn, to safeguard fodder quality.

Refining A general term describing a process used to purify or refine raw materials. For sugar, this means stripping brown unrefined sugar (made from sugar cane or sugar beet) using a (repeated) succession of crystallisation processes.

Renaturation Returning brownfield sites (e.g. used by industry) to a more natural state.

Resource In general, the materials needed to solve a particular task. The term usually refers to equipment, funds, raw materials, land, energy or staff.

Return on equity This is a figure which indicates the profitability of the capital used. It is calculated by dividing the annual net income by balance sheet equity.

Return on revenues A financial indicator obtained by dividing net income for the year by revenues and enabling an analysis of a company's profitability.

Silo truck An enclosed lorry used for transportation.

Strategy Map The Strategy Map outlines Nordzucker's plans for the company's future development. It comprises our vision, mission, targets, values and guidelines.

Sugar market regime A joint market organisation for sugar established in 1968 (for the EEC/EC/EU), which regulates the prices for sugar and sugar beet, maximum production quantities for sugar, and conditions to provide external protection. The previous Regulation (EC) No. 1260/2001 was replaced on July 1, 2006 by the Regulation (EC) No. 318/2006, which the agriculture ministers from the European Union member states passed on February 20, 2006.

SweetFamily is the Nordzucker Group's international umbrella brand. Beet sugar products have been marketed to end consumers, bakeries and the food and drink industries under the SweetFamily brand in Germany, Poland, Slovakia and Hungary since November 2004.

Syrup A general term for highly concentrated sugar solutions.

Vapour Evaporated or vaporised water (in steam form) which is used as a heating medium in the evaporating station, for example.

Nordzucker's environmental declarations



Environmental declarations by the German Nordzucker plants

Our certified environmental declarations for the German Nordzucker plants contain detailed reports on steps taken to protect the environment at the individual factories. Environmental declarations for the plants in

- Clauen
- Klein Wanzleben
- Nordstemmen
- Schladen
- Uelzen

are available from us on request. Please contact umwelt@nordzucker.de







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Online publications available from the Download Centre at www.nordzucker.de

- Declaration of compliance
- Annual Report
- Sustainability Report
- Nordzucker certificates

This sustainability report for the Nordzucker Group is also available in German. PDF files of the German and English reports can also be downloaded from www.nordzucker.de