Wiegand-Glas

SUSTAINABILITY

REPORT 2023

GEMEINSAM ANPACKEN, NACHHALTIG VERPACKEN

Table of contents

1. Preface and company profile	Pages 04 - 11
2. Our Approach to Sustainability	Pages 12 - 19
3. Responsibility for our environment	Pages 20 - 31
4. Responsibility for our products	Pages 32 - 37
5. Responsibility for people and society	Pages 38 - 49
6. GRI Index and Appendix	Pages 50 - 60

Preface

Dear Reader,

We are delighted to present to you the second Sustainability Report of the Wiegand-Glas group. As one of the leading family businesses in the production of container glass, pre-forms and PET bottles, as well as further services related to finishing, logistics and recycling, it is not only an obligation for us to provide some insight into our sustainability efforts and progress, but it is also our heartfelt wish to do so.

The time following the first report was shaped by a number of global crises: The coronavirus pandemic and the consequences of it, the rising prices, which are at once a sign of the fragile nature of our global trading system, the climate change and its repercussions, as well as Russia's war against the Ukraine, along with the associated global food and energy crises.

Overcoming such crises in the long term has long been the focus of economic, political and social action. Nonetheless, in particular the macro-economic consequences are currently still not foreseeable today. In parallel, the attempt to decarbonise the German economy and society, has gained significant momentum. Ambitious climate and transformation goals have been set, at both national and European level.

The Wiegand-Glas group has also further substantiated its company objectives for a sustainable future during this time, and had these objectives validated by the Science Based Targets Initiative. Thus, our decarbonisation pathway has also been established, and has been published in writing.

To what extent we can, against the background of the macro-economic and political complexity mentioned, that is gradually coming to light, really achieve these objectives in the industry as a whole also depends upon the general conditions. The further substanti-

ation of the European Green Deal and the national implementation in Germany will lay down the crucial guidelines, and thus take on an essential control function. In the interests of economic feasibility and achieving the climate objectives, we would certainly be very keen, as entrepreneurs, to implement decarbonisation without deindustrialisation.

From our efforts to reduce the ecological footprint to supporting our employees and consolidating our social commitment in the region, we would like to show you how we make a positive contribution with specific initiatives. We are, however, aware that there is always room for improvement. We face the existing challenges, constantly reflect on our actions, and set ourselves ambitious goals for the future.

As a German company strongly rooted in the region we are obliged to do justice to both the requirements of our customers and the needs of our region. Our focus on high quality and innovative solutions enables us to fulfil our customers' needs, while, at the same time, we remain anchored in the region, but, in the process, do not lose sight of our position in the international arena.

We warmly invite you to find out more about our efforts at sustainability from this report, and look forward to receiving your expressions of interest, suggestions and feedback. Let us jointly have a positive impact upon our environment and society.

Nikolaus Wiegand

Oliver Wiegand

Company Profile
- Tradition, innovation and quality

Our mission is to provide innovative packaging concepts based on glass and PET.

450+
years of tradition

8
locations

6%
investment ratio

2,000+
employees

250%
increase in the number of employees since 2010

8 million
preforms manufactured per day

8 million
glass containers produced per day

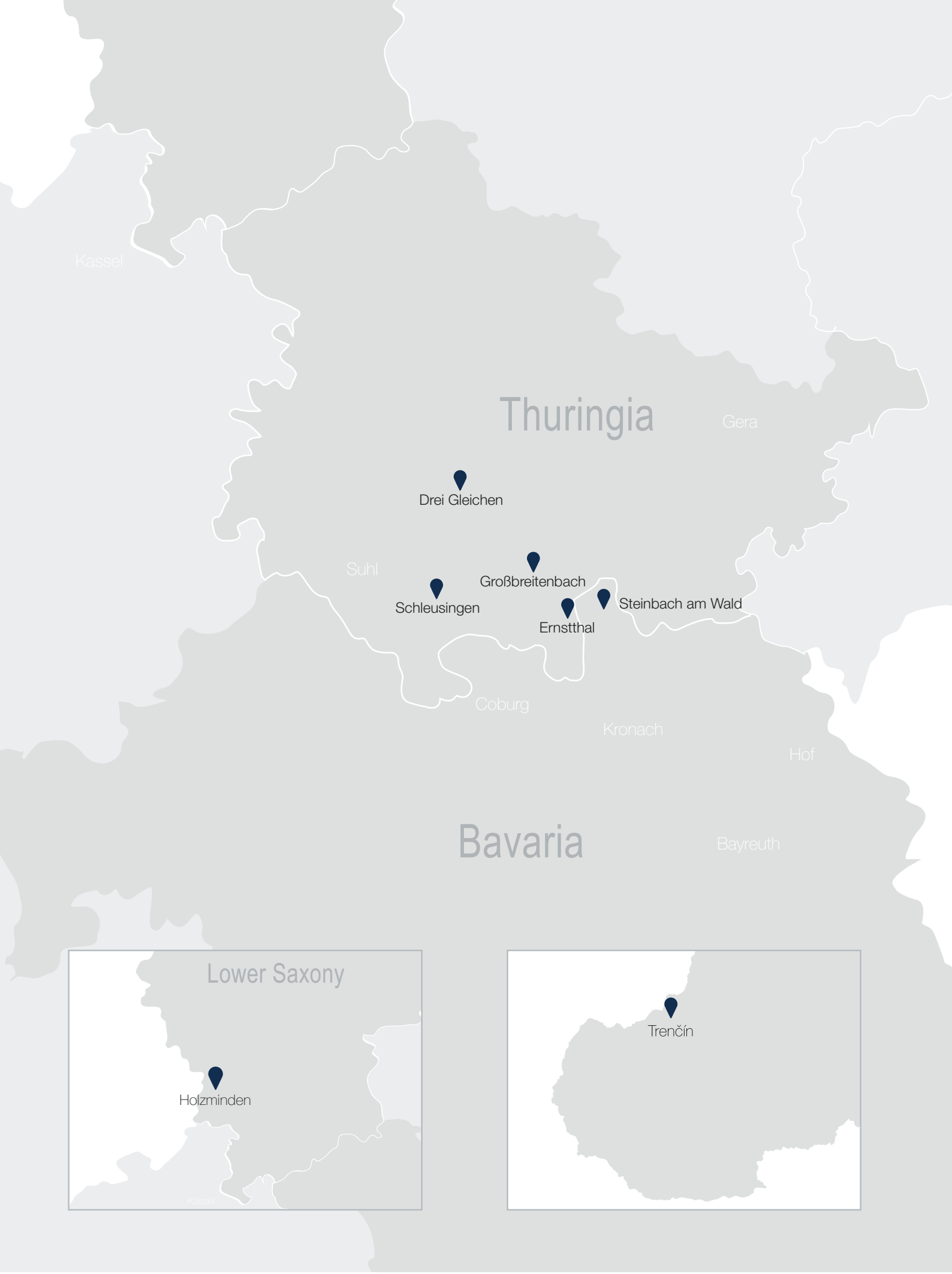
2,200 t
recycled used glass per day

2 million
recycled PET bottles for beverages per day

Wiegand-Glas

PET-Verpackungen GmbH
Deutschland

Wiegand-Logistik


Kassel
Thuringia
Gera
Drei Gleichen
Suhl
Großbreitenbach
Schleusingen
Steinbach am Wald
Ernstthal
Coburg
Kronach
Hof
Bavaria
Bayreuth
Lower Saxony
Holzminden
Kassel
Trenčín

Value creation
- economic responsibility

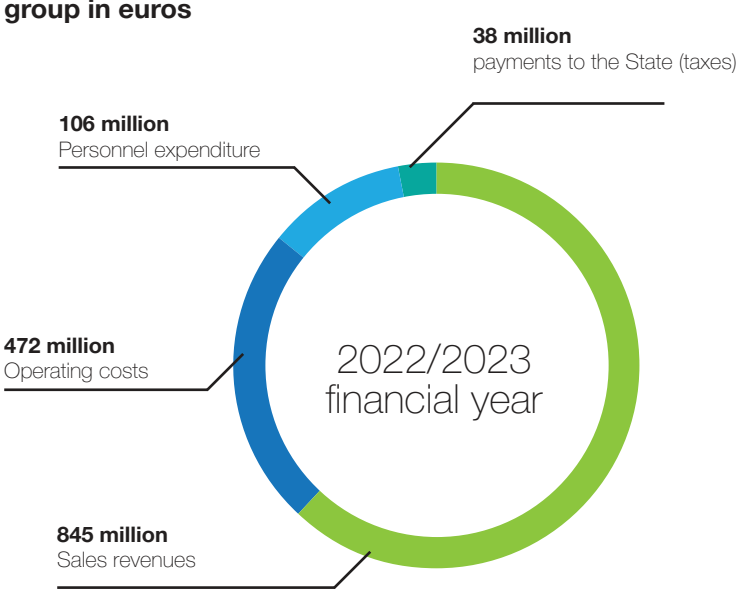
Pursuing an entrepreneurial approach means, for us, investing judiciously and responsibly in our future.

As a family business, the Wiegand-Glas group has committed to innovative glass and PET packaging concepts. At a total of eight sites we always produce our products for the food and beverage industries with the aim of providing a secure, sustainable and appealing packaging solution for consumers. We are in particular distinguished by our high level of process integration across the entire value creation chain – from preparing raw materials to refining our products and shipping, as well as transporting the finished goods.

Today, we are focusing on our Glass Division. As one of the most successful container glass manufacturers in Europe, with a history that goes back some 450 years, we can rely on a wealth of experience in development and production. Regionally, we are, with the three Divisions of Glass, PET and Logistics, deeply rooted, as an employer, in Bavaria and Thuringia.

The parent company of the group is Wiegand-Glas Holding GmbH. Together with its subsidiaries, it forms the Wiegand-Glas Corporate Group. The two managing shareholders and cousins Oliver Wiegand and Nikolaus Wiegand have been running the company since 1996, succeeding their fathers.

Value Creation Wiegand-Glas group in euros



Sustainability at Wiegand-Glas

"If I hear Wiegand-Glas and sustainability, I think of environmentally friendly transportation of our products to the customer. By using long lorries with a larger number of storage spaces, we can save every 13th lorry, and thus save on CO_2 emissions. In addition, it is our task to expedite the transformation from road to railway transport, true to the motto: As much rail transport as possible, as much road transport as necessary. In that respect, we adhere to the following guideline: Broad main runs by rail, short onward carriage by road. The re-opening of our rail connection in Steinbach am Wald in 2022 was a major step in the right direction."

Markus Grebner,
Head of Despatch, Logistics

"If I hear Wiegand-Glas and sustainability, high recycling quotes and maximum use of cullet spring to mind. Furthermore, investments are constantly being made in the field of used glass recycling, so that we generate more cullet and have to dump less used glass."

Thomas Renner,
Shift Manager - Used Glass Recycling

"If I hear Wiegand-Glas and sustainability, I inevitably think of the efficient use of resources. In this context, the ongoing efforts to reduce the weight of containers may be mentioned as a prime example. The less glass that is used to manufacture a glass container, the lower is the amount of energy required, and thus the impact upon the environment. We, at Wiegand-Glas, are therefore constantly striving to develop and manufacture products that are as lightweight as possible, without having to cut any corners in regard to the performance characteristics."

Moritz Müller-Litz,
Head of Product Development/Design

"If I hear Wiegand-Glas and sustainability, I inevitably think about the high recycling quota of bottles and glass containers, and am pleased that we can make a significant contribution towards sustainability with our products. It is precisely young people who are gaining an increasing interest in the topic of sustainability, and, for that reason, I am also very happy to include these facts in events aimed at winning over trainees, and/or I explain these connections at recruiting fairs and school events."

Cornelia Ehrsam, Human Resources Manager

"If I hear Wiegand-Glas and sustainability, I cannot help thinking about our most modern and well-adjusted machinery. This increases product quality, and, due to the ongoing inspection mechanisms, any faults are recognised and stopped promptly."

Oliver Staude,
Departmental Head, Glass Processing

"If I hear Wiegand-Glas and sustainability, I think of an economically strong employer, rooted in the region, that has for generations been offering its employees security and opportunities for development. Besides that, the Wiegand-Glas group is a producer of packaging, which manages to offer its customers packaging solutions from the actually competing materials of glass and PET."

Hubert Rebhan,
Authorised Officer holding a general Power of Attorney, Head of Business Development at PET-Verpackungen GmbH Deutschland

"If I hear Wiegand-Glas and sustainability, the closed-loop economy comes to mind. It has many advantages that we recycle used glass ourselves, and are able to make new glass containers out of it. We can thereby have a direct influence upon energy savings."

Manuela Westerhoff,
Technical Administration

1.

Our Approach to Sustainability

For Wiegand-Glas, sustainability and success in business are inseparably connected with one another. The aim is to anchor sustainable value creation as an integral component of business operations. For this reason, our focus is placed on sustainably changing over to innovative solutions, which contribute towards a positive trend for both the environment and society, and also enable long-term growth.

Sustainability strategy
- Taking on responsibility together

Organising sustainability

The responsibility for taking steps in the direction of a sustainable transformation is ultimately borne by the management of the group. In order to avoid conflicts of interests in the emergence of strategic decisions, the risk management is outsourced to the individual specialist departments. The senior executives in the Technical and Commercial Divisions are responsible for strategically and operationally implementing the measures laid down. In that respect, it is the aim of the internal process managers to strategically anchor sustainability in the entire group, and make it measurable. Overarching sustainability topics are generally the responsibility of the Corporate Development, Energy and Funding, as well as Integrated Management Systems specialist divisions. Depending upon the specialist division concerned, reports are made available to the management, in verbal or written form, with varying frequency.

Sustainability is a fixed component of the Wiegand-Glas group's strategy.

Strategic orientation

Thinking and acting in a sustainable manner have, already for many years, been the cornerstones of our strategy. For us, that means, contemplating our business model, as well as our impact as a company, in the long term, and developing the latter further. By developing and manufacturing glass and PET products for packaging food and drinks, we are making an important contribution towards secure food consumption. Besides topics that focus on people, such as health and safety at work, diversity and regionality, the focal points especially lie, in the area of the environment, in the spheres of activity of emissions, energy and recycling. For this reason, in 2022, with the science-based targets we set guidelines for dealing responsibly with carbon emissions, which has far-reaching repercussions for the entire value creation process.

Key topics
- Basis for the sustainability strategy

Taking responsibility for our environment, people and society, as well as our products

In the financial year 2020/2021 a comprehensive materiality assessment was conducted, by potentially relevant topics, from the perspective of our key stakeholders, being prioritised, along with an assessment of the repercussions on the environment and society. You can read about the exact method of proceeding in the Sustainability Report. In the financial year 2022/2023 the topics ascertained were reviewed for their topicality. In the process, the internal process managers from the relevant specialist departments assessed and supplemented the selection of topics.

In regard to the main topics, the following changes have thereby emerged:

- The addition of "Integrating Employees of Various Different Nationalities"
- The addition of a "Product and Market Portfolio"
- Renaming "Safety and Quality" "Product and Food Safety"
- Renaming "Closed-loop Economy" "Circular economy" and merging it with "Conserving Resources"
- Merging "CO_2 Footprint of Production" and"Pollutant Emissions" to become "Emissions"

Sustainability programme
– Our agenda until 2030

The objectives laid down form the basis for our sustainable development strategy.

The Sustainable Development Goals (SDGs) of the United Nations are of fundamental significance for our strategic orientation, and show that our agenda supports a more sustainable future in various fields. One or two objectives have been adjusted in comparison to the 2021 Sustainability Report. These are marked with an asterisk (*). In regard to goals that have already been successfully achieved, we have once again initiated the goal-setting process.

*** Reducing the specific energy CO_2emissions of the Corporate Group by 25% in comparison to 2021 in the case of glass production**
0.93 t CO_2/tpack (2021); 0.90 t CO_2/tpack (2022)

8%

Reducing the specific water consumption of the Corporate Group to 0.153 m³/tmelt
0.118 m³/tmelt (2023)

100% +

Reducing the share of fossil fuels in the energy consumption from glass production by 20% in comparison to 2020.
83% (2020); 82.4% (2022)

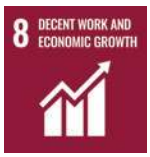
0%

Extending the share of electricity from renewables to 50%
0.2% 2022

0%

Setting up and putting into operation at least one large area photovoltaic power station
Taking part in the October call for tenders with an 8-MWp roof-mounted system at the Großbreitenbach site

10%



Increasing the share of investments for environmental protection to 20% of the total investments
7.3% (FY 2022/2023)

35%

Increasing the equity-to-asset ratio to > 50% of the overall capital in the consolidated financial statements
71.6% (FY 2022/2023)

100% +

*** A ten-fold increase in the products loaded (tonnage) by rail in comparison to the FY 2022/2023**
18,919 tonnes (FY 2022/2023)

0%

Converting 80% of respective industrial trucks and automobiles to electric vehicles
Industrial trucks: 99% (FY 2022/2023); automobiles: 12% (FY 2022/2023)

50%

Reducing reportable accidents at work in the glass factories to the level of the industry average (LTI Rate: 2.0; TRI Rate: 3.2 and TRIS Rate: 50.5)
LTI Rate: 4.44 (FY 2022/2023), TRI Rate: 5.16 (FY 2022/2023), TRIS Rate: 114.3 (FY 2022/2023)

30%

*** Determining key performance indicators for measuring employee satisfaction**
Defining relevant KPIs when planning

10%

Fulfilling the stipulated PCR ratios in the glass factories (2025: 70 %; 2030: 75 %)
78.8% (FY 2022/2023)

100% +

Exceeding the stipulated quotas of recycled material in the field of PET (2025: 25 %; 2030: 30 %)
46.6% (FY 2022/2023)

100% +

Implementing 20 new Eco2Bottle projects annually
8 new projects (FY 2021/2022), 3 new projects (FY 2022/2023)

30%

Increasing the share of reusable packaging by five percentage points in comparison to the financial year 2019/2020
16.5% (FY 2019/2020) → 17.5% (FY 2022/2023)

20%

Establishing a supplier assessment system in accordance with the Supply Chain Act
Forming a working group to implement the statutory obligation

10%

EcoVadis gold-level certification
Silver-level certification (2022)

50%

Extending the funding of regional projects, associations and organisations
Commencement of the glass industry model region

25%

Stakeholders
- Exchange and co-operation

In connection with the ongoing development of our sustainable development strategy, dialogue with our stakeholders plays an essential role.

We use various different formats to get in touch with our business partners and customers, the capital market, employees, political representatives, clubs and associations and regional protagonists.

The exchange with our customers takes place primarily through personal contact. However, our website also shows current trends, as well as detailed product and service information. So that we are put in the picture about our customers' expectations, a customer survey will once again be conducted this year. Especially in the year 2022, the dialogue with our customers was of great significance, as the price explosion on the energy markets made it necessary to increase the prices of our products and services. In this respect, we managed to create an understanding of the extraordinary situation, and consolidate customer loyalty in spite of difficult times. Our employees from the most diverse fields of the company were also, during this time, heavily engaged in tackling the current crisis and implementing the subsequent measures in the field of sustainability.

Our discussions and exchanges with representatives from the realm of politics were likewise intensified, and did not only take place in the context of the usual industry association activities. Instead, Wiegand-Glas sought to jointly exchange views with industry representatives, as well as regional and nationwide representatives from the field of politics, on short-term measures and an adaptation of the legislative position, in order to continue to develop the glass industry in a sustainable manner. Transparency for our stakeholders is a top priority in designing the sustainable development strategy. Various distinctions awarded express the efficacy-orientated and high quality work of Wiegand-Glas in the field of sustainability.

The following memberships are essential for us, in order to both define the strategic orientation of the industries in collaboration with other parties involved and work on implementing specific measures within the scope of cross-functional projects.

- Aktionsforum Glasverpackung
- Bundesverband Glasindustrie e.V.
- Bundesarbeitgeberverband Glas und Solar e.V.
- Bundesverband der Deutschen Industrie e.V.
- Circular Plastics Alliance
- Energieeffizienz-Netzwerk Rennsteigenergie
- Fédération Européenne du Verre d'Emballage AISBL (FEVE)
- Forum PET
- Friends of Glass
- IK Industrievereinigung Kunststoffverpackungen e.V.
- Industrie in Touch
- IPGR International Partners in Glass Research
- IZK Innovations-Zentrum Region Kronach e. V.
- Lebensqualität für Generationen
- vbw Vereinigung der Bayerischen Wirtschaft e. V.
- Wasserstoffbündnis Bayern
- WIR Wirtschaft – Innovation – Region zwischen Rennsteig und Main e.V.

Through our involvement, we undertake to provide greater transparency in regard to the cornerstones of ethics.

With a rating of "B", PET-Verpackungen GmbH Deutschland achieved the second highest level of assessment in 2022.

In the year 2022 Wiegand-Glas was able to improve its ranking from Bronze to Silver in the EcoVadis Ranking.

Sustainable procurement
– A focus on regionality

Regionality and having a long-term relationship are crucial values in designing our supplier structure.

As a manufacturer of glass packaging, we principally deploy the primary raw materials of sand, soda, limestone and dolomite, as well as small quantities of other additives, for the production at our container glass plants. For the manufacture of our PET products, besides polyethylene terephthalate (PET) only the tiniest quantities of various additives are still needed. Our purchasing activities are focused on reliable supply, as well as competitive pricing. In spite of us having various different business divisions, our procurement department is organised centrally from our main site in Steinbach am Wald. The integration of sustainability into our supplier management gives us the opportunity to design our supply chains to be durable and to further intensify the sometimes long-term relationships with our suppliers.

93%
Proportion of suppliers from Germany

We have formulated our expectations and requirements in our Code of Conduct for Suppliers. The Code is supplemented and adapted on a regular basis. The standards laid down there cover the topics of ethics, work standards and social standards, human rights, health and safety, as well as data privacy and protection of the environment. This clear communication of our expectations, especially in regard to sustainability topics, creates the necessary transparency for our suppliers.

84%
Proportion of purchase order items from Germany

In comparison to the previous gathering of data in 2021, we have been able to slightly increase the proportion of active suppliers from Germany to 93%. This backs up our route of sustainability that we have embarked upon, as, by having a regional focus and transport routes that are as short as possible, the environment is burdened by procurement as little as possible.

Jointly setting up the supply chains in a sustainable manner

In addition to regularly reviewing the suppliers by means of supplier assessments, at the beginning of 2023 a working group was founded, to define the framework for the future orientation of supplier management. The requirements of the Supply Chain Due Diligence Requirement Act make it necessary, as from the year 2024, for substantial sustainability risks in the value creation chain to be identified, assessed and pursued in a structured manner for all suppliers. Internally, a provisional assessment of the risk potential has already been undertaken. This initial evaluation contributes towards defining the suppliers that could be the right ones, in the sense of risk-minimising measures. The decision-making process for supporting this process by way of a uniform software solution, for continual monitoring of the risks, as well as to define the further method of proceeding, is currently in progress.

Link to the Code of Conduct

2.

Responsibility for our environment

Environmental protection and the challenges posed by climate change prompt us every day to continually improve our energy, consumption and emission management. For this reason, it is our overarching aim to deploy raw materials and resources as efficiently as possible. Our thinking and acting is embedded in the general conditions of a circular economy.

Circular Economy
– Responsibility as a circuit

Environmental management

With the certification of our production sites in Steinbach am Wald, Großbreitenbach, Schleusingen and Ernstthal pursuant to ISO 14001, we seek to implement eco-friendly conduct in our processes and continually improve our environmental management system. The validation is carried out by regular internal and external audits. The results are recorded in an action control plan, and pursued further there.

The environmental teams at the individual sites ensure that processes for fulfilling the requirements posed of the environmental management system and for carrying out the steps for dealing with opportunities and risks, as well as achieving the environmental objectives, are developed, implemented, managed and maintained. They monitor scheduled amendments, assess the consequences of unintentional changes, and, if necessary, take steps to reduce any negative repercussions. At the very heart of the environmental teams is always the Technical Operations Manager, the central Environmental Management Officer of the company group and the Corporate Officers for Pollution Control, Water Protection and Waste Management. At specific plants, the teams are supplemented by additional specialists with environmentally-relevant spheres of responsibility/activities. Quarterly Environmental Reviews at the plants, as well as bi-annual central meetings with the Officers, enable a co-ordinated and successful co-operation. In an annual Management Review, the environmental management system is reviewed by the management in regard to suitability, appropriateness and efficacy.

Water consumption

Water is considered a precious resource, and handling it responsibly takes on a special meaning. With the aid of consistent water management, as well as the optimisation of existing methods of proceeding, we have, over the past few years, been able to reduce our requirement for well water, as well as tap water, from the remote water supply. Circular systems, including the retreatment at our own corporate sewage works, ensure that the waste water can once again be re-routed to the production process.

53%

Reduction of the specific water consumption[1]

With a specific water consumption of 0.118 m^3 per molten tonne of glass, we fall far short of the industry average in the field of container glass manufacture. We have already at this point achieved our goal set for 2030, and are working towards being able to maintain the specific consumption at a similar level.

The reduction of the absolute and specific water consumption throughout the entire Wiegand-Glas group is principally attributable to the creation of a cooling water circuit in the course of putting the new plant in Schleusingen into operation in 2021.

43%

Reduction of the absolute water extraction[2]

[1] in the Glass Division in comparison to 2021, a detailed itemisation of the data can be found on p. 55
[2] Glass and PET in comparison to 2021, a detailed itemisation of the data can be found on p. 55

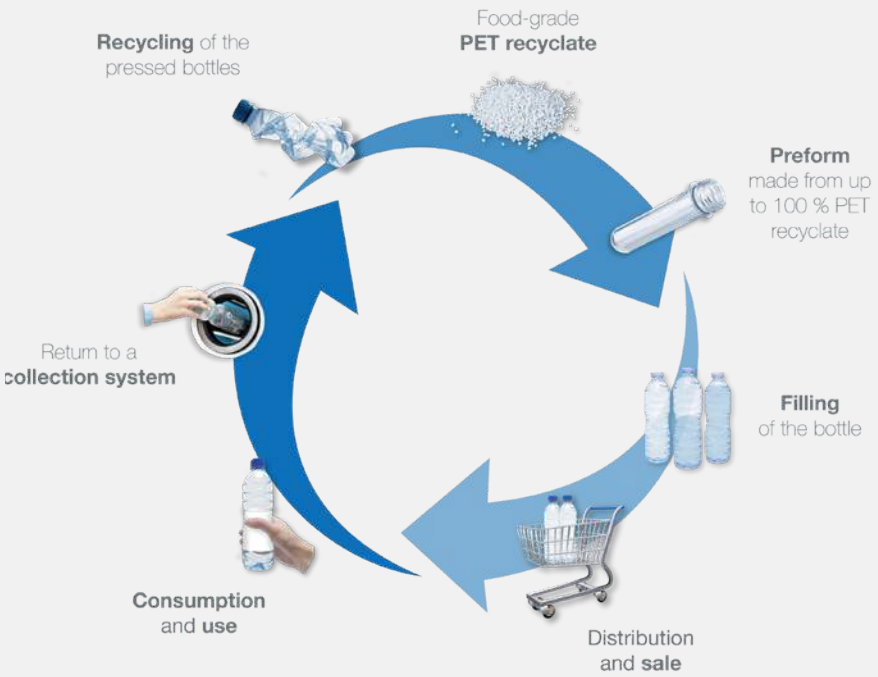
Circular economy

The circular economy is developing into an important social and entrepreneurial necessity. Both markets and consumers recognise how important this method of proceeding is, in order to save natural resources, energy and greenhouse gas emissions. This principle already forms a component of various items of legislation at European and national level. The EU taxonomy that came into force at the beginning of 2023, as a key instrument for measuring sustainable economic activities, defines six goals:

- Climate protection
- Adjusting to climate change
- Sustainable use of water resources
- Transformation into a circular economy
- Avoiding pollution
- Protecting ecosystems and biodiversity

Wiegand-Glas has, within the scope of sustainable transformation of the production sites, made these requirements an important focus of its strategic orientation.

Circular economy in the container glass production



Circular economy in PET container production

Conservation of resources
– Handling raw materials

Our production and treatment processes ensure responsible handling of our raw materials and natural resources.

Glass

When manufacturing glass containers, we pay attention to adopting the most eco-friendly processes possible. In that respect, every bottle produced is, on average, made, to an extent of 78.8 per cent, from used glass (FY 2022/2023). Thus, in comparison to the financial year 2020/2021, we have once again been able to improve by three per cent. When manufacturing green glass, we are even in a position to deploy cullet to an extent of up to 98%. We are thus setting a benchmark as concerns the use of recycled glass as the most important raw material for new glass packaging. The high usage of recycled glass is only possible due to the high quality in-house used glass treatment plants. Due to the high usage of used glass, we manage to save over 700,000 tonnes of primary raw materials per year. Used glass also melts at a lower temperature than the mixture from primary raw materials, which further reduces our energy consumption and CO_2 footprint.

PET

Polyethylene terephthalate (PET) is a thermoplastic polymer from the family of polyesters, which is produced by means of polycondensation and used to manufacture our preforms and PET containers. Depending upon the field of application, we use up to 100 per cent regranulate for the manufacture of our products, which has again been returned to the production cycle through our treatment plant. Within five years, we have been able to virtually triple the proportion of recycled material, from 16% to 46.6%. This means that we are already at this point in compliance with the statutory minimum usage quantities of recycled material required by the Single Use Plastics Directive in the case of PET beverage bottles, of 25 per cent as from 2025 and 30 per cent as from 2030, and are clearly exceeding this requirement.

Recycling of used glass and PET

With the materials of glass and PET, which have an outstanding capacity to be recycled, as well as our high-technology treatment, we are on the right track towards contributing to the European circular economy. All our used glass treatment plants are certified as waste management businesses under the German Waste Management Company Ordinance (EfbV). These plants, which already rank among the most advanced of their kind, are continually enhanced by us to obtain an optimum sorting outcome, and to reduce the quantity of waste materials that cannot be utilised. Thus, at our plant in Steinbach am Wald in the financial year 2022/2023, for example, a new sorting machine was installed, which is in a position to noticeably improve the fine-grain treatment. In the case of the previous, dual-stage, recognition, a too great proportion of ceramic, stone and porcelain remained in the cullet following the sorting. As a result, the material could not be used, and was sold on for further use. The ad-

78.8%
Average proportion of used glass in the FY 2022/2023

46.6%
Average proportion of recycled PET material in the FY 2022/2023

3+1
Recycling plants for used glass and PET

ditional sorting stage now ensures that the proportion of impurities is reduced, and thus generates an additional 20,000 tonnes of usable fragments each year.
In addition, this sorting stage makes it possible to sort out and treat aluminium, which can be sold on. In addition, an in-built crushing screening drum ensures that the first sorting now runs automatically, and the employees, who previously worked shifts on the sorting point, can now be deployed for other procedural steps. Overall, in the financial year 2022/2023, an output of a good 530,000 tonnes of finished cullet was produced with the treatment plants in Steinbach am Wald.

At the treatment plant in Drei Gleichen, the throughput could be increased by the partial stream drying. Around 5 tonnes more cullet per hour can thereby be treated. A further positive side-effect is the saving of energy. Overall, a noticeable increase in the quantity treated could be discerned in Drei Gleichen over the past few years, currently being over 100,000 tonnes per annum.

At our own PET recycling plant, the re-granulation and refinement into food-grade re-granulate is carried out. Due to the increased use of recycled material in our products, the requirement for high quality recycled material is significantly increasing. In that respect, our own plant enables us to fulfil very high quality demands. The quantity treated could once again be increased by 7 per cent in the financial year 2022/2023, and now stands at a good 15,700 tonnes of re-granulate. Investments in heating the plant furthermore ensure a reduced energy consumption during operation.

Every container produced in the financial year 2022/2023 consists, on average, of:

Energy input
– Producing efficiently

As an energy-intensive industry, we are heavily affected by the energy crisis and its consequences.

Energy management

All our glass and PET production sites, as well as Glas-Cycle GmbH and Wiegand-Glas Holding GmbH, are certified in accordance with ISO 50001. The aim of the energy management system is to continually improve the energy-related services. The validation is carried out by regular internal and external audits. The results are recorded in an action control plan, and pursued further there.

In order to implement and comply with the standard requirements, an Energy Management Officer, who is assisted by an energy team, is appointed at every site. This team comprises the Technical Operations Management and the Management of the Electrical Workshop, Operations Maintenance, Glass Production, Glass Processing and Energy/Hauling. Internal and external experts can, as needed, be involved as consultants. Quarterly Energy Team Reviews at the sites, as well as bi-annual central meetings with the Officers, enable a co-ordinated and successful co-operation. In an annual Management Review, the energy management system is regularly reviewed for possible optimisation potential.

In order to be able to document consumption better, the energy management software already in use at the other glass plants was successfully implemented at Ernstthal.

In the wake of the energy crisis in the year 2022, an energy crisis team was additionally established, which, during this time, was involved, on a weekly basis, with the supply situation and the supply market.

100%

Use of renewable energies in our PET business division as from 2025

Renewable energies

The aspect of security of supply and the rapidly increasing energy costs from the year 2021 intensified our efforts to invest in the development of renewable energy sources. The plan stipulates gradually changing over to renewable forms of energy by using various regenerative sources of energy generation. The generation of energy is primarily focused on generating energy through wind power and photovoltaics at the various plants. In addition to the technical installations, this also means expediting the conversion of the grid infrastructure, as well as suitable storage facilities. In the field of photovoltaics, the existing output is supposed to be noticeably extended by further rooftop installations in Schleusingen and Großbreitenbach. An 8-MWp photovoltaic roof-mounted system is currently to be found at the Großbreitenbach site at the detailed planning stage.

Glass

We seek to reduce the energy consumption through the most diverse steps, in order, in this way, to be able to guarantee the energy-efficient production of our glass packaging. In this respect, the energy crisis in the calendar year 2022 posed a major challenge. Due to an impending gas shortage situation in Germany, the Wiegand-Glas group proactively reduced its gas consumption. Within the scope of the so-called "fuel switch", natural gas was sometimes replaced by light fuel oil. The absolute priority at this time was to guarantee the security of the energy supply, in order to be able to continue to produce, and avoid the "freezing" of the melting furnaces.

12.8%

Reduction in the specific energy consumption in 2022 in comparison to 2016

Also in 2023, due to ongoing contracts, individual melting furnaces continue to be fuelled by light fuel oil. It can clearly be seen from the energy consumption of previous years that the gas consumption has been reduced in comparison to the previous years, while the use of light fuel oil within the scope of the fuel switch has appeared in the data gathered for the first time.

Besides the use of natural gas and electricity, within the scope of the Eco2Bottle projects biomethane from German domestic waste and green energy is also being used, and thus regenerative energy sources are being relied on.

Major savings in energy have been achieved over the past few years, due to the following measures:

- Replacing a compressor at the Ernstthal plant (savings of approx. 200 MWh per annum)
- Replacing the UPS supply in Großbreitenbach (savings of approx. 60 MWh)
- Optimising the heating in Ernstthal (savings of approx. 500 MWh)

Also in the next few years, further energy efficiency measures are due to be implemented, during furnace rebuilds in Steinbach am Wald and Ernstthal, as well as the conversion of the drying process in the used glass treatment plant.

PET

Through the increased demand in the PET business division following the outbreak of the coronavirus in the calendar year 2020, an increase in energy consumption can be perceived.

Major savings in energy have been achieved over the past few years, due to the following measures:

- Waste heat recovery from generating compressed air in the large container production (savings of approx. 210 MWh)
- Optimising the heating of the PET recycling plant (savings of approx. 180 MWh)
- Conversion of a water plant (Savings: approx. 250 MWh)

Also in the coming years, further energy efficiency potential will be realised, by replacing machinery and converting further water plants.

Emissions
– Science Based Targets

We have set ourselves specific CO_2 reduction goals with Science Based Targets.

Wiegand-Glas set its goal, over the past few years, to continually improve the process of gathering data, and set up and pursue routes for the reduction of emissions. Besides product-specific emission calculations within the scope of our Eco2Bottle concept, an annual analysis of the Scope 1,2 and 3 emissions is conducted for all corporate sites, based on the Greenhouse Gas Protocol.

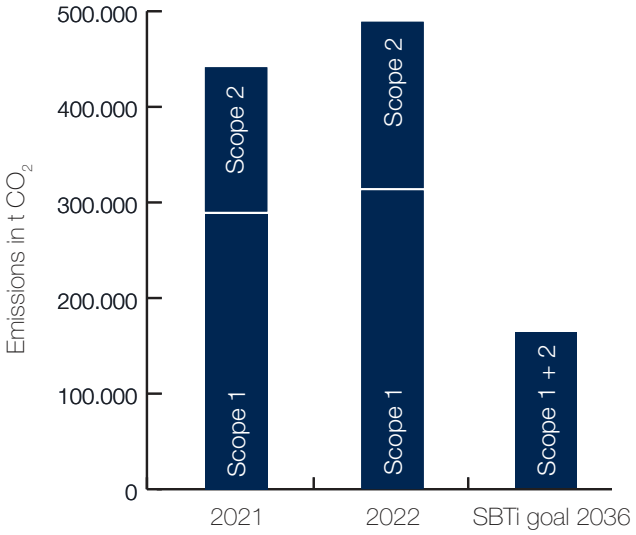
Glass

The Scope 1 and 2 emissions are responsible for just under half of the entire CO_2 emissions, and therefore have an enormous impact upon the overall balance. For this reason, the sustainable transformation of the melting technologies is of paramount importance for our decarbonisation pathway. We aim to continually reduce our gas requirement over the next few years, while the electricity consumption will noticeably increase due to the conversion to hybrid or fully electric melting technologies. This, however, only makes sense if sufficient regenerative power can be used to supply the energy. In the Scope 3 area, in turn, the use of raw materials is responsible for a major part of the emissions (virtually exclusively through soda). It is therefore even more important to perpetuate our high proportion of used glass, as well as keep the transport routes for our raw materials to the absolute minimum. Taking a glance at the overall balance of the past year, it can be seen that, due to the use of light fuel oil in the wake of the fuel switch, the absolute CO_2 emissions have increased, as this source of energy possesses a greater emission factor than natural gas. A further reason that has led to an increase in the Scope 2 emissions lay in a poorer emission factor of our specific mix of electricity.

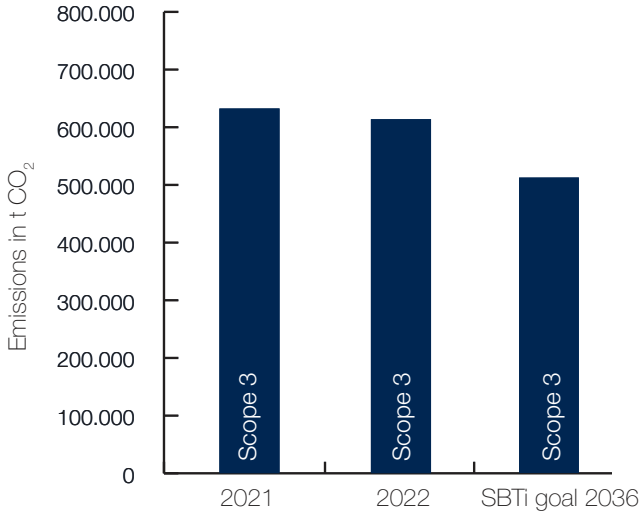
PET

The PET business division is clearly distinguishable from glass. While Scope 1 emissions can virtually be disregarded, Scope 2 emissions are responsible for around 11 per cent of the emissions. The largest sources of CO_2 emissions are to be found here in the Scope 3 area with the purchase of Virgin PET, as well as the product disposal. Our measures are therefore focused on both reinforced use of regenerative energies and a further increase in the proportion of recycled PET material.

Corporate group: Development of Scope 1 and 2 emissions in regard to the Science Based Targets Initiative goal.



Corporate group: Development of Scope 3 emissions in regard to the Science Based Targets Initiative goal.



63%

Reduction in the absolute Scope 1 and 2 emissions[3]

19%

Reduction in the absolute Scope 3 emissions[3]

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Our path to a sustainable future

The validation of these goals by the Science Based Targets Initiative obliges us to reduce our quantity of emissions in such a way that the requirements of the Paris Climate Agreement are achieved, and thus the global warming of the earth can be restricted to 1.5 °C. With this major step, we are adopting a leading position in our industries in combating climate change.

[3] Goal horizon until 2036 (Base year 2021)

Ecologically sound transport
– From road to rail

Over the past few years, we have intensively been working on upgrading our rail connections.

The top priority of Wiegand-Logistik is ongoing development in regard to the modes of transport used and internal processes. Safety and reliability are paramount, in that respect. So that every load reaches its destination safely, we rely on special equipment for the glass industry. In our own corporate motor vehicle workshop, any problems that have arisen can be quickly and directly solved on site. In order to maintain a constantly high level of quality, our processes in the field of quality management are certified in accordance with ISO 9001:2015. In regard to the handling of transport, we rely on digital processes, from recording the order to vehicle telematics and the archival of the freight-related documentation. In that respect, the conservation of resources and our environment play an exceedingly important role in the entire transportation process.

Rail transport

The upgrading and reactivation of the rail connection in Steinbach am Wald was successfully concluded in 2022. The factory is supplied daily with rolling stock by the DB Cargo transshipment station in Saalfeld, and meanwhile ships our products to various receipt destinations. In that regard, a new loading technology is deployed, with a self-developed trailer equipped with a loading ramp. This ensures gentler handling of our sensitive packages, and a faster loading process. Three different parking positions, inter alia also at our batch house, offer us the opportunity, besides the outgoing goods, to also arrange for the delivery receipt of raw materials by rail. A first successful test of inbound transport of soda took place at the beginning of June 2023. The advantage is that no upstream and downstream lorry traffic arises there, as the raw material is delivered by our supplier directly by rail to the unloading station at our batch house. That means that one instance of railway wagon delivery replaces two instances of road transport. Also with other raw materials, such as sand and dolomite, there are suppliers interested in delivering in future by rail.

26,300

Loaded pallets by rail in the FY 2022/2023

Road transport

Besides these activities, we also try to improve what we offer by road transport, and establish ourselves more sustainably. Our current vehicle pool consists of 43 vehicles that comply with the Euro 6 Standard. The increased focus on articulated lorries, as well as tandem trailers, ensures that we can save every thirteenth or seventh lorry journey. Thus, we can reduce the traffic congestion on the road, and additionally avoid the emissions that are incurred through this form of transport.

There is a further massive advantage in using moving-floor trailers. The use of this type of lorry offers a flexible and dual use. Thus, this type of lorry can, for instance, transport finished products to our customers on the outward journey, while, on the return route it can be driven back again loaded with used glass. Instead of deploying two lorries, for two different sets of goods, through its hydraulically powered floor the moving floor makes dual transport possible, whereby, with optimum planning, one lorry is saved. Besides a reduction in traffic and emissions, in such a case in particular empty kilometres are avoided, that a conventional lorry would have to cover without a load on either the outward or the return journey.

265 020-8

3.

Responsibility for our products

With us, the production of progressive and exciting products for the food and beverage industries goes hand in hand with our responsibility to act sustainably and protect the environment. In order to continue to guarantee economic and expedient sustainable production of packaging in Germany in the future, the ongoing optimisation of our products and production processes forms a further pillar of our transformation. Thus, we are not only ensuring the readiness for the future of our products and that of our customers, but also protecting jobs at our sites.

Sales markets
- Product and market portfolio

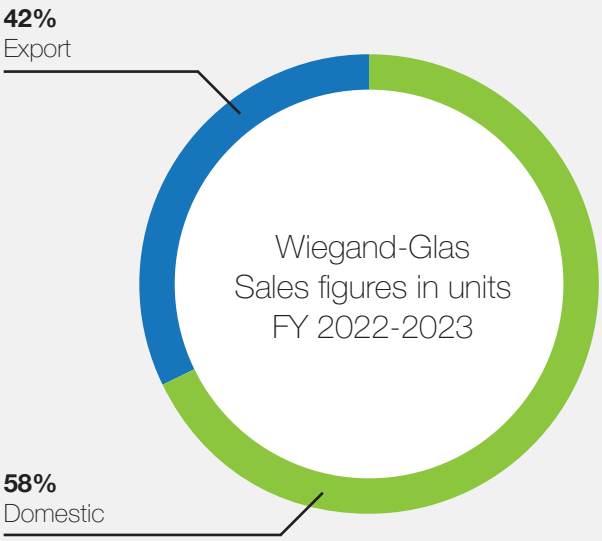
Our products are principally manufactured for drinks and food.

Glass

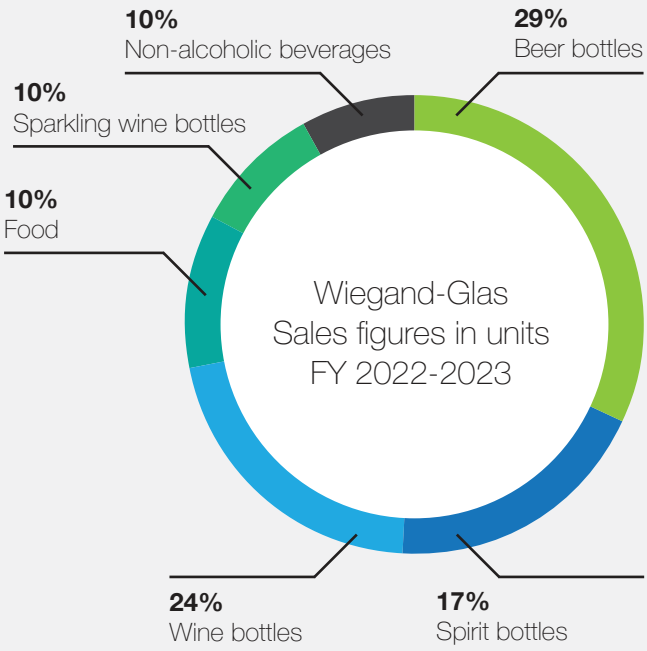
Our products made of glass are predominantly manufactured for food and beverages. Drinks and beverages are obtainable in our containers across the globe. Our principal sales market for glass containers is, however, in Europe. In that respect, we generate 62% of our sales in Germany. The further sales markets on the European continent include France, Belgium and Italy. However, also on a global scale, products of Wiegand-Glas are in demand – for example, for Cuban rum.

In that respect, our product portfolio in the glass division extends over virtually the entire market spectrum, and ranges from liquor bottles to classic beer bottles and food jars. As a manufacturer of wine bottles, we are a leader on the German market. This broad expertise in the manufacture of container glass makes us one of the most advanced glass manufacturers worldwide. In close co-operation with our customers and partners, already numerous product solutions, leaner and more efficient processes and sustainable alternatives have been created. We, at Wiegand-Glas, always give 100% for the optimum packaging solution for our customers' products. In addition, we are continually on the lookout for new and optimised possible uses for the packaging material glass.

Domestic/export sales - glass



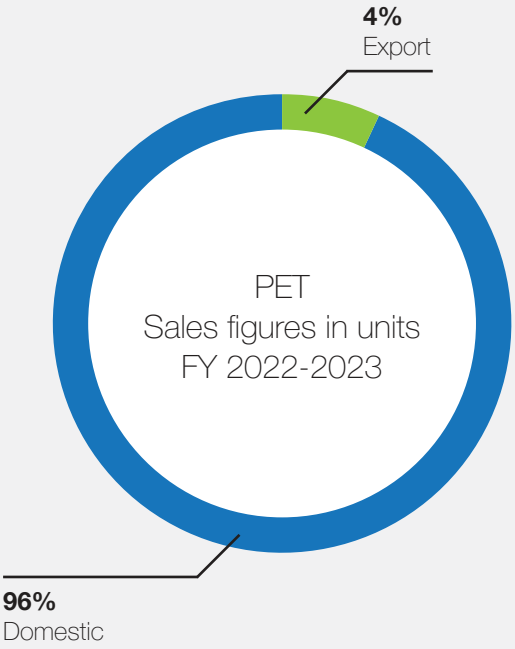
Sales figures by product groups - glass



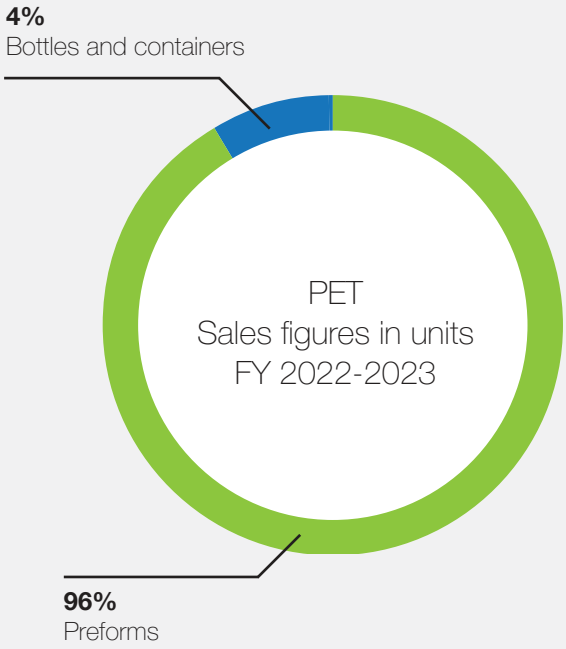
PET

In the PET division, we likewise manage a broad customer and product portfolio. In that regard, a variety of small and large mineral spring companies, yet also groups of companies, rank among our customers. Our core product is the manufacture of various pre-forms for the drinks industry – this line of business makes up almost 90% of our sales in the PET Division. Other customers also appreciate us for the fact that we can offer them the two-stage process right up to the finished bottle – and it is important to us, too, as manufacturers, to be able to present the entire product range. Thus, our weight portfolio with pre-forms ranges from 13.5 g to 481 g for volumes of 60 ml to 30 l. Overall, we offer over 120 different pre-form designs. We produce bottles in a variety of designs, ranging from a capacity of 10 ml to 1,500 ml.
As regards PET, the ongoing ecological optimisation of our portfolios when developing products means a lot to us – therefore, our own recycling plant for PET constitutes a major gain in flexibility when using raw materials. Also with PET products, we are meanwhile in a position to calculate Product Carbon Footprints in regard to Scope 1, 2 and 3 emissions. Compared to other packaging materials, our products have a comparatively low Product Carbon Footprint.

Domestic/export sales - PET



Sales figures by product groups - PET



Product and food safety
– High quality for customers

We have high quality and safety standards for our entire range of products and services.

Product safety/quality

As a manufacturer and supplier of food packaging to customers from the industry of filling drinks and food into containers, we bear a great deal of responsibility for the safety of the end users. In order to guarantee this, all sites are certified in accord with the criteria of ISO 9001 Quality Management. In this connection, we regularly conduct a risk assessment for fixed assessment schemes along the manufacturing processes and in the mechanical, spatial and human environments. In this way, we identify any faults that may have repercussions on the health or safety of our employees and customers, the elimination of which we attend to promptly, by adopting adequate measures. The manufacturing process and the quality testing of our products made of PET and glass are assisted by the most up-to date software solutions, so that a seamless record of all relevant data and parameters can be accessed at any time.

The most advanced technology guarantees high glass quality.

At the present time, we are developing, together with a manufacturer of inspection machines, a successor to the current technology. The aim is a contactless inspection, for faster and better quality control.

The solution to be newly developed will be equipped with both user-friendly software and cameras, in order to be better able to monitor inclusion at the finish and in the shoulder area. This makes for a more rapid inspection, in order to be able to identify the position and form of faults more easily.

Food safety

With the certification of the glass plants in Ernstthal and Großbreitenbach, all the glass plants as well as the PET business division, now bear an FSSC certificate. The certification includes a management system for food safety pursuant to ISO 22000, inclusive of an HACCP concept. That is understood to mean a quality tool for risk assessment that was conceived for production of, and when handling, food. This tool is based on a collection of food safety and product quality standards of the United Nations. Further requirements include preventive programmes, as well as product protection, protection against fraud and deception, and product labelling. For the manufacture of all product and service categories, risk assessments were created, and assessments made, along the process chains.

In order to reduce harmful effects on the health of the end user to a minimum, preventive programmes were introduced, maintained, verified and validated. Thus, our processes for manufacturing food packaging fulfil all the relevant requirements.

It is paramount to constantly optimise the effectiveness and efficiency when ensuring the food safety of our packaging. All employees are involved in this ongoing process. Particular attention is paid to the hygiene areas. At our PET plant, this concerns the entire production area. At the glass plants, the cold-ends and the service centres are identified as hygiene areas. The hygiene ordinance applies in the hygiene area, to all persons who work there or happen to be there for any other reason. However, the previous and supporting processes also fall within the scope of application of the standard.

ECO2BOTTLE

THE GREENER PACKAGING

With our Eco2Bottle concept, we are able to reduce the CO_2 footprint of every packaging.

Our customers' demand for sustainable packaging solutions, as well as Product Carbon Footprints, is ever increasing. Our multi-functional toolbox of the Eco2Bottle concept enables us to find individual solutions for climate-friendly packaging.

Recycling, weight reduction, packaging optimisation and the use of energy from regenerative sources play an essential role. Therefore, our focus is placed on reduction and avoidance of emissions throughout the entire value creation chain.

After introducing the Eco2Bottle concept in the year 2020, we have constantly been developing measures, as well as strategic methods of proceeding, around the topic of sustainability. We are today capable of measuring all the relevant process parameters with precision, and calculating the CO_2 footprint of a product in full, in Scope 1, 2 and 3, in line with the principle of "cradle-to-customer plus waste" (in accordance with the requirements of the Greenhouse Gas Protocol). We started with a 0.75 l bottle of Bordeaux for a customer in Germany, and can today boast Eco2Bottle items from the most diverse groups of goods in our product portfolio.

2022 turned out to be a difficult year for Eco2Bottle. The high energy prices, as well as the resulting general price increases, had a negative impact upon the sales figures of the sustainable packaging solution.

That the concept, however, not only impresses our customers, but also various representatives from the realms of business and science, is demonstrated by the fact that the Eco2Bottle has been distinguished by receiving a number of awards over the past few years.

Prize for sustainability in the wine industry in 2023

1st place: German Sustainability Award Category: Production - 2022

1st place: CO&CO Selected Category: Design - 2021

ECO2 Bottle

The Greener Glass

www.eco2bottle.com

PET-Verpackungen GmbH
Deutschland

4.

People and Society

For us as a company, it is a major challenge to find sufficient and qualified employees for our production plants that are in operation on 365 days per year and 24 hours per day, in order to maintain our efficiency at our German sites. Simultaneously, we are faced with the challenge of obtaining specialists for the transformation processes that lie ahead of us, and qualifying the existing staff further. Our attractiveness as an employer for existing and new employees is therefore one of the most important strategic building blocks when looking ahead to the future. Wiegand-Glas thereby also takes on an important role in society, actively contributing towards sustainable regional development at the sites.

Compliance
– Ethical, social and sustainable

Compliance with the laws and ordinances relevant to us forms part of our guidelines, since it accords us certainty in our activities.

The legal obligations and the requirements of our stakeholders are implemented within our integrated management system. This in particular covers the areas of quality and product safety, the environment, energy, occupational health and safety, data privacy and information security, as well as the economic, ethical/social and ecological duty of care and compliance along the supply and value creation chains. The systematic integration unifies the process when implementing the legal obligations and other requirements in regard to presenting the evidential documentation, the internal audits, the management review and the presentation of the corporate group towards the various stakeholders.

Human rights

Due to our involvement on the internationally recognised Sedex platform (Supplier Ethical Data Exchange), we undertake to provide greater transparency in regard to the cornerstones of ethics: Employee rights, health and safety, environmental protection and business ethics. In these areas, we have our processes reviewed by way of SMETA audits. Thus, we not only recognise flaws, but respond in good time with counter-measures. The result is released, for interested customers, on the Sedex platform, upon request.

The following companies and plants are reviewed for compliance with human rights, within the context of regular audits (the last review took place in June 2021):

- PET-Verpackungen GmbH Deutschland
- Wiegand-Glashüttenwerke GmbH - Schleusingen
- Wiegand-Glashüttenwerke GmbH - Steinbach am Wald

Wiegand-Glas Code of Conduct

The Code of Conduct forms the basis for our compliance management. With these principles on ethical conduct, our group commits to the inherent principles of legal compliance, integrity and fairness, and emphasises the obligation on the part of all our staff to comply with applicable law. The main content of the Code of Conduct includes: Avoiding and combating corruption, information security and data privacy, equal treatment and anti-discrimination, respect for human rights and fair business conduct. The code forms part of the initial briefing of all new members of staff, as well as of the annual briefings on the integrated management system.

Corruption

We make a clear statement in the corporate policy and guidelines on combating corruption. In the past two financial years, already over 1,500 employees have been informed and trained concerning available action and procedures for combating corruption. In the period under review, no cases of corruption have occurred at the Wiegand-Glas group.

Whistleblower Procedure

Our executives are the initial contacts for any questions on topics relating to compliance. In case of any suspicion, our employees can contact the Personnel Department or the management to report violations.

Within the scope of complaint management, a new procedure for protecting whistleblowers is being introduced. The complaint procedure enables individuals to point out risks, as well as infringements in the field of human rights or environment-related obligations which have arisen due to the economic action of a company in their own business division or that of a direct or indirect supplier.

Occupational Health and Safety
– Responsibility with priority

The safety and health of our employees is of utmost importance to us as a manufacturing company.

A safe working environment is the prerequisite for being able to manufacture our glass and PET products with consistently high quality. We would like to achieve that occupational safety and health are seen as a community task. The aim is to increase the daily perception of the topic and avoid any potential accident. All our glass plants are currently certified in line with the ISO 45001 Management System for Occupational Health & Safety Standard. Included are not only the employees in our corporate group, but also third-party company staff and employees from upstream and outsourced processes, such as external pallet repair.

Occupational Health Management

Since introducing the occupational health management, work and health are even more closely related with one another in the group. In co-operation with AOK Plus and the AOK Bayern, various offers in the fields of stress and resource management, healthy nutrition, health-friendly employee management or arranging work in a health-promoting manner are conducted under the name “Wiefit”.

In addition, immunisations, as a preventive measure to fend off infectious diseases, such as flu, are offered by the company physician at regular intervals. In January 2021, Covid-19 immunisations were also carried out for all interested employees who had, as at this date, not yet attended an appointment at a vaccination centre or been vaccinated by their GP.

Preventive care at Wiegand-Glas

After a long break due to the coronavirus, in November and December 2022 at last health campaigns by the AOK Bayern took place again at all Wiegand sites.

With the InBody analysis, the muscle and fat percentages of participating employees were measured in Ernstthal and Großbreitenbach using a body analyser that the employee had to step onto. An the Schleusingen and Steinbach am Wald sites, the back check was carried out. The back check is an equipment-based test, with the aid of which the maximum strength of abdominal and back muscles while standing is measured.

A consultation followed at all sites, at which the respective strengths and weaknesses of the employees were analysed. In addition, there were recommendations for various fitness exercises, to strengthen the respective musculature.

Avoiding accidents at work

In order to optimise the regular monitoring on the status of briefings, occupational health care, the risk assessments and the occurrence of accidents, the reporting structure was adapted and standards established that are valid throughout the company. In 2022, monthly reports by the occupational health and safety specialist were introduced, in order to inform the Technical Operations Management and the Management about the current status each month. In order to do justice to the ongoing further development of the checks of the operating resources deployed that are legally required, a corporate standard was developed. This will be updated whenever there are any amendments of laws, and serves as a basis and reference work for the executives and officers in fulfilling their obligations.

In addition, since 2022 Wiegand-Glas has taken part in the Health and Safety Reporting of FEVE (The European Container Glass Federation). We thus obtain valuable information on how the occurrence of accidents at our company compares with the industry average. Monthly reports for the Technical Operations Manager were extended, in the financial year 2021/2022, to include this key data on safety at work, in order to place an increased focus on this topic.

32%

Improvement of the LTI Rate[4] and TRI Rate[5] in the FY 2022/2023

23%

Improvement of the TRIS-Rate[6] in the FY 2022/2023

Safety first - Avoiding risk at the production machines

The IS machines, which are deployed in order to form the glass containers, are dangerous machines without any physical protection devices. In order to reduce the risk posed by unprotected machine components and hot surfaces when operating the machines, various developments have been pursued over the past few years.

- Deploying lubrication robots in Steinbach am Wald and Großbreitenbach; further ones are planned
- Equipping machines with Blanc Barriers (protective grids) in Steinbach am Wald and Schleusingen, which visualise the operation of the machine in order to visually perceive the switching state; further ones are planned
- In 2022, together with the manufacturer, developing a CE-certified safety ladder for securely climbing on and off the machines when changing the mould
- Further developing the protective workwear in collaboration with our textile service provider, by integrating a robust and non-slip aramide trim on work trousers and dungarees (in use as from 2024)
- Testing exoskeletons, in order to reduce the risk of muscular and skeletal disorders when engaging in heavy physical work

Training and instruction

We offer our staff various types of instruction, training and exercises in the field of occupational health and safety. These may include:

- Activity-related and general annual briefings for all employees, including the instructions for using hazardous substances
- Education and training of qualified persons in accordance with TRBS (Technical Rules regarding Operational Safety), such as inspectors of ladders, racks, cranes and lifting equipment, electric windows, doors and gates, PPE against falling, hazardous goods cabinets, scaffolding
- Acquisition of a driving licence for wheel loaders, cranes, forklift trucks, telescopic forklifts and aerial work platforms, as well as annual briefings
- Training of first responders and safety officers, fire marshals
- Acquisition and maintenance of special training for, for example, external company co-ordinators, climbing and rescuing, explosion protection, hazardous substances, protection against radiation, laser protection or boiler attendants

[4] Lost Time Incident Rate: Accidents at work with loss of time with reference to 100 employees
[5] Total Recordable Incident Rate: Accidents at work with loss of time and accidents at work which led to relocations or reduced-time working, with reference to 100 employees
[6] Total Recordable Incident Severity Rate: Loss of working time in calendar days with reference to 100 employees

Attractive job
– Designing the future together

The satisfaction of our employees, their deployment and knowledge are the most important drivers of corporate success.

At all our production sites, we offer our employees canteens with a modern design, the range of dishes on offer of which we have been able to extend further through self-management. Roof terraces, moreover, invite our staff to spend the break outdoors. Spacious newly erected staff facilities give everyone the opportunity to make their way home feeling refreshed after finishing work. Staff are provided with industrial clothing tailored to requirements, and this is regularly professionally cleaned. An advanced office concept with flexible and adaptable workstations ensures a pleasant working atmosphere. We moreover offer the best possible lighting for workplaces, cutting edge hardware and software, and various arrangements for increased ergonomics at the workplace. Some 90 per cent of our staff are subject to collective bargaining agreements.

In the existing production environment, the focus is placed on designing workstations more ergonomically, as well as with safety in mind, and designing them in a more attractive way. The technological advancement, the impending transformation of our industrial economy in Germany, and further megatrends necessitate ongoing further development and the emergence of new fields of work – also for us. An example of newly emerged fields of work, for instance, concerns the topics of generating proprietary energy and designing the sustainable transformation of the glass industry. But also the ongoing further development in IT, IT security and automation necessitates new and in-depth qualifications. It is not for nothing that the number of new staff set on in the past two financial years has risen by over half.

In that respect, a high degree of employee engagement forms the basis for the stability and continuity of our family business. With great investments in the latest technologies, but also in the ongoing development of our employees, we are today securing our future, under constantly changing conditions. Unfortunately, the general fluctuation has slightly increased over the past few years. The reasons for it are manifold, and, besides the general social and political conditions, are also rooted in the individual needs of the employees, and, naturally, also in the company itself. The immense lack of specialist staff on the German market and an under-supply of employees, lead to greater competition to attract employees. For companies, it is crucial to adjust to these changing circumstances, and find the right measures to continue to be perceived as an attractive employer. Wiegand-Glas is on its way to constantly work on improving working conditions and the attractiveness of its image.

2,000+
Employees in the Wiegand-Glas group

21.4%
Proportion of female employees

57.3%
More new recruits in the FY 2022/2023, compared to the FY 2020/2021

89.2%
Employees are employed as permanent staff

Wiegand-Glas

Training
– Staff development with great dedication

We place great value on the in-house training of new specialists, as well as qualifying employees further.

Our trainees have ranked among the best for many years. We have repeatedly, most recently in 2022, been distinguished as a top training company by the IHK für Oberfranken Bayreuth (Upper Franconian Chamber of Commerce and Industry in Bayreuth), as well as the IHK Südthüringen (Southern Thuringian Chamber of Commerce and Industry). All our technical trainees are trained in the training centres and individual departments, by experienced trainers, who impart the necessary knowledge in theory - together with the vocational school - and practice. Successful completion is the best prerequisite for being incorporated into the permanent staff.

12+2

apprenticeships and dual courses of study

Contact with students from the region is very important to us. At all our sites, with corresponding co-operation agreements we cultivate a good and constructive co-operation with the schools. Such partnerships offer the young people the option to get to know our company, obtain practical insight into the professional and working world, make initial contacts with training officers, and be able to try out various fields of work, and thereby develop an interest in a particular occupation. In addition, various hands-on events at our trade fair booths ensure that the students at vocational and training trade fairs already come into contact with the company at an early stage, and can inform themselves about offers of training and study.

Within the scope of internships and projects, we also make an offer to students to oversee their final dissertations. This offers them and us, as a company, a good opportunity to get to know one another and develop a potential future task profile.

For our current staff, we provide a comprehensive range of continuing education, both internally and externally, in order to extend the skills and capabilities of our employees that are needed on a daily basis. Due to the pandemic conditions, hardly any continuing education was implemented in the financial year 2020/2021, either internally or externally. The overall figures are thus not comparable with those from the previous financial years. In order to be able to carry out the briefings during the pandemic in good time, the IT Department developed an online briefing tool. This has become established, and is meanwhile in increasing use.

Our current offers for training and integrated studies:

- Construction draftsman (m/f/x)
- Professional driver (m/f/x)
- Electronics Engineer (m/f/x)
- Industrial electronics technician for operation technology (m/f/x)
- Industrial mechanic (m/f/x)
- IT management assistant (m/f/x)
- Plastics and rubber technician (m/f/x)
- Mechatronics technician (m/f/x)
- Physics lab assistant (m/f/x)
- Process technician for glass engineering (m/f/x)
- Metal cutting mechanic for turning technology (m/f/x)
- Tool mechanic (m/f/x)
- Business administration (Bachelor of Arts)
- Mechanical engineering (Bachelor of Engineering)

Integration
– A joint task

Diversity is considered an important component of the corporate values at Wiegand-Glas.

The lack of specialists on the German employment market has also led the Wiegand-Glas group to recruit more and more workers from abroad. We are very happy about our foreign employees from many European countries, but also countries outside Europe, supporting us. However, along with the benefits of employing workers from abroad, there are naturally also some hurdles to overcome.

In order to accelerate the process of integration, we offer a support programme by native speakers of the respective nationality. Besides applying for the visa to stay or requiring assistance in looking for an apartment, probably the greatest difficulty of all is the language barrier. In order to improve their knowledge of German, and thus also facilitate the understanding between the foreign colleagues and their supervisors, we offer courses in German in our premises. In 2022, the first course in German for foreign employees of the PET and glass plants commenced at the Großbreitenbach site. In spite of the many different nationalities, little previous knowledge and the problem that many of our foreign employees engage in shift work, with various different shift times, a course in German is offered and successfully conducted twice per week. At the beginning of 2023, the language courses at all production plants of the Wiegand-Glas group commenced.

In order to facilitate the accommodation of foreign or out-of-town employees, we also provide living space for rent. We are currently considering purchasing further properties, so that we can extend this offer.

34

Different nationalities are employed at the Wiegand-Glas group

Responsibility for the region
– Model region as a pilot project

"Modellregion Glasindustrie" (glass industry as model region) is being worked on, with various protagonists.

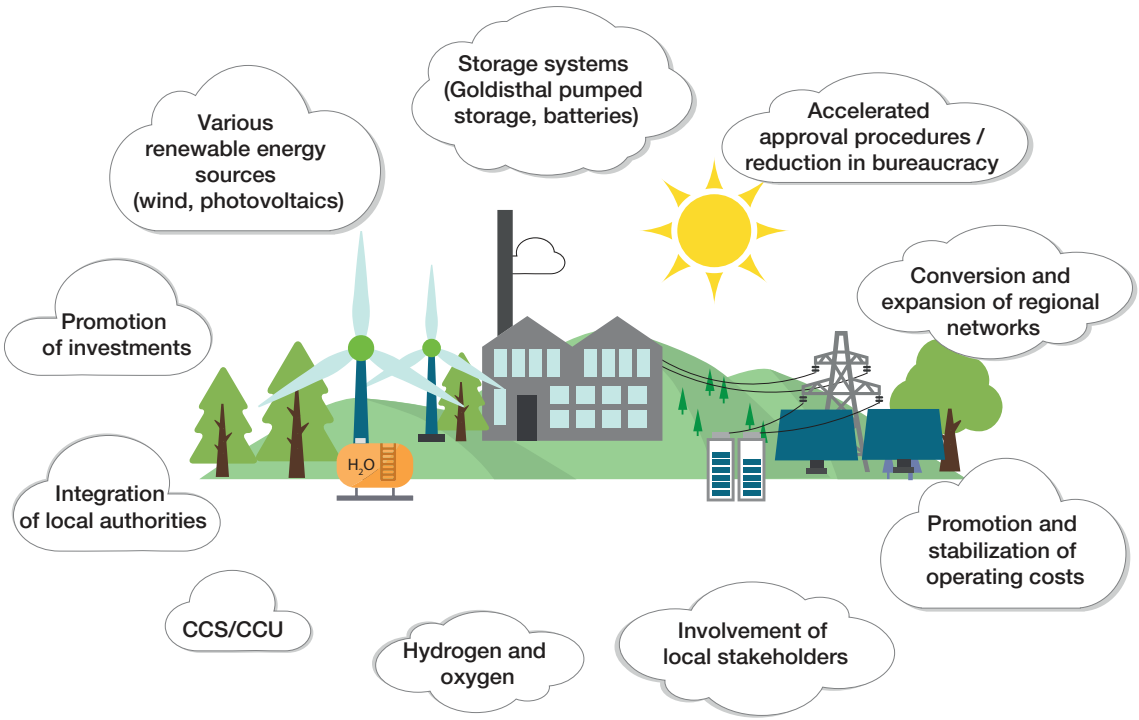
The energy transition is the declared political goal in Germany. Associated with it is the green energy supply for glassworks in the region, along with the corresponding further development of the melting technologies, which will noticeably increase the future requirement for electricity. A number of working groups with representatives from local businesses, local politics, institutes and associations have been in regular discourse with one another since 2022, in order to discuss the necessary strategic decisions towards decarbonised glass manufacture on the Rennsteig.

The working groups focus on the following topics:

- Promoting investment
- Local renewable forms of energy
- Extending the power grid
- Hydrogen
- Business-related infrastructure
- Accelerating processes
- Regulatory reforms

One aim of the work package concerning local renewable forms of energy and hydrogen is, for example, a wind and hydrogen park at the Rennsteig with 15 advanced wind turbines. Thus, one of the largest wind energy projects in Bavaria would be implemented in the region. In an extension, the construction of a hydrogen production plant based on wind energy is planned. The project is supposed to be a community task, and be implemented in the interests of all stakeholders involved, including the local communities. In a citizens' survey conducted at the end of 2022, the consent to the scheduled wind and hydrogen park among the population was a pleasing 85 per cent. The opportunity should exist for the citizens to benefit from cheaper electricity by way of a citizens' electricity tariff, and additionally hold shareholdings in the wind and hydrogen park.

We, as the Wiegand-Glas Corporate Group, have initiated this joint project of a model region, and are supporting the planning of the model region with full commitment. In July 2023, the model region was officially launched by the Economics Ministers of Thuringia and Bavaria.



About this report

Editorial notes

We have refrained from differentiating gender in the present German report, and have mostly chosen the masculine form, in a generic manner. Needless to say, corresponding terms do apply to all gender identities.

Reporting standards

The report was prepared in conformity with the GRI Standards, the internationally recognised sustainability reporting framework.

Scope of application

The period under review corresponds to the financial year 2022/2023 (1 April 2022 until 31 March 2023). Where any disclosures, exceptionally, relate to the calendar year, we point that out. The disclosures comprise the following operating companies:

- Bayerische Flaschen-Glashüttenwerke Vertriebs-GmbH
- Wiegand-Glashüttenwerke GmbH
- Glas-Cycle GmbH
- PET-Verpackungen GmbH Deutschland
- Wiegand-Logistik GmbH

The report was published in 2023 in German and English. The report is published every two years.

Legal Notice

Wiegand-Glas Holding GmbH
Otto-Wiegand-Straße 9
96361 Steinbach am Wald

Tel. +49-9263 80-0
Fax +49-9263 80-1234
mail@wiegand-glas.de
www.wiegand-glas.de

Contact
Lukas Neubauer
nachhaltigkeit@wiegand-glas.de

Editing
Wiegand-Glas group

Concept and design
Nadja Büttner
Tobias Löffler
Wiegand-Glas group

Publication
November 2023

Photos
Wiegand-Glas group
Thoermer Fotoproduktion - Val Thoermer

Printing
WIRmachenDRUCK GmbH

Wiegand-Glas group Social Media profiles:

www.facebook.com/wiegandglasgruppe
www.linkedin.com/company/wiegand-glasunternehmensgruppe
www.instagram.com/wiegandglaskarriere

GRI content index

GRI used:	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s):	None
GRI 2:	General Disclosures 2021

GRI Standards		Page
The organisation and its reporting		
GRI 2-1	Organisation profile	6 - 8
GRI 2-2	Entities that are taken into consideration in the sustainability reporting of the organisation	50
GRI 2-3	Period under review, frequency of reporting and point of contact	50, 51
GRI 2-4	Correction or re-presentation of information | *Note: Adaptations are marked.*	
GRI 2-5	External audit | *Note: No external audit*	
Activities and employees		
GRI 2-6	Activities, value creation chain and other business relationships	4 - 5, 8, 34 - 35
GRI 2-7	Employees	58 - 59
GRI 2-8	Staff who are not employees	58 - 59
Corporate management		
GRI 2-9	Management structure and composition	8
GRI 2-10	Nomination and election of the highest supervisory body	8, 14
GRI 2-11	Chairperson of the highest supervisory body	8, 14
GRI 2-12	Role of the highest supervisory body when overseeing the management of the impact	14
GRI 2-13	Delegation of responsibility for the management of the impact	14
GRI 2-14	Role of the highest supervisory body in the sustainability reporting	14 - 15
GRI 2-15	Conflicts of interests	14
GRI 2-16	Transmitting critical concerns	40
GRI 2-17	Collective knowledge of the highest supervisory body	14
GRI 2-18	Assessing the performance of the highest supervisory body	14
GRI 2-19	Remuneration policy | *Note: For confidentiality reasons, Wiegand Glass does not disclose any information on the remuneration policy.*	
GRI 2-20	Method of establishing the remuneration | *Note: For confidentiality reasons, Wiegand Glass does not disclose any information on how the remuneration is established.*	
GRI 2-21	Ratio of the total annual remuneration | *Note: For confidentiality reasons, Wiegand Glass does not disclose any information on the salaries of its employees.*	
Strategy, guidelines and practices		
GRI 2-22	Application Statement on the Sustainable Development Strategy	4 - 5
GRI 2-23	Declaration of commitment to principles and practices	4 - 5, 40
GRI 2-24	Inclusion of political commitments	18, 49
GRI 2-25	Methods of eliminating a negative impact	40
GRI 2-26	Procedures for obtaining advice and the reporting of concerns	40

GRI Standards	Page
GRI 2-27 Compliance with laws and ordinances | *Note: Wiegand-Glas does not report on legal proceedings, as such details are subject to a confidentiality obligation.*	
GRI 2-28 Membership in associations and interest groups	18
Stakeholder engagement	
GRI 2-29 Approach to stakeholder engagement	18
GRI 2-30 Collective wage agreements	44
GRI 3: Key topics in 2021	
Details on key topics	
GRI 3-1 Method of proceeding in order to determine the key topics	15
GRI 3-2 List of key topics	15
Circular Economy	
GRI 3-3 Management of material topics	22 - 23
Efficiency of resources	
GRI 3-3 Management of material topics	24 - 25
GRI 301 Materials 2016	
GRI 301-1 Materials deployed according to weight or volume	25
GRI 301-2 Recycled input materials used	24 - 25
GRI 303 Water and Effluent 2018	
GRI 303-3 Water extraction	22, 55
Energy input	
GRI 3-3 Management of material topics	26
GRI 302 Energy 2016	
GRI 302-1 Energy consumption within the organisation	26 - 27, 55
GRI 302-3 Energy intensity	55
GRI 302-4 Reduction of energy consumption	24, 26 - 27
Emissions	
GRI 3-3 Management of material topics	
GRI 305 Emissions 2016	28 - 29, 56
GRI 305-1 Direct GHG emissions (Scope 1)	28, 56
GRI 305-2 Indirect energy-related GHG emissions (Scope 2)	28, 56
GRI 305-3 Any other indirect GHG emissions (Scope 3)	28, 56
GRI 305-4 Intensity of the GHG emissions	56
GRI 305-5 Reducing the GHG emissions	24, 28 - 29, 30, 37
GRI 305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	57
Ecologically sound transport	
GRI 3-3 Management of material topics	30
Product and food safety	
GRI 3-3 Management of material topics	36

GRI Standards		Page
GRI 416	Customer Health and Safety 2016	
GRI 416-1	Assessment of the health and safety impacts of various product and service categories	36
Product and market portfolio		
GRI 3-3	Management of material topics	34 - 35
Climate-neutral products		
GRI 3-3	Management of material topics	37
GRI 302	Energy 2016	
GRI 302-5	Reducing the energy requirement for products and services	37
Compliance with ethical and social principles		
GRI 3-3	Management of material topics	40
GRI 205	Anti-corruption 2016	
GRI 205-2	Communication and training concerning anti-corruption policies and procedures	40, 58
GRI 412	Human Rights Assessment 2016	
GRI 412-1	Operations with local community engagement, impact assessments and development programmes	40
Occupational Health and Safety		
GRI 3-3	Management of material topics	42 - 43
GRI 403	Health and Safety at the Workplace 2018	
GRI 403-6	Promoting the health of employees	42 - 43
GRI 403-8	Employees who are covered by a management system for Occupational Health and Safety	42
GRI 403-9	Job-related injuries	43, 58
Attractive job		
GRI 3-3	Management of material topics	44
GRI 401	Employment 2016	
GRI 401-1	Newly set on employees and employee fluctuation	44, 59
Training		
GRI 3-3	Management of material topics	47
GRI 404	Training and Education 2016	
GRI 404-1	Average hours of training and education per annum and employee | *Note: This information can only be gathered for internal training. Differentiating the gender and employee categories is not possible.*	47, 59
Integrating employees of other nationalities		
GRI 3-3	Management of material topics	48
Responsibility for the region		
GRI 3-3	Management of material topics	8, 19, 49
GRI 201	Economic Performance 2016	
GRI 201-1	Directly generated and distributed commercial value	8
GRI 204	Procurement practices 2016	
GRI 204-1	Proportion of outlays for local suppliers	19

Appendix:
Eco-friendly activities

Water (p. 22)

Glass	CY 2020	CY 2021	CY 2022
Well water	212,078	187,793	103,660
Drinking water	20,148	16,764	19,396
Overall water extraction from all areas in m^3	**232,226**	**204,557**	**123,056**
m^3 overall/tmelt	**0.25**	**0.21**	**0.12**

PET	CY 2020	CY 2021	CY 2022
Well water	3,768	3,441	3,255
Drinking water	2,510	6,312	10,002
Overall water extraction from all areas in m^3	**6,278**	**9,753**	**13,257**

Energy (pp. 26 - 27)

Glass - Primary energy consumption in GWh[7]	CY 2020	CY 2021	CY 2022
Natural gas	1,165.5	1,202.4	1,022.3
Heavy fuel oil	22.3	0	0
Light fuel oil	0	0	216.9
Electricity	245.1	260.4	263
Overall energy consumption	**1,432.9**	**1,462.8**	**1,502.2**
Energy intensity quotient - MWh/tpack	**1.51**	**1.47**	**1.41**

PET Primary energy consumption in GWh[7]	CY 2020	CY 2021	CY 2022
Natural gas	2.5	4.2	4.0
Electricity	31.7	39.6	42.4
Waste heat	6.9	8.9	2.0
Overall energy consumption	**41.1**	**52.7**	**48.4**

[7] Reduced quantities < 0.5% of the total energy consumption have not been taken into consideration. Fossil energy sources relate to the lower heating value.

CO_2 emissions (p. 28)

The emissions were ascertained based on the GHG Protocol. As 2021 is the base year for the setting of the Science Based Targets Initiative goals, the data is made available as from this year.

Glass Scope 1 – Direct GHG emissions in t CO_2 equivalent	CY 2021	CY 2022
Heat	285,709	310,430
Vehicle pool	1,322	1,184
Total of Scope 1 emissions	**287,031**	**311,614**
Intensity of the GHG emissions (Scope 1) [t CO_2/t pack]	**0.29**	**0.29**

Glass Scope 2 – Indirect energy-related GHG emissions in t CO_2 equivalent[8]	CY 2021	CY 2022
Electricity	132,204	149,563
Total of Scope 2 emissions	**132,204**	**149,563**
Intensity of the GHG emissions (Scope 2) [t CO_2/t pack]	**0.14**	**0.14**

Glass Scope 3 – in t CO_2 equivalent	CY 2021	CY 2022
Total of Scope 3 emissions	**483,062**	**478,630**
Intensity of the GHG emissions (Scope 3) [t CO_2/t pack]	**0.50**	**0.46**

PET Scope 1 – Direct GHG emissions in t CO_2 equivalent	CY 2021	CY 2022
Natural gas	937	912
Total of Scope 1 emissions	**937**	**912**

PET Scope 2 – Indirect energy-related GHG emissions in t CO_2 equivalent[8]	CY 2021	CY 2022
Electricity	18,621	24,336
Total of Scope 2 emissions	**18,621**	**24,336**

PET Scope 3 – in t CO_2 equivalent	CY 2021	CY 2022
Total of Scope 3 emissions	**149,415**	**135,276**

[8] Ascertaining the Scope 2 emissions by means of the market-based method.

Pollutant emissions

Significant air emissions in tonnes	CY 2020	CY 2021	CY 2022
NO_x	1,025	1,058	933
SO_x	641	770	737
Fine dust	5.68	5.32	6.69

Specific significant air emissions in kg/tpack	CY 2020	CY 2021	CY 2022
NO_x	1.10	1.09	0.90
SO_x	0.70	0.79	0.71
Fine dust	0.01	0.01	0.01

Appendix:
People and Society

Compliance – Corruption (p. 40)

Employees who have been trained in anti-corruption policy and the company's procedures	FY 2020-2021	FY 2021-2022	FY 2022-2023
Total, absolute	299	1,325	210

Occupational safety (p. 43)

Job-related injuries	FY 2020-2021	FY 2021-2022	FY 2022-2023
LTI rate	6.84	6.35	4.44
TRI rate	7.81	7.06	5.16
TRIS rate	148.5	149.6	114.3

Employees of the Wiegand-Glas group (p. 44)

	FY 2020-2021	FY 2021-2022	FY 2022-2023
Average number of employees deployed during the Financial Year (Total)	**1,950**	**1,997**	**2,129**
Employees (excluding the management)	391	415	408
Trainees	78	80	85
Industrial employees	1,481	1,502	1,637

	FY 2020-2021	FY 2021-2022	FY 2022-2023
Number of employees (total number on the reference date)	**1,954**	**1,998**	**2,115**
Temporary staff	**130**	**152**	**229**
of which female	25	36	60
of which male	95	116	169
of which gender not specified	0	0	0
Permanent staff	**1,624**	**1,846**	**1,886**
of which female	323	385	371
of which male	1,301	1,461	1,515
of which gender not specified	0	0	0

	FY 2020-2021	FY 2021-2022	FY 2022-2023
Number of employees (total number on the reference date)	**1,954**	**1,998**	**2,115**
Full-time employees	**1,886**	**1,918**	**2,021**
of which female	302	307	358
of which male	1,584	1,611	1,663
of which gender not specified	0	0	0
Part-time employees	**68**	**80**	**94**
of which female	62	72	83
of which male	6	8	11
of which gender not specified	0	0	0

New recruits and fluctuation (p. 44)

New employees and retirements FY 2020/2021	< 30 years	30 - 50 years	> 50 years	Female	Male	Gender not specified	In total
Recruits (absolute)	76	62	33	30	141	0	171
Proportion of recruits (in per cent)	3.6%	2.9%	1.6%	1.4%	6.7%	0.0%	8.1%

* In the financial year 2021 the retirements were not yet differentiated according to age and gender.

New employees and retirements FY 2021/2022	< 30 years	30 - 50 years	> 50 years	Female	Male	Gender not specified	In total
Recruits (absolute)	98	105	28	50	181	0	231
Proportion of recruits (in per cent)	4.6%	4.9%	1.3%	2.4%	8.5%	0.0%	10.9%
Employees leaving (absolute)	93	66	83	48	194	0	242
Fluctuation (percentage)	4.4%	3.1%	3.9%	2.2%	9.1%	0.0%	11.5%

New employees and retirements FY 2022/2023	< 30 years	30 - 50 years	> 50 years	Female	Male	Gender not specified	In total
Recruits (absolute)	125	107	37	69	200	0	269
Proportion of recruits (in per cent)	5.9%	5.1%	1.7%	3.3%	9.4%	0.0%	12.7%
Employees leaving (absolute)	85	76	105	62	204	0	266
Fluctuation (percentage)	4.0%	3.5%	4.9%	2.9%	9.6%	0.0%	12.6%

Education and training (p. 47)

Internal training	FY 2020-2021	FY 2021-2022	FY 2022-2023
Number of hours per employee	1.3	1.5	1.6

Wiegand-Glas