



Nordzucker Post 1/2023

Lars Gorissen: “Together into a new successful year”



Dear Readers,

A successful company needs a good strategy and enthusiastic, flexible colleagues to put the concepts and programs into action together with all stakeholders. The 2022/23 campaign held unprecedented challenges for all of us, such as a potential energy shortage and extreme climatic conditions. I'm convinced everyone did their best to find good solutions, and for that I thank everyone involved very much. The experience we have gained will help us to do even better in the future.

Unfortunately – and due to heat and drought – the beet yield was lower in some regions than the average in recent years. This was not compensated for by higher sugar contents, so that the overall campaign result was below average. We partially compensated for the lack of sugar by refining imported cane sugar at our refineries in Finland and Poland. Important for our beet growers: The current high sugar prices are enabling very good prices for this harvest! Sugar beet thus remains an important crop in agriculture, whose cultivation and processing are essential for the food supply and pays off for our beet growers. In Australia, the sugar cane harvest produced very good yields.

One example of how our teams met the challenges of the past year with a great deal of commitment, intelligent and pragmatic solutions is securing energy supplies in times of extreme geopolitical upheaval. I am proud of our teams who set up bivalent energy supplies with other energy sources at short notice for our plants in Europe, which are often operated with natural gas. In this way, all locations came through the campaign without any energy-related restrictions.

Why do I mention this? Because I am convinced that we have a forward-looking strategy and in addition the people and partners who use their knowledge to create precisely tailored solutions to achieve the best possible results. Based on this, we have again set our targets high for 2023. With our strategy based on the three pillars of excellence, sustainability and growth, we are focusing on programs and projects that make Nordzucker more efficient, more successful and more sustainable.

With our GoGreen team, for example, we are continuing to work on becoming more energy-efficient and using new technologies to make our production CO₂-neutral by 2050 at the latest. One component of this could be biogas from sugar beet processing residues. The basis for this would be the inclusion of beet pulp from the process as a renewable

energy source in the Renewable Energies Directive at European level. This is what we are committed to.

With our Smart Beet Initiative, we support our growers with the latest findings and practicable solutions to the ever-new challenges – such as reducing the use of crop protection products. Together, we want to make regional beet cultivation even more sustainable, efficient and profitable. We will keep you informed about these and many other projects in the course of this year – or perhaps even work with you directly.

For now, I hope you enjoy this issue of our Nordzucker Post.

With best regards,

Lars Gorissen

Very good operating result after three quarters

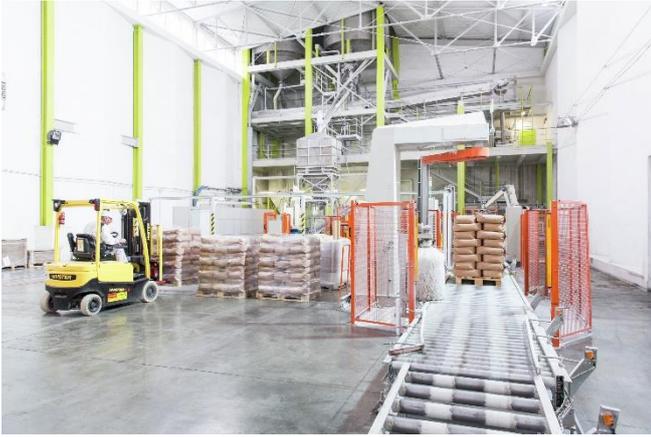


Nordzucker generated group-wide revenue of 1,664 million euro in the first nine months of fiscal year 2022/23. In the same period last year, sales were 1,463 million euro. Higher sugar prices and a positive trend in animal feed, molasses and bioethanol supported the increase in revenues. Overall, an operating profit of 175 million euro was achieved. In the

prior-year period, EBIT was 106 million euro. Nordzucker's Australian subsidiary Mackay Sugar Ltd. contributed significantly to this result, in particular by feeding self-generated electricity into the public grid at very good prices.

Alexander Bott, CFO, comments: "We have been able to compensate for the significant market-related increases in production and logistics costs in the last three quarters through positive developments in the sugar and feed markets. Our forward-looking and optimized purchasing in the energy sector has also contributed to our very good economic situation. We expect a clearly positive operating result for the fiscal year 2022/23. However, we must be aware that market developments in the current volatile environment are very difficult to assess and extrapolate into the future."

Challenging 2022/23 campaign successfully concluded



Nordzucker has successfully completed sugar production from sugar beet and sugar cane at all its factories in the seven European countries and in Australia. Yields are behind the 5-year average due to heat and drought in some regions. This was not compensated by higher sugar contents, so that the overall campaign result was below average. In Australia, the sugar cane harvest brought very good yields.

"The current high sugar prices allow for very good prices for this crop. This is positive for our growers, for whom - as everywhere - production and logistics costs have increased," explains Dr Lars Gorissen, CEO of Nordzucker. "In these volatile times characterized by high inflation, we are doing everything in our power to continue on the path we have taken together with our growers and our customers in a sustainable and successful manner. Sugar beet is an important part of agriculture and the basis for a secure food supply."

Campaign marked by energy supply and weather challenges

"The current campaign was characterized by particular challenges in terms of energy supply and extreme climatic conditions in some regions," says Alexander Godow, COO at Nordzucker. These include high temperatures and extreme drought on the one hand, and heavy rain as well as hard frost in some countries on the other. "Thanks to the extraordinary commitment of our employees, we have found suitable solutions. In this way, we mastered these complex situations flexibly and achieved the best possible result

together. With the experience gained from this challenging campaign, we are even better equipped for the future."

Influenced by geopolitical developments, Nordzucker employees worked out solutions for a secure energy supply in 2022. In order to become less dependent on scarce gas, the factories in Europe, which often run on natural gas, were equipped with bivalent - that is, with another type of energy - for the short term. "It is thanks to the high level of commitment and forward-looking action of our colleagues that we were able to carry out the campaign at all locations without any energy shortages. The issue of a sustainable energy supply at competitive prices will continue to occupy us and is an important part of our GoGreen strategy," says Godow. One of the solutions on the way to becoming CO₂ neutral by 2050 at the latest could be biogas obtained from pressed pulp as a residue of sugar beet processing. The basis for this would be the inclusion of beet pulp as a renewable energy source in the Renewable Energy Directive (RED III) at European level. "We will continue to campaign for this."

Overview of the campaign at Nordzucker locations

The campaign was completed in all countries in December or January. The Uelzen plant (Germany) processed its last beet on February 5th. This was due to the quality of the beet as a result of extreme weather conditions. There were unusual frosts down to minus 15 degrees in December followed by relatively high temperatures and rain. Bacteria formed slimy substances in the thawed sugar beet, which then led to processing problems. Thanks to good cooperation between agriculture, logistics and production, it was possible to find other uses for beet that could no longer be processed, such as feeding it into biogas plants. Overall, this affected significantly less than one per cent of the total beet volume for Nordzucker.

On average, the campaign lasted about 114 days for all European factories. In Germany, Denmark and Lithuania, organic beet was again processed into organic sugar in the first days of the campaign.

The crush, the processing of sugar cane, in Australia was not completed until 13 January 2023 after an unexpectedly long 213 days. Rains in July led to harvest interruptions but also to higher cane yields than expected.

Very long processing of cane – Mackay Sugar ends crush 2022/23



The crush 2022/23, the processing of sugar cane, ended at Farleigh, Racecourse and Marian on 13 January 2023. Mackay Sugar looks back on a season that was more challenging than expected. Despite all the difficulties in the past crush, the management of Mackay Sugar Ltd (MSL) is optimistic and praises the tireless efforts of the staff.

The decision to end the crush was made in light of the heavy rainfall the region has been dealing with since the beginning of the year. 1000 litres per square metre in a few days (roughly equivalent to two years' rainfall in some beet areas) flooded part of the sugar cane fields and washed out the tracks, making it impossible to harvest and transport the cane. Overall, the crush took longer than originally planned.

Intermittent rains and problems in production led to delays in processing, and a higher-than-forecasted crop yield

further extended the crush. In total, a good 5.5 million tonnes of cane were harvested and processed in a period of 31 weeks, which is about 94 per cent of the total amount of sugar cane in the field. Not only raw sugar was produced, but also electricity for the mills from the bagasse. In addition, a good 90,000 MWh of electricity (annual demand of about 30,000 households with three persons) was fed into the national grid.

Carl Morton, General Manager Operations at Mackay Sugar, is proud of the performance of his employees: "We have really dedicated colleagues who have worked tirelessly to be able to process as much cane as possible. They will also put in overtime during the maintenance season to ensure we can re-commission and start the crush 2023 on time."

Last autumn, the Nordzucker Executive Board visited MSL's Australian sugar mills together with Michael Gerloff, Head of Business Unit Cane Sugar, and some members of the Supervisory Board. In addition to discussions with the employees in the mills, there were also talks with farmers. The visitors were deeply impressed by the development in the mills and the commitment of the employees. On the agricultural side, discussions also took place with motivated and dynamic cane growers.

GoGreen – Our path to climate neutrality



Nordzucker has set itself ambitious targets for the coming years: Phasing out coal by 2030 and CO₂ neutrality in production by 2050 at the latest. Already by 2030, direct CO₂ emissions are to be halved compared to the average emissions of the years 2017-2019.

The GoGreen program takes three approaches to shaping a sustainable energy supply for Nordzucker. The measures are

interlinked: by 2030, there will be a switch from coal and oil to alternative fuels with lower CO₂ emissions, predominantly natural gas. At the same time, energy requirements will be reduced with new technologies, modernizations and optimized heat and energy management, so that even less CO₂ will be emitted. A roadmap is currently being developed for each European plant.

As sugar production remains energy-intensive, the third component is the development of renewable energy sources. Here, for example, the use of beet pulp to generate biogas opens up the possibility of covering a large part of the energy required in the future. Technical and regulatory hurdles are to be overcome in current and future projects in order to exploit this potential.

Smart Beet Initiative – an initiative for seven countries



The Smart Beet Initiative (SBI) project has been running at Nordzucker since 2019. Together with the local farmers, approaches to solutions are being developed to safeguard regional beet cultivation and its profitability. At the same time, this initiative supports the Green Deal as the European roadmap to climate neutrality in 2050. Two key approaches of the Green Deal are the Farm-to-Fork and biodiversity strategies. A large number of the Smart Beet initiatives are helping to ensure that measures under these strategies, such as reducing chemical pesticides, are also implemented in beet cultivation in the short term.

Currently, there are no ad hoc solutions to the various challenges in beet production, such as loss and reduction of important pesticides and restrictions on fertilization in designated areas. Rather, the approaches are neither theoretically nor technically fully mature. Therefore, it is all the more important that the Smart Beet Initiative project tries new innovations and ideas in a timely manner that would be difficult for an individual or a single farm to implement. The SBI project is running in all seven European countries (Germany, Denmark, Sweden, Finland, Lithuania, Poland, Slovakia) where Nordzucker processes beet. The country-specific challenges differ in some cases, but the objectives are the same for all countries.

In order to work as closely as possible with the local farmer, the individual field demonstrations are supervised by the regional Agricenters. As part of the Smart Beet Initiative, demonstrations must meet three criteria; they must be sustainable, smart and public.

Smart Beet initiatives in the 2022 crop year

In 2022, there were a total of 20 SBI demonstrations across the company. In Denmark, colleagues showed on the ground that spot spraying beet herbicides can theoretically save up to 70 per cent. The planting of perennial flowering strips in the area surrounding the Clauen sugar factory is designed to protect and promote beneficial insects and is part of the German government's Biological Diversity program.



Flowering strips for the promotion of insects

Planned Smart Beet initiatives for 2023

Currently, 26 Smart Beet initiatives are planned for the coming crop year. A large number of the initiatives pursue approaches to reduce the use of herbicides in conventional beet cultivation and thus follow the measures of the Green Deal. To sustainably minimize insecticide use in sugar beet, studies of the effects of perennial flowering strips are continuing, tools are being developed to quickly and easily target pests and beneficial insects, and traps for catching pests are being tested. Digital applications, such as the creation of sowing and yield maps, which have already been introduced in other crops such as corn, will also continue to be tested for their usefulness in beet cultivation.

Beet pulp for energetic self-use - a consistent concept



Pressed beet pulp after leaching of sugar

The focus of the political discussions remains on the energy topic. With the successful securing of the energy supply in the Nordzucker sites for the 2022/23 campaign, a future climate-neutral sugar production became all the more central.

With reference to the ongoing consultations at EU level on the Renewable Energy Directive (RED), we have highlighted in dialogue with parliamentarians and ministries in particular the great opportunities offered by the energy recovery of beet pulp for a climate-neutral and energy-autonomous supply in sugar production. The use of beet pulp, which is already produced in the sugar factories, for the energy supply of the sites corresponds exactly to the politically expressed will to become independent of natural gas as quickly as possible and to advance the transformation to a climate-neutral energy supply. Politicians at the state, federal and EU levels have consistently shown themselves

to be open to our concerns in personal dialogue. However, this support from individual parliamentarians and the united campaigning of the European sugar sector has not yet contributed to the necessary approval within the EU Commission, the EU Council or even the governments in the EU member states. Obviously, reservations based on a lack of knowledge and often a misunderstood food-fuel discussion are too stubborn.

The concept is to use the leached beet pulp produced during sugar extraction to produce biomethane for the company's own sugar factories. About 60 per cent of the beet pulp is sufficient to cover the factories' energy needs. There is no need for separate production or additional cultivation areas – from the beet for sugar production, the beet pulp remains – as a natural residue of sugar production.

Today, beet pulp is dried in an energy-intensive process and sold as animal feed (for ruminants). The share of beet pulp in the total animal feed market is only about one per cent throughout Europe. Overall, the path mapped out politically leads us to expect a decline in animal husbandry in the coming years, which will also have an impact on the feed market. Beet pulp is not a protein feed and is not substituted by soy imports. Surplus beet pulp is already in demand on export markets, e. g. in Asia.

For the trilogue between Parliament, Commission and Council, which is progressing at EU level, it is a matter of seizing this opportunity politically and making energy-autonomous and climate-neutral sugar production possible for the entire European sugar industry within a few years.

New alignment of Communications & Public Affairs



Nordzucker refocuses Communications and Public Affairs: Nicole Dinter joins Nordzucker as Head of Communications. Christian Kionka is focusing on Public Affairs.

Nicole Dinter took over as Head of Communications in January 2023. She was most recently Communication Manager Germany & Industrial in Corporate Communications at the global chemical company Solvay in Brussels and in Germany. There she was responsible for

internal and external communications. A graduate biologist and public relations consultant, she began her career at a PR agency before building up German and European communications at food retail company Plus. Her responsibilities at Nordzucker include the strategic new positioning as well as management and responsibility for internal and external communications.



Christian Kionka has been focusing on the strategic management of political decision-making processes as Head of Public Affairs since the beginning of the year. Kionka has held various positions at Nordzucker since 1994, initially in the Agri division for many years. From 2007, he built up Public Affairs in the Group and since 2014 has also been responsible for Communications for Nordzucker.

Have you ever tried vegan?



For birthdays, holidays or just in between, waffles can be eaten anytime, be it winter or summer, spring or autumn. With icing sugar or apple sauce – waffles are simply versatile!

But is it also possible to make them vegan? We have the recipe for vegan quinoa-carrot waffles here: [Recipe for Vegan Carrot-Quinoa Waffles - SweetFamily by Nordzucker \(sweet-family.de\)](#)

And that's not our only vegan recipe, you can find many other delicious and vegan recipes on the SweetFamily homepage ([Recipe search \(sweet-family.de\)](#)).