



Sustainability strategy

Excellence in sustainability – our new strategy to get us to 2030

Sustainability is a key aspect of Nordzucker's development and has been an integral part of our business model for many years. Over the past few months, a series of Nordzucker experts have been working hard to develop measures and indicators within the scope of a new sustainability strategy, in consultation with the Executive Board.

Our new 2030 sustainability strategy covers our entire supply chain and is based on four pillars: Caring for people, sustainable sourcing, sustainable production and sustainable products. These four pillars comprise a broad range of obligations and measures covering issues such as climate change, the greening of agriculture and sustainable supply chains and reflect the changed expectations of consumers, employees and other social groups.

Our new strategy is based on many years of commitment to protection of the environment and to sustainability. We were already active in this area over 30 years ago, when climate change, conservation of resources and social commitment were not yet key topics of public debate. For instance, in the period from 1990 up to the present day we have already lowered the CO₂ emissions associated with our sugar production by around 60 per cent. Nordzucker has signed up to the Science Based Targets initiative as part of its new strategy and is working on aligning its Group-wide goal of lower greenhouse gas emissions with the objectives of the Paris climate agreement on an independent and scientific basis.



Caring for people

Good and healthy working conditions, fair treatment, diversity, tolerance and a particular focus on occupational safety symbolize the care we show our employees and serve as the basis for our positive and successful working relationship with them. All of this rests upon our four values: responsibility, courage, commitment and appreciation. These values have brought us together for many years, transcending national borders and cultural divides and shaping our behaviour.



Sustainable sourcing

As a producer, Nordzucker forms part of the supply chain between the supplier and the customer. Sustainable procurement means that we support human rights and the protection of the environment throughout our supply chain. Our Supplier Code of Conduct and our auditing system for beet growers serve as the framework for this. For sugar beet, our key raw material, we are developing new, environmentally friendly and improved cultivation methods alongside our growers.



Sustainable production

With our Go Green program, we are already hard at work realizing the transition to renewable energy sources, with the knowledge that this will require a high volume of capital expenditure as well as fresh ideas. Our CO₂ reduction goals have a scientific underpinning through our commitment to science-based targets for climate protection. This provides even greater transparency and external validation for our medium-term objective of CO₂ neutrality.



Sustainable products

We use every part of the beet in order to create our products: besides sugar, we also produce animal feed from beet pulp and molasses. This means that hardly any waste is left after processing. What is more, our products are sustainably packaged. We have documented our clear objectives for reduced packaging and increased use of recyclable material in our Corporate Policy on Sustainable Packaging.

Caring for people

Forward-looking and sustainable corporate governance includes a focus on people and their needs. Our employees are the backbone of Nordzucker, since they contribute to the company's success every day with their expertise, commitment and ideas.



PEOPLE, VALUES, RESPONSIBILITY

What makes Nordzucker an attractive employer?

The key factors include a modern and inspiring work environment which reflects the needs of current and future generations, diversity and comprehensive in-house trainings and further education programs. Our values of responsibility, dedication, courage and appreciation form the basis of our daily activities.

An emphasis on people and a clear ethical commitment characterize our interactions with one another and our corporate culture. For some years now, we have provided training covering our values and our Code of Conduct, with the goal of embedding them in our company while also pursuing their ongoing development. We actively promote openness, transparency and a willingness to communicate. Currently, over 90 per cent of our employees have received intensive training which has

provided them with in-depth knowledge of our Code of Conduct. We aim to provide training covering ethical issues for all of our employees. Our ethics committee ensures compliance with our values and investigates individual cases where necessary. One of our goals is to establish a network of value ambassadors at all of our sites, who will serve as an interface with our employees.

Awareness of sustainability is also important for us and we are pursuing extensive communication activities in this area.

In addition, all our plants regularly undergo external audits in line with the stringent SMETA (Sedex Members Ethical Trade Audit) requirements. We thus demonstrably comply with the highest labour, health and safety, environmental and corporate ethics standards.

Nordzucker Values



Safety, health and sustainability



We ensure safety in the workplace by deliberately promoting a safety-conscious culture: our employees assume responsibility for, and take good care of, themselves and other members of staff. We are working towards avoiding all accidents in the workplace.



We strongly emphasize the need for good mental health in order to ensure balanced, healthy everyday work life.



Our managers lead by example in relation to sustainability, and our philosophy is also reflected in our communication activities and our everyday relationships.

Health protection and care during the coronavirus pandemic

For more than a year now, the world has been focused on the pandemic. Right from the start, health protection and preventing the spread of the Covid-19 virus within the company were top priorities for Nordzucker.

A large number of preventive measures were immediately implemented in the spring of 2020, and these were strictly complied with even over the summer when restrictions were eased. These measures included separate shifts, refraining from home, social distancing and hygiene rules, UVC disinfection and refraining from physical meeting, plant visits and business trips.

These measures are being pursued hand in hand with a high level of responsibility as well as exemplary cooperation between our managers and the workforce.

Even during the coronavirus pandemic, our comprehensive hygiene, prevention and protection measures continue to exceed what is required by law and have proved highly successful. At all of our plants in Europe, we have been able to guarantee production and the delivery of sugar.

Sustainable sourcing

On the basis of our Supplier Code of Conduct, we have developed a multi-step approach with the goal of promoting sustainability across the supply chain. We aim to encourage our suppliers to integrate sustainability within their business models.



FARMERS AND SUPPLIERS AS SUSTAINABILITY PARTNERS

We can only meet the challenges of the future such as climate change, managing scarcity of resources, soil health and supplying a growing world population by working together with our suppliers.

We have already been pursuing this path with our beet growers for many years now, in particular by becoming a member of the Sustainable Agriculture Initiative Platform (SAI) in 2015. SAI is the leading food and beverage industry sustainability initiative and supports the development of sustainable agriculture across the globe. Since 2019, Nordzucker beet growers in all countries have been certified to at least silver status on the basis of an SAI farm sustainability assessment (SAI FSA). Our aim is for all of our growers to have gained the highest level of SAI FSA certification – gold status – by 2030.

For many years now, a central approach has been to improve yields per hectare and thus soil productivity for beet cultivation, in this way integrating economics

with ecology. Our Smart Beet initiative pools our various approaches and aims to at least stabilize beet cultivation yields, while also using less fertilizers and pesticides. Cost-effective organic beet cultivation becomes more relevant, and an increasingly large area has been devoted to this over the past few years.

With our latest supplier program (Supplier Sustainability Engagement Program), we are more strongly integrating all our suppliers and stepping up the process of dialogue on sustainability issues, particularly in relation to safe and socially responsible working conditions and environmental standards. We have long monitored our suppliers' respect for human rights by means of our own risk-based human rights due diligence approach.

Our company's Code of Conduct, our Supplier Code of Conduct and our Human Rights Policy are available for download at www.nordzucker.com.

Sustainability goals 2030 – sustainable sourcing

Key areas	Target
Responsible beet procurement	By 2025: at least 50% of growers to achieve SAI FSA gold standard certification. By 2030: all growers to achieve SAI FSA gold standard certification.
Stable yields for conventionally cultivated beet	Stable yields by comparison with a five-year average 2015-2020
Organic beet cultivation – closing the yield gap	By 2030: Organic beet growers achieve an average yield of 10 t/ha.
Increased integration of suppliers	Our aim is for all of our key suppliers to have signed up to our Supplier Sustainability Engagement Program (SSEP) by 2025.



Sustainable beet cultivation: the Smart Beet Initiative

How can we at least maintain average beet yields at their current level, while also reducing our use of fertilizers and pesticides? How can we encourage and improve soil health, soil fertility and biodiversity? In cooperation with growers, research institutes, seed breeders and manufacturers of agricultural machinery, we are examining new approaches and conducting field trials on site, in order to test out and refine new methods such as band spraying, robotics and the usage of beneficial insects.



New technologies enable much more precise application of pesticides. Within the scope of our Smart Beet initiative, we and our growers are researching mechanical-digital methods of crop protection and the use of robot technology in the field.



Beneficial insects such as ladybirds can help to reduce the use of pesticides. Their settlement also provides a positive contribution to biodiversity. We are supporting flower strips as a habitat for insects through a series of initiatives.



Our beet is always cultivated on a rotational basis, i.e. alternately with other crops in subsequent years. Moreover, thanks to its deep roots and its broad leaf canopy, beet promotes soil fertility and biodiversity.



What does the smartphone have to do with the beet? A lot. By mobile recording of leaf diseases in the field, for example, our cultivation advisors can immediately give good advice to secure yields. Digitalisation makes it possible to share knowledge. This plays an important role in improving cultivation.

Sustainable production

With regard to energy consumption and CO₂ emissions, Nordzucker is already setting standards today and exceeding the EU's target: since 1990, the amount of energy used in extracting sugar from beet has fallen by 40 per cent, while CO₂ emissions have decreased by 60 per cent. We aim to stop the use of coal by 2030 and, through a series of further steps, to switch to renewable energy entirely.



TACKLING CLIMATE CHANGE – CONSERVING RESOURCES

We require heat and electricity, and therefore energy, to evaporate the water – that makes up roughly 75 per cent of sugar beet – and to crystallize the sugar. Our boilers for the production of steam are mainly gas-powered. This steam generates electricity via a turbine and is subsequently used several times during the evaporation and boiling process. This heat and power generation used in our sugar factories is particularly efficient. This system has an energy efficiency rate of 85 per cent, which is significantly better than that of conventional power plants (which achieve a maximum of 50 per cent).

However, this is not enough in terms of protecting the climate. We are aiming to end our use of coal by no later than 2030 and to achieve carbon-neutral production as soon as possible, in compliance with the national requirements at our sites, at the latest by 2050. Our “Go Green” program to convert all of our plants to renewable energy

is now in its launch phase. We are currently examining and assessing the potential offered by different technologies and how they can be used in our plants. Promising technologies will subsequently be tested in full scale production, so that they can be implemented throughout the Group. This transition will require considerable investments, ideas and changes.

In order to achieve carbon neutrality, we aim to set ourselves goals which are ambitious and based on scientific facts. Nordzucker’s obligation to comply with science-based targets ensures that our new emissions targets are consistent with the Paris Agreement on climate change. Once independent climate scientists have reviewed our goals as a contribution to limiting global warming, our commitment will be publicly monitored on an annual basis.

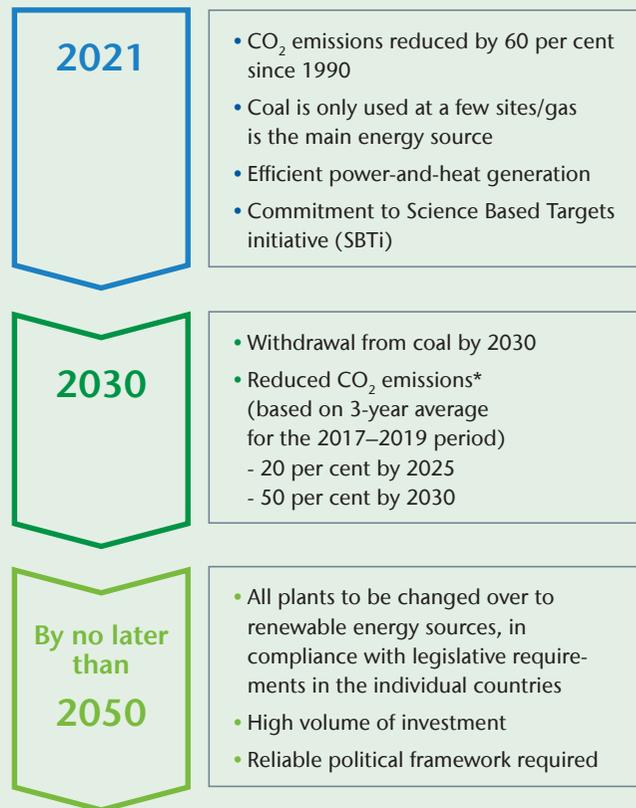
Water cycles at the plant

Water is a scarce resource and it is important to conserve it. During the production process, we require water in order to wash sugar beet, for its transport within the plant and in order to remove the sugar from the beet. Around 75 per cent of sugar beet is water, and this is reused several times within a well-designed closed loop system. We are able to cover our fresh water needs almost entirely through the water which is naturally present in the beet in the field. Nonetheless, we aim to achieve further reductions in the volume of water which we require for additional purposes.



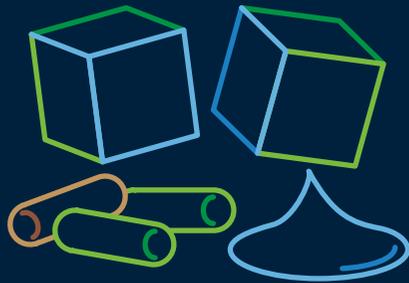
The path to carbon neutrality in production

Climate change means that huge cuts in CO₂ emissions must be achieved in order to safeguard a decent quality of life for future generations here on Earth. We aim to end our use of coal as an energy source by no later than 2030 and subsequently to achieve carbon-neutral production through a series of further steps. Those are enormous challenges, which will require huge investments as well as innovations. In order to achieve this, we need a reliable political framework.



Sustainable products

Our sugar is a natural product which is mainly grown locally. The beet is transported short distances, the sugar is extracted in compliance with the highest quality, environmental and social standards. Almost all of the sugar beet is used.



FOR INCREASED TRANSPARENCY – MEASURING OUR FOOTPRINT

Carbon footprints and life cycle analyses provide information and transparency as to which products are better for the environment than others. We aim to achieve a more comprehensive picture of our products' carbon footprints and life cycle analyses. As well as the production process, procurement, transport and packaging play an important role in this.

Nordzucker has been participating in the debate over a healthy lifestyle and responsible consumption of sugar for many years now, through a range of different activities. We aim to provide information on nutrition and a healthy lifestyle.

Wide SweetFamily organic range



Sugar is a natural product. The beet produces sugar in the field with the aid of the sun and water. When harvested, roughly 17 per cent of the beet is sugar. The rest of the beet is made out of water and valuable fiber. We use every part of the beet to create sugar and other products, in particular beet pulp cossettes as animal feed and molasses. A research topic for the future is to establish which other products can be created out of the various parts of the beet and the sugar. We are exploring new possibilities in this area with partners.

Our goals for sustainable packaging

Our principle:

avoid, reduce, reuse and recycle

Is packaging necessary?

We sell 80 per cent of our sugar and our animal feed and molasses in unpackaged form. Bulk trucks are used to transport our products directly to our customers, particularly to food manufacturers for further processing.



A small footprint

Where packaging is required, we ensure that the environmental footprint is as small as possible. Unnecessary packaging is eliminated and we take the social and ecological impact into consideration in our procurement of packaging materials.



Fully recyclable by 2025

Our goal is for all of our plastic packaging to be fully recyclable by no later than 2025.



Sustainable paper packaging

By 2025, we aim to achieve sustainable procurement of all primary and secondary paper packaging for our products, e.g. FSC certification.



We have documented our goals in our Corporate Policy on Sustainable Packaging. This is available for download at www.nordzucker.com.

Our involvement in initiatives

PROMOTING TRANSPARENCY AND DEVELOPMENT

Nordzucker is involved in various sustainability initiatives that aim to enhance sustainability and increase transparency in this area, while bringing together many other companies which are players along the value chain.

A MEMBER OF SAI SINCE 2015



The SAI is the most important initiative run by the food and beverage industry supporting the development of sustainable agriculture across the globe.

Nordzucker has been a member of the Sustainable Agriculture Initiative Platform (SAI) since 2015, and from early on it has promoted the work done on the SAI platform in order to encourage and document sustainable sugar beet cultivation. Since 2019, Nordzucker beet growers in all countries have undergone SAI FSA audits. Our aim is for all of our growers to have gained the highest level of SAI FSA certification – gold status – by 2030.

TRANSPARENCY THANKS TO EXTERNAL ASSESSMENT BY ECOVADIS



EcoVadis is the largest sustainability rating platform that assesses companies based on a range of non-financial management systems including Environmental, Labour & Human Rights, Ethics and Sustainable Procurement impacts.

Each company is rated on the material issues associated with their company's size, location and industry. The outcome of the EcoVadis sustainability rating is a scorecard that shows in which areas can companies improve, and how they compare to the benchmark in their industry. The EcoVadis methodology is based on international sustainability standards (Global Reporting Initiative,

United Nations Global Compact, ISO 26000). A scientific committee comprising corporate social responsibility (CSR) and supply chain experts monitors the assessment process. EcoVadis has been assessing Nordzucker since 2015.

COMMITTED TO CLIMATE PROTECTION THROUGH THE CDP

The Carbon Disclosure Project (CDP) is a global non-profit organization established in London in 2000 that aims to establish transparency in relation to environmental data. The CDP has established a leading and globally recognized environmental reporting standard and holds extensive data on corporate and governmental sustainability activities. Transparency in relation to climate-damaging greenhouse gas emissions and water consumption is a core area.



Once a year, the CDP collects data and information on companies' CO₂ emissions, climate risks and reduction targets and strategies which have been provided on a voluntary basis through standardized questionnaires. The CDP manages what is now the world's largest database of its kind.

Nordzucker has been a CDP member since 2010.

COMPREHENSIVE SMETA PLANT AUDITS

Sedex is one of the world's leading supporters of ethical trade that seeks to improve working conditions in global supply chains. Sedex provides practical tools, services and a network to help companies improve their responsible and sustainable business practices and source their supplies responsibly.



Nordzucker has been a member of Sedex (Supplier Ethical Data Exchange) since 2009. Through SEDEX, all of our plants regularly undergo external inspections through SMETA audits based on the Ethical Trade Initiative Base Code (ETI Base Code).



EMAS-COMPLIANT ENVIRONMENTAL STATEMENT

EMAS (Eco-Management and Audit Scheme) is a leading environmental management guideline. EMAS-certified businesses publish detailed environmental information about their activities and services. This includes communication of the company's energy and environmental policies, the significant environmental effects of our main activity – the production of sugar – and an annual environmental program including quantifiable targets to improve environmental protection.

For more than 20 years, Nordzucker has published environmental statements every year for its plants in Germany, in compliance with the EMAS Regulation.

In doing so, we make environmental information transparent and strengthen public confidence in our company's environmental performance – for example, in discussions with citizens, neighbours and local authorities.

DEMANDING SCIENCE-BASED TARGETS



The goal of the Science Based Targets initiative (SBTi) is to help companies to review their climate goals in line with scientific principles and in accordance with the goals of the 2015 Paris Agreement. In concrete terms, this means that overall measures should be sufficiently ambitious in order to limit global warming as required by the Paris Agreement. The SBTi is a partnership between the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

Nordzucker signed up to the Science Based Targets initiative in April 2021. We are thus providing a clear sign of our ambitious commitment to climate protection.

After analyzing our emissions and activities, independent climate scientists will verify our specific target for a reduction in greenhouse gas emissions by 2030.

COMMITTED TO THE UN GLOBAL COMPACT

The UN Global Compact is the world's largest global sustainability initiative with over 9,500 participating companies and 3,000 non-commercial members.

The UN Global Compact's mission is to bring together a global movement of sustainable companies with responsible business models. These companies undertake to align their business strategies and activities with the principles of the UN Global Compact in relation to human rights, labour, the environment and the fight against corruption and to pursue measures to achieve the UN's Sustainable Development Goals (SDGs).

After taking a break for a few years, Nordzucker rejoined the UN Global Compact in 2021. The commitment includes annual progress reporting in relation to implementation of the Global Compact principles.



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