



# Sustainability Report 2019



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## DEAR READERS,

Back in 1998, the future outlook for GIZEH looked anything but sustainable. Even insolvency was a serious option when my family took the company over that year. But 1998 ended up marking a major turning point.

We embarked on a stringent austerity programme that pushed us all to our limits in one way or another – but also laid important foundations for sustainable, and therefore future-proof, operations.

I still recall how I personally lost my temper at times when I saw that unused power guzzlers had not been turned off, that more than necessary had been thrown away out of sheer convenience, or when I saw trucks that were only half-full pulling out of the yard.

My children, who were between 8 and 10 years old at the time, often sat on cardboard boxes in our production halls – removing labels from instant meal cups by hand. The cups, now neutral in terms of their design, were to be put to good use again.

What I didn't want was to lay off staff. I firmly believed that I could achieve a lot with the well-trained team – all that was missing, in my view, was some fresh impetus for a different, more resource-aware way of thinking and operating.

A lot of the things that are still with us today have their roots in that era. We had already introduced sustainable resource management back then, keeping our eye on material quotas, checking waste containers, using outer packaging several times over, managing electricity consumption and organising joint events if the policies agreed were not being followed in individual cases.

The turnaround we achieved has proved to be truly sustainable – in both meanings of the term. Sustainable operations are an asset that works

to our advantage, as we have witnessed time and again ever since. This is not only because we went on to achieve growth of at least 5 % a year (except during the 2008/2009 crisis).

A lot has happened since 1998 – but our philosophy has been with us for almost 25 years now. And it is as elementary today as it was then! The careful use of all kinds of resources is an accolade for a company and a win-win situation for the environment. This is why we will continue to vehemently pursue this approach going forward and use the ever-evolving technology in an even more targeted manner, e.g.

- in the separation and separate treatment of production waste
- through energy-saving technology and systems of the highest standard
- by using renewable energies wherever possible
- to mention but a few of our endeavours.

Nowadays, a successful company is inconceivable without sustainable corporate governance, or at least it is if you want to have better prospects for the future than we had back then: prospects that are sustainably better.

Thank you for placing your trust in us and for your interest in helping our environment.

Your GIZEH management team,

Ralf Jung



# 1

## WHAT WE UNDERSTAND BY SUSTAINABILITY

Striking a balance between economics and ecology



## Striking a balance between economics and ecology

Business policy can, and indeed must, set priorities. But companies also have to generate the resources that these priorities require. This creates a cycle which, in the best-case scenario, becomes a fly-wheel for every business.

This is why sustainability must cover both aspects. Only a company that is commercially successful in the long run is in a position to consistently have the resources that a social, ecological and product and production-related business policy requires at its disposal.



A successful company like this also, however, has an obligation to live up to its social, ecological and product and production-related responsibilities.

As a result, our understanding of sustainability includes the following areas:

### Sustainable corporate governance

We aim to achieve a return on sales of approximately 3 - 5 % in the long term. This allows us to secure our survival in the long run, pay our employees fair salaries on an ongoing basis and maintain a production structure that meets the relevant economic and ecological requirements. We aim to remain a family business in the long term and to uphold our traditional values.

### Products

Products that are an ideal fit for a customer's requirements reduce the associated transport costs and minimise spoilage. Targeted development has already allowed us to reduce the necessary material input by more than 30 %. A high degree of reusability and easy recyclability are also taken into account in the packaging design process from the very outset. Even if the current legislation or development status still imposes limits on us, we are conducting research into the increased use of sustainable and biological materials.

### Energy

A company that relies on the consumption of irretrievable resources has restricted prospects for the future. We are working at full tilt on using less and less energy and on extracting as little of it as possible from fossil fuels. We are aiming not only to become a completely CO<sub>2</sub>-neutral company, but also to make a positive contribution as we interact with nature and our climate. This is why GIZEH generates and uses electricity from its own solar power systems and is actively working on measures to continuously optimise its energy management.

### Social

It is often said that family businesses do not think from quarter to quarter, but rather from generation to generation. As a result, we are very proud to have some employees that are already the third generation of their family to work for us. Satisfied, motivated and well-trained employees are a key success factor. This is why taking targeted measures to keep employee satisfaction levels high in the long term is a priority for us.

### Our contribution to the SDGs

The GIZEH Group has operations across the globe. This means that many of our decisions have global implications and also explains why we are committed to the Sustainable Development Goals ("SDGs" for short) of the United Nations as part of its 2030 Agenda. Our sustainable measures allow us to make a significant contribution to making the world a good bit cleaner and fairer. Our sustainability strategy, for example, already addresses 16 out of 17 Sustainable Development Goals.

<https://sdgs.un.org/goals>



“Sustainability is an important pillar of GIZEH’s corporate strategy – and a key success factor.”

# 2

## OUR PRODUCTS

Better protection for good products



# PRODUCTS

## Our highlights

Ensuring optimum protection for the packaging contents, as well as measures to promote a closed-loop economy, are the best approach for us. With this in mind, we focus on:

### ✓ Product protection and durability

Technical advancements in the production of packaging that contains a barrier layer and minimises the permeability of gases (e.g. oxygen) and vapours (e.g. water vapour).

### ✓ Resource optimisation

Technical developments and advancements to reduce the weight of different forms of packaging, achieving savings of up to 20 % with the same or improved technical functions.

Successful tests using recycled polypropylene (PCR-PP) made from 100 % recycled packaging originating from household waste (material with the “green point” recycling symbol).

Pilot project with partners: production of a screw cap made of 100 % PCR-PP in combination with a container made of 100 % recycled PET (rPET).

### ✓ Design-for-recycling

New and enhanced packaging. Planning and design make material separation easier for both containers and decoration (labels), to optimise the recycling process, for example.

## Our visions

Our overriding objective is to achieve a closed-loop material cycle. This will involve the following measures

- ✓ Further increase in the recyclability of our packaging
- ✓ Further minimisation of material consumption
- ✓ Safe use of recycled materials to promote the “circular economy”
- ✓ Increased use of materials from renewable resources such as organic feedstock, green PE/PP and additives for biodegradability

## Our initiatives



## Because environmental protection starts with packaging

Plastic packaging is a completely normal part of modern everyday life. Its advantages are undisputed: it is lightweight, allows for flexible use and is durable in contact with both heat and water. What is more, it takes much less energy to produce than glass or aluminium, for example.

As a result, a product's content often has a much higher carbon footprint than its packaging, making it particularly worthy of protection for this reason alone. This means that packaging that is as well suited to the product as possible already makes a specific contribution to environmental protection.

At GIZEH, our “Customized Cup Solu-

tions” provide our customers with innovative and optimised packaging solutions. Behind this buzzword, however, is also a holistic approach to packaging and its contents – including their impact on our environment.

We focus our commitment first and foremost on the following approaches:

- Protection that is the perfect fit for the product
- Ongoing optimisation of resource requirements and using sustainable sources to meet these products to the greatest extent possible
- Taking recycling aspects into account back at the design stage so as to ensure or increase reusability

## Product protection and durability – Better protection for good products

Packaging allows products to be transported and stored efficiently. But packaging is, of course, designed primarily to protect the product. In this respect, packaging fulfils a simple but key function: it shields goods and environment from each other.

Food, in particular, is often not consumed fresh. Even if it can be preserved, it needs the right packaging to protect it against perishable influences.

GIZEH has a wealth of experience in manufacturing packaging with a built-in barrier layer. This generally consists of multi-layer films that act as a barrier to

protect the product. As well as directly shielding the product from external physical influences, it also offers protection by ensuring only the most minimal permeability of gases (e.g. air) and vapours (e.g. water vapour) in both directions.

This not only helps to preserve flavour and consistency, but also to conserve volatile substances such as vitamins. The oxidation of the food is also prevented. This protection allows avoiding additional preservatives.

The direct impact: the product has a much longer shelf life. Unnecessary food waste due to premature spoilage is avoided, saving CO<sub>2</sub> in the process.

## Optimised use of resources – achieving more with less

In its quest to make its use of resources ever more efficient, GIZEH is investing in the following approaches:

- Material savings
- Use of recycled material
- Increased use of bio-based and biodegradable plastics
- Reusable solutions

### Material savings

Our aim is to produce packaging in a way that is as resource-friendly as possible. In order to achieve this, we are optimising our technical capabilities with regard to material, design and the required technology (e.g. for tools, etc.). And our hard work is paying off: these developments have enabled us to reduce the weight of our packaging by up to 20 % with the same or even improved technical functions. This is one of the main reasons why our expertise is in demand, especially when it comes to advice on the ideal manufacturing process.

Joint analyses of the necessary processes allow us not only to develop the best possible new designs with our customers, but also to improve existing containers by reducing their weight/wall thickness. But resource-saving development is not just limited to individual packaging. Stackability, in particular, which we are maximising for the vast majority of our packaging, ensures that the largest possible number of items can be shipped with the smallest number of necessary truck shipments. Compared to the transportation of heavy glass containers, for example, which are also usually not stackable, our plastic packaging has a better CO<sub>2</sub> footprint not only in production, but also in its transportation.

### Use of recycled material

GIZEH was one of the first companies in our industry to carry out tests using recycled polypropylene (PP). This material is

made exclusively from household waste, which is why it is also known as post-consumer material. Our experiments produced promising results: new packaging products can be manufactured from this environmentally friendly material using both thermoforming and injection moulding processes. Direct contact with food is the only area of application that is not yet possible, as the EU has not approved recycled polypropylene from post-consumer waste (PCR-PP). This is mainly due to problems associated with the release of substances from the plastic into the food (migration). We are, however, already working on various solutions to minimise or avoid migration.

As a result, direct applications are currently limited to the household and cosmetics sector where there is no direct contact with food. This is the only way to exclude potential risks for consumers resulting from the possible transfer of substances.

In a pilot project, GIZEH recently developed a screw cap made of 100 % PCR-PP together with a large recycling company and a manufacturer of bathroom and cosmetic products. Together with the matching container made of 100 % recycled PET (rPET), the products make up a form of packaging made entirely of recycled material.

GIZEH is receiving an ever-increasing number of enquiries from its customers for the use of recycled PET, in particular. Since recycled PET comes from a closed, certified (EFSA) system – meaning that it remains separate from rPET for non-food applications – it can be used in the food sector without hesitation. About 30 % of the PET used at GIZEH is now recycled material.

### Use of renewable and biodegradable plastics

Our development team is also focusing on processing biodegradable materials and using materials from renewable resources.

According to the German Environment Agency (Umweltbundesamt), however, these material groups, which are still in the very early stages of their development, are unfortunately not any more sustainable than conventional plastics (at present). This is also because they account for a small proportion of the total waste volume, which is why they are currently classified as non-recyclable.

We are, however, keeping our eye on the market and have carried out successful tests using the following alternative plastics:

#### Organic feedstock:

This term refers to plastics based on oils and fats from industry and forestry. They are usually created as a waste product in these industries. The use of these plastics allows the use of crude oil to be reduced.

#### Green PE/PP:

This material is a form of plastic based on renewable sugar cane. The resulting

material has almost identical properties to conventional PE/PP plastic. The special thing about it: this type of plastic can be used to increase the proportion of renewable raw material to as much as 100 %.

#### Additives for biodegradability:

Many countries have no collection systems for used packaging. This means that large quantities of waste are not disposed of ideally and end up in the environment, either directly or indirectly. New additives, however, now open up the option of using standard polypropylene, for example, as a fully biodegradable plastic. Micro-bacteria break down the plastic completely over time into its original chemical components. This also allows negative effects such as microplastics or toxic by-products to be avoided.

### Reusable solutions

A new GIZEH business unit produces, decorates and distributes reusable drinking cups for large and small-scale events. The high-quality printed cups can be used several times over and ensure safety, thanks to their breaking strength, and a clean environment thanks to the deposit that is refunded on their return.



**Green PE:**  
sugar cane-based plastic cups



**PLM material:**  
fully biodegradable PP cup thanks to additives



**Reusable drinking cups:**  
used in the Allianz Arena – home to FC Bayern Munich

## Design for recycling – Considering recyclability right from the outset

“Design for recycling” is the name of a solution approach that GIZEH already takes as a basis when developing packaging: whenever a new container is designed, the extent to which it can be recycled after disposal is taken into account directly. This means that the recyclability of the material used is an essential design criterion for us in the design phase. The aim is to use only materials and/or combinations of materials that do not have a negative impact on recyclability.

### Why this is important

All forms of plastic packaging feature a specific combination of polymers and additives. The individual composition depends on the product to be packaged, as well as the functional and aesthetic requirements. The resulting vast range of different packaging can make the recycling process more difficult, more expensive, and can affect the quality and, as a result, the value of recycled plastic. A design decision made at the very start of the process that appears to make sense for marketing or branding reasons (e.g. the use of very dark colours) can have a negative impact on the value of the recycled material later on. Design for recycling takes these aspects into account right from the start – and helps to plan for added value at the end of production from day one.

### What this can look like

White or transparent packaging is best suited to the recycling process. Without additional decoration, however, the packaging cannot fulfil its purpose, namely to

provide information. The decoration is also what makes the packaging unique. It is required to label the contents based on their type, quantity, weight and price. The decoration also provides information about hazardous substances and expiry dates and carries machine-readable information such as barcodes. In order to prevent a scenario in which decoration makes packaging less recyclable, the material used for labels (OML/IML), for example, or shrink sleeves should be similar to the packaging material.

We pursue different approaches to make it easy to separate containers and their decoration. For example, we use decoration elements that consumers can remove easily and without leaving any residue. What remains is monomaterial – i.e. material that consists of a single basic material – that is as pure and light in colour as possible.

Easily removable decoration elements like these can include paper sleeves, a perforated shrink sleeve or a removable in-mould label. These are simply pulled off using a flap. GIZEH has forged ahead with its own developments (EcoEasy Paper and EcoEasy Sleeve) to ensure the clean separation of containers and decoration elements, particularly with regard to paper sleeves and perforated shrink sleeves.

The combination of product design and decoration is a key factor in improving recycling levels and has the potential to significantly reduce the cost of processing plastic packaging waste.



Julius Tews, Technical Sales and Project Management

Frank Kriener, Head of Sales and Product Development

“It’s the content that counts – and our packaging provides exactly the right product protection. This allows it to make an active contribution to protecting the environment!”

We make a contribution to these SDGs:



# 3

## OUR PLANET

Resource-friendly ways of working



# OUR PLANET

GIZEH – The facts at a glance

## Our highlights

- ✓ Reduction in our specific energy consumption by 23 % (as against 2012)
- ✓ ISO 50001 certification for the Bergneustadt and Elsterwerda sites
- ✓ A total of approx. 16.5 million kg of CO<sub>2</sub>e saved by implementing energy efficiency measures
- ✓ 100 % CO<sub>2</sub>-neutral electricity used for German sites
- ✓ Generation of approx. 200,000 kWh of solar power in-house every year
- ✓ Transport-related emissions down by ~ 130,000 kg of CO<sub>2</sub>e/a thanks to product production relocation
- ✓ Reduction of production waste and polypropylene waste by 57 % between 2018 and 2019

## Our visions

- ✓ CO<sub>2</sub>-neutral German sites by 2025
- ✓ Replace remaining fuels with climate-neutral alternatives – where available
- ✓ Electricity from renewable sources for further sites outside Germany by 2025
- ✓ Detailed analyses of the main categories of our Scope 3 emissions
- ✓ Continuously increasing the efficiency of our energy use in our production operations
- ✓ Certification of our energy management system according to ISO 14001

## Our initiatives



## Protecting what is irretrievable

Since 2015 at the latest, almost all countries across the globe have been committed to the goal of limiting global warming to well below two degrees Celsius. The objective enshrined in the Paris Agreement can only be achieved if CO<sub>2</sub> emissions are radically reduced.

As a plastics processing company, we are also rising to this challenge. We are working actively at all levels to minimise our ecological footprint and conserve valuable resources.

To this end, we have implemented various measures in recent years:

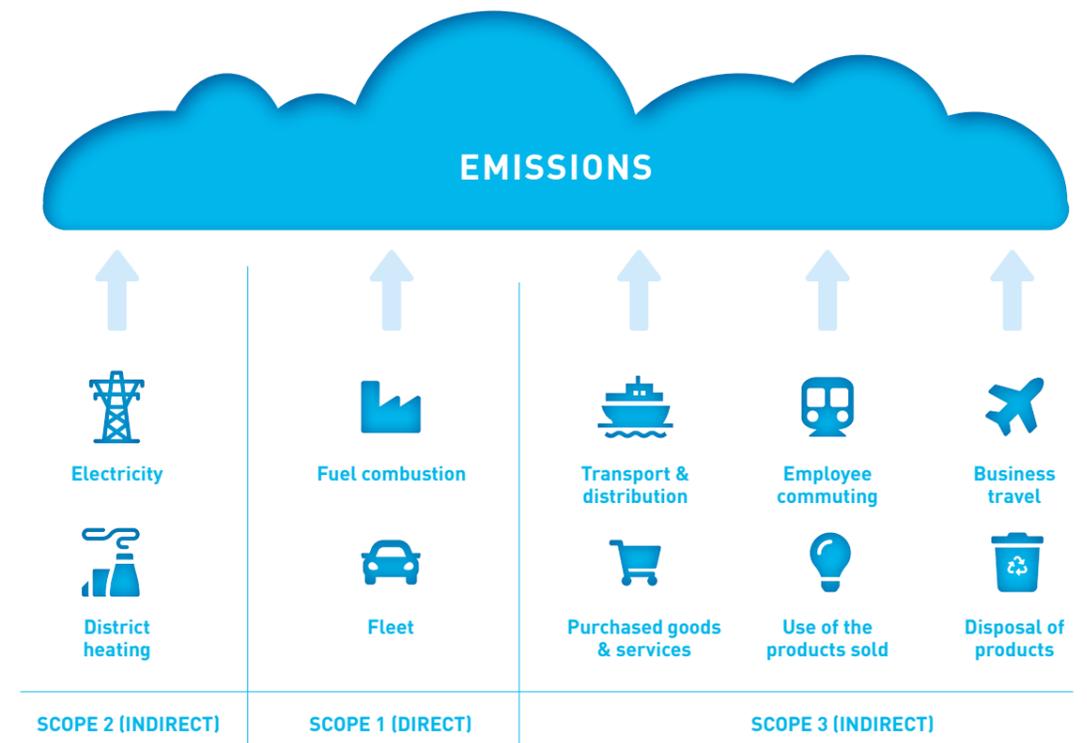
- Detailed and critical analysis of our processes
- Optimisation in areas such as energy efficiency, waste avoidance, energy recovery
- Reforestation measures and installation of solar power systems.

### Identifying and focusing on the most effective levers

Within our company, the process of reducing CO<sub>2</sub> starts with the recording and analysis of all greenhouse gas emissions caused by our business activities. This involves categorising our emissions into Scope 1, 2 and 3 emissions in accordance with the requirements set out in the Greenhouse Gas Protocol (GHG).

This basis allows us to identify our direct and indirect CO<sub>2</sub> sources, as well as the main consumers. The results: the areas of raw materials and energy use produce particularly high levels of emissions.

In response to the analysis, we have stepped up our efforts to increase our energy efficiency. A lot of CO<sub>2</sub> can already be saved by using less energy. At the same time, we are also focusing on using fewer raw materials, for example by reducing the number of rejected goods in the production process. This allows us to save environmentally unfriendly CO<sub>2</sub> in our processes – as well as in our value chain. After all, fewer rejected goods also mean less consumption of raw material.



## Our climate goal: to be completely CO<sub>2</sub>-neutral by 2025

Three years before the Paris Agreement on climate change, we introduced an ambitious energy management system – with the ambitious goal of reducing our energy consumption by 20 % within a ten-year period. We were able to achieve this goal as early as on as in 2019, instead of in 2022 as planned.

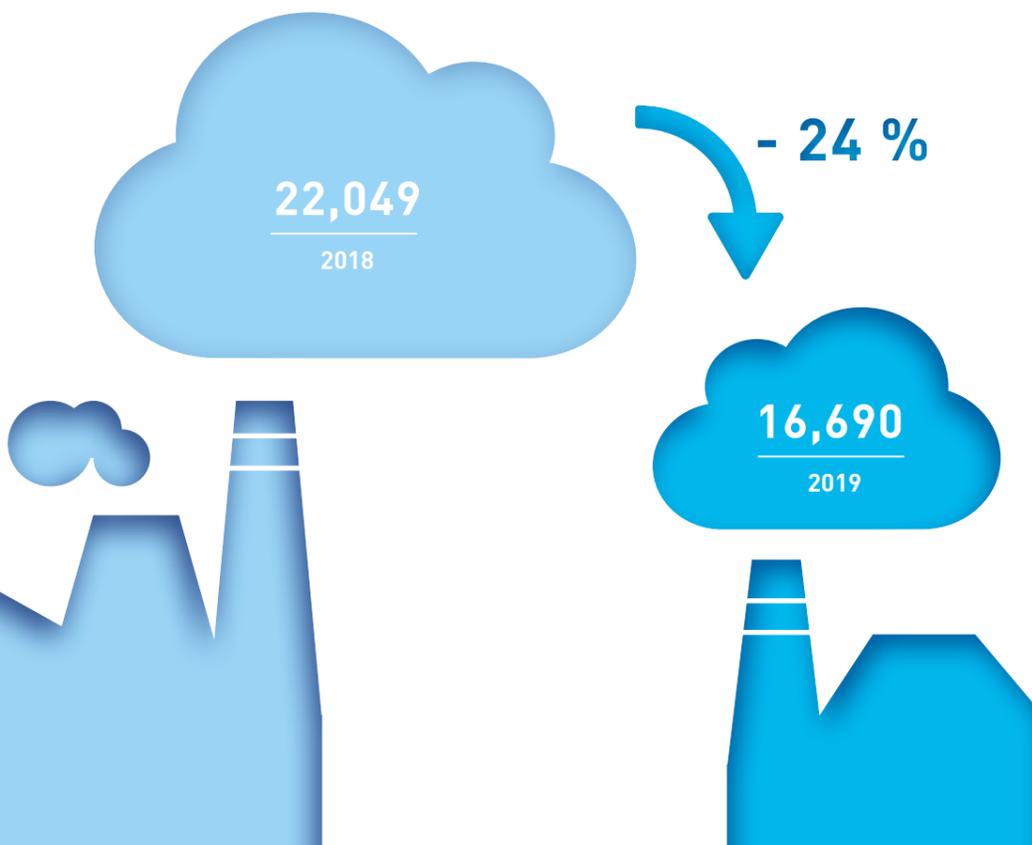
This success was ensured by the systematic implementation of a wide range of efficiency and saving measures. To date, we have avoided the emission of around 16.5 million kg of CO<sub>2</sub>e.

And we don't plan to rest on our laurels, but rather see this success as an incentive for another ambitious project: by 2025, we plan to have made our German sites CO<sub>2</sub>-neutral with regard to Scope 1 & 2 emissions.

Specifically, this means that we include not only the direct CO<sub>2</sub> emissions resulting from our activities (e.g. from the combustion of heating gas) – but also indirect emissions that are caused, for example, by the purchase of electricity.

We are currently also gaining initial experience with hybrid drives in local transport and for business trips covering short distances. We currently still rely on cars with combustion engines on long-haul routes for reliability reasons. In order to keep the impact on the environment as low as possible, we compensate for the CO<sub>2</sub> emitted during our journeys using the climate-neutral DKV Climate-Card fuel card.

CO<sub>2</sub> emissions [tCO<sub>2</sub>e] Scope 1 & 2  
GIZEH Bergneustadt and Elsterwerda sites



## Analysis of Scope 3 emissions: systematic focus on more sustainable procurement of goods & services, reduction in transport distances on an ongoing basis

Compared with scope 1 & 2 emissions, scope 3 emissions are naturally more difficult to record. This value includes indirect emissions resulting from the purchase of goods and services. But the fact that this poses a complex challenge does not give us any excuse to be less ambitious.

As a result, we are currently identifying and evaluating the most important emitters in our upstream and downstream value chain as part of a first step. We plan to use this analysis to work out further steps allowing us to reduce or avoid these emissions. In some of the categories identified, we have already been able to successfully implement initial measures.

In cooperation with our customers, for example, we have been able to optimise the transportation of our goods and already save large volumes of CO<sub>2</sub> in the process.

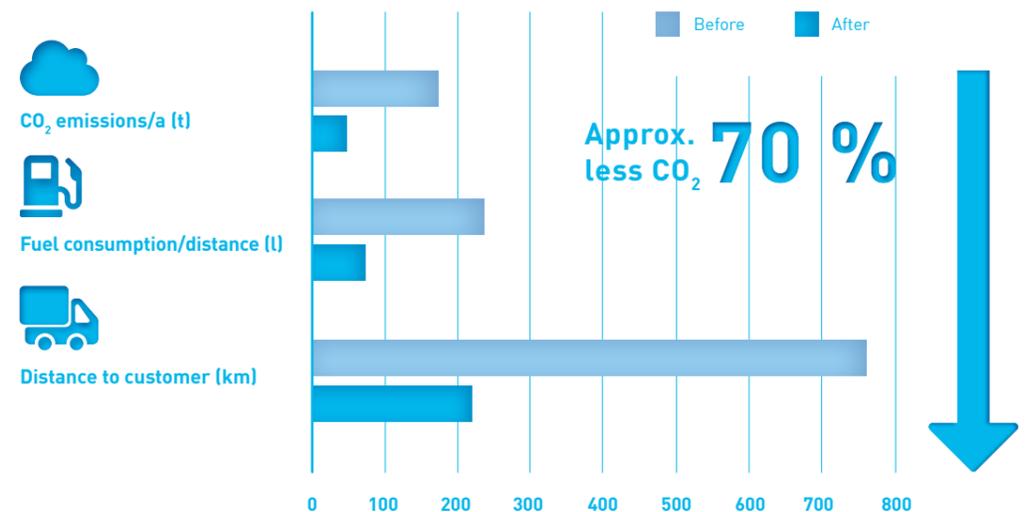
Be it complicated delivery routes or only

partially loaded trucks – the potential CO<sub>2</sub> sources in the field of logistics, in particular, are huge. This is why we are focusing systematically on reducing transport-related emissions.

In this area, we have been able to increase the proportion of full loads from 60 % to over 80 % in recent years by optimising how we plan our shipments – as well as by adapting outer transport packaging. We have also increased the load level per truck from 75 % to over 90 %. This saves around 600 truck journeys per year, which corresponds to a distance of approximately 190,000 km. This equates to saved emissions of approx. 150,000 kg of CO<sub>2</sub>e.

In addition, the targeted relocation of production for one of our products to a site that was more convenient for a major customer allowed us to shorten the transport route by almost 70 % and save further annual emissions of approx. 130,000 kg of CO<sub>2</sub>e.

CO<sub>2</sub> savings through relocation of product production



We make a contribution to these SDGs:



## Energy – Using one of the largest industrial measurement systems to achieve more efficient energy management

Converting fossil fuels into energy leads directly to an increase in gases that are harmful to the climate in our atmosphere. This is why our energy management system aims first and foremost to use less fossil energy – as well as to generally consume less energy by increasing efficiency.

The four basic pillars of CO<sub>2</sub> reduction guide us in these endeavours:

1. Analysis of our own carbon footprint
2. Avoidance of unnecessary energy consumption
3. Reduction of CO<sub>2</sub> emissions where possible
4. Offsetting unavoidable emissions

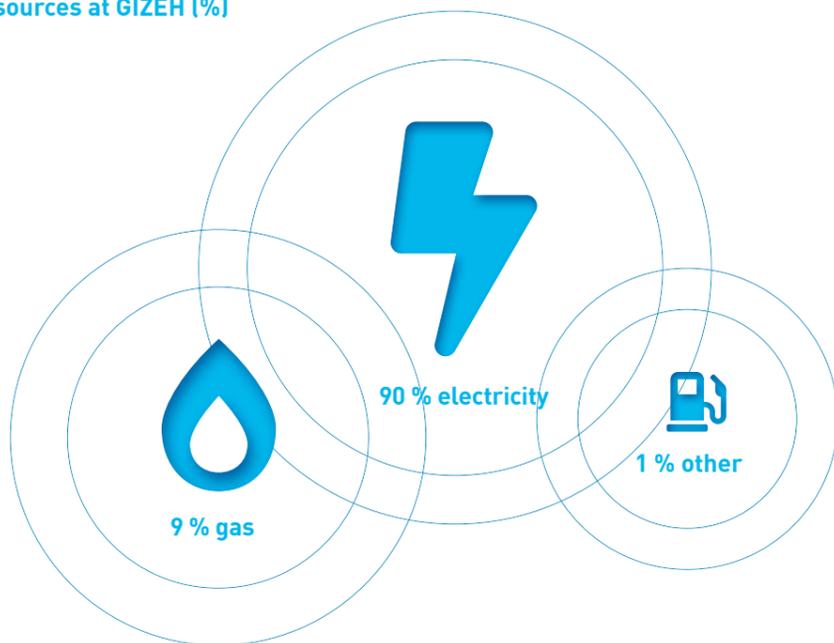
We opted for certification based on the ISO 50001 guideline in as early as 2012. This allowed us to lay a solid foundation for the sustainable use of different energy sources. In order to manage our continuous development and improvement using reliable data, we operate one of the most sophisticated energy measurement systems in the industry, with over 270 mea-

suring points. This allows us to accurately identify savings potential, optimise energy-intensive processes and, in doing so, save CO<sub>2</sub> and costs in the long term.

What we know today: over the last three years, we have required an average of approx. 40,000 MWh/a in energy for administration and production at the Bergneustadt and Elsterwerda sites. Almost 90 % of this relates to electricity and around 9 % to natural gas, with the remaining 1 % including the use of petrol, diesel and propane gas.

To reduce these figures even further, we are a committed member of the Energy Efficiency Networks Campaign of the German Federal Ministry for Economic Affairs and Energy (BMWi). The initiative seeks to promote joint efforts to improve energy efficiency through dialogue. Regular network meetings allow the members to exchange experience and ideas – which are also incorporated into our daily production routine.

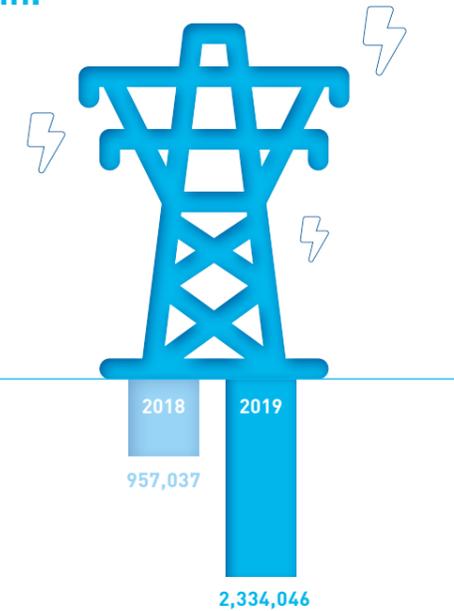
### Average distribution of energy sources at GIZEH (%)



## Electricity – Measures that are bearing fruit. And are being subsidised into the bargain.

**2.4 times**  
the savings compared to previous year

Electricity savings achieved 2017-2019 (kWh/a)



The analysis referred to above makes it clear: as the most widely used energy source (90 % share), the use of electricity is the biggest lever we have at our disposal when it comes to reducing our CO<sub>2</sub> footprint. As a result, it is logical for us to have initiated ambitious projects in the recent past to save electricity in particular.

Examples include:

- Investment in state-of-the-art production machinery
- Reduction in heat losses on production lines
- Compressed air optimisation incl. elimination of leakages
- Free cooling to take pressure of the refrigeration systems in the winter
- Intelligent control of switching light sources on and off.

And our hard work is paying off: all in all, we have succeeded in saving approx. 3,500 tCO<sub>2</sub>e a year at our sites thanks to the measures taken.

Some of the projects implemented offer such considerable savings potential that they are even subsidised by government agencies. GIZEH has approval from various agencies for grants amounting to approximately €120,000 in total in 2019.

Subsidies like this are an important factor in remaining competitive despite shouldering high investment costs.

One example is our most recent energy saving measure. It will save up to 180,000 kWh/a annually, which corresponds to approx. 96 tCO<sub>2</sub>e. In order to achieve these values, we are specifically optimising the refrigeration supply for our PET production. For example, we have recently taken the strain off our existing refrigeration systems by putting a "free cooler" into operation. It generates cold with the help of outside air, which leads to significant savings, especially in winter.

In addition, the cooling circuits feature a smart split to meet the relevant requirements. Cooling-intensive devices such as tools or special machinery have to be cooled at lower temperatures than, for example, the hydraulics. A system with two separate circuits to meet these different needs saves a lot of cooling capacity. And it also saves electricity in the process.

Savings that also won the German Federal Ministry for Economic Affairs and Energy over in an energy efficiency competition – and resulted in us being awarded a subsidy of 50 %.

## Renewable energy – We not only rely on “green electricity”; we also produce it ourselves

As well as boosting our energy efficiency, we are also pushing ahead with the active reduction of CO<sub>2</sub>. One of the key measures taken in this respect is the decision to switch the electricity we purchase to renewable sources.

In line with this approach, we have installed several photovoltaic systems at our German sites in recent years, which produce a total of around 200,000 kWh of CO<sub>2</sub>-neutral solar power for our own use. This corresponds more or less to the annual electricity requirements of

around forty three-person households in Germany.

Since the beginning of 2020, we have been using renewable European hydro-power to cover 100 % of our remaining electricity consumption. This step has already enabled us to make a large part of our business activities at our German sites CO<sub>2</sub>-neutral. As this often proves to be a challenge in other countries, we are currently working on a solution to enable our sites outside Germany to also operate using green electricity in the future.

Approx. **200,000 kWh**  
CO<sub>2</sub>-neutral solar power for our own use

## Gas – Using heat recovery to save more than a third

After electricity, the second-biggest energy source that we use is gas. We need gas not only for use in production, but mainly for heating our office and production areas. We have been able to reduce this form of consumption, specifically, by around 40 % in recent years, primarily thanks to the use of heat recovery technologies. Since then, we have been heating a large part of our premises using the waste heat generated by our air compressors.

A smaller proportion is supplied by our photothermal unit, which is mounted on the roof of a production building in Bergneustadt. Together with the ongoing upgrading of our heating systems, we have been able to reduce our specific heating gas consumption at this site by almost 70 % from 136 kWh/m<sup>2</sup> to 41 kWh/m<sup>2</sup>.

We make a contribution to these SDGs:



## Water – Systematic minimisation of our water consumption through recycling and heat coupling

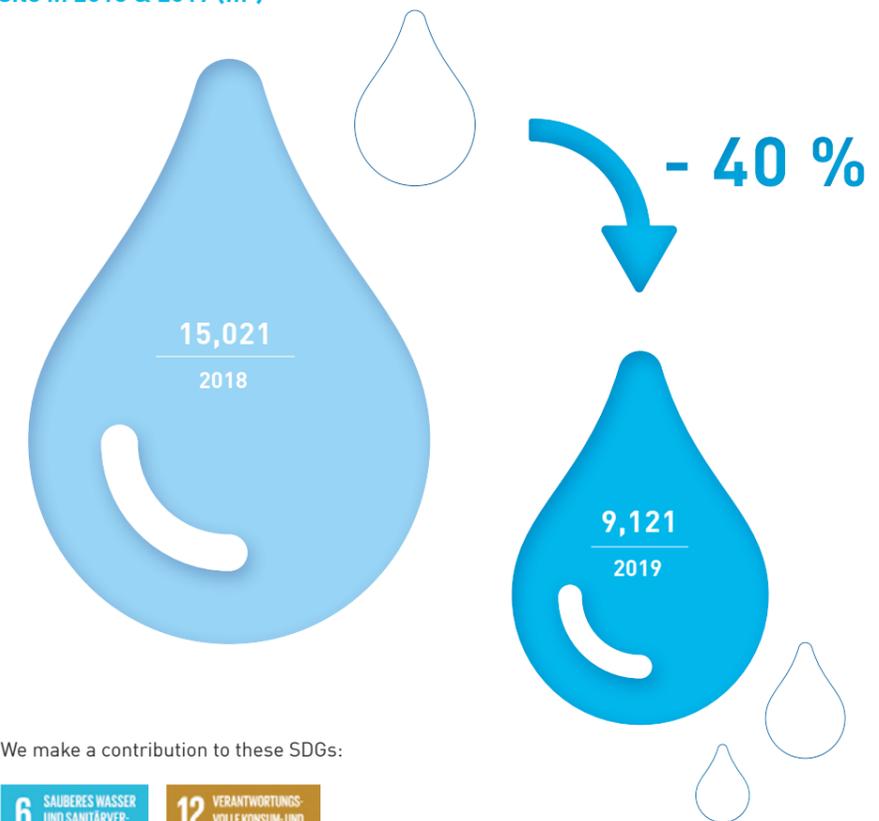
Clean drinking water is becoming increasingly scarce across the globe due to climate change and the growing world population. Particularly in regions with a high site-specific water risk, water scarcity is a major threat. In as early as 2013, for example, the World Economic Forum (WEF) identified a shortage of clean drinking water as one of the greatest global risks.

Within the GIZEH Group, we, too, regard water as one of our most precious and vital resources. This is why it is particularly important to us to systematically minimise water consumption in all areas of the company and in all processes.

Using state-of-the-art water treatment technology, we were able to switch the water cooling system for our machine chains to a closed circuit system. This has reduced our consumption of fresh water in this area to almost zero.

We have also made significant water savings in our cooling towers. By coupling the hydraulic circuit to be cooled with a heat recovery unit, the running time of the cooling tower is drastically reduced, especially in the winter months, meaning that hardly any water is needed for evaporation.

Water consumption at the Bergneustadt site in 2018 & 2019 (m<sup>3</sup>)



We make a contribution to these SDGs:



## Waste – Production rejects and waste not only more than halved, but also better recycled thanks to separation

In addition to the active measures we take to use energy more efficiently and cost-effectively, we are working systematically on recycling operational waste to the greatest extent possible and reducing the total waste produced on an ongoing basis. This translates into substantial raw materials, reduces CO<sub>2</sub> emissions and makes a significant contribution to protecting the environment.

### Minimising waste volumes

As a result, we monitor our production waste on a daily basis. Since the introduction of this approach in November 2018, we have been provided with a valuable pool of data that allows us to define and implement the most effective measures possible. Once again, our measurement and analysis activities paid off: compared with 2018, we reduced our total production waste by 57 % a year later (2018: 508 tonnes; 2019: 217 tonnes).

This has been achieved primarily through measures to increase efficiency. We use state-of-the-art technologies such as the inline process, which feeds rejects straight back into the production process. Software-supported evaluation of camera images allows any irregularities in the production process to be detected at an early stage and the resulting waste to be minimised as a result. We also, however, achieved good results by optimising our production planning and increasing the degree of standardisation in production. We succeeded in reducing our polypropylene plastic waste, for example, from 435 tonnes to 188 tonnes in the period between 2018 and 2019.

This example makes it clear: in most cases, waste is a valuable raw material which, if properly treated, can often be used in a new production process. One key step that has to be taken in advance, however, is the separation of the waste into individual recyclable components.

### Separating waste according to type

In order to achieve this, we adjust the system for separating our waste (e.g. by colour) to reflect our current production and the associated waste volume at regular intervals. This ensures that we are able to separate the waste as accurately as possible. The more homogeneous the sorted waste is, the greater the probability that it will be used in a second life cycle.

These efforts allowed us to more than halve the amount of unsorted (mixed) waste compared to 2018. (2018: 152 tonnes; 2019: 66 tonnes). In this case, one key component that made a decisive contribution to the achievement of the objectives related to moves to raise awareness among, and train, our employees with regard to the conscientious handling of raw materials and the separation of waste.

### Zero Pellet Loss

GIZEH Verpackungen has been certified by the "Zero Pellet Loss" initiative since 2017. The initiative aims to minimise the loss of plastic pellets into the environment. All of the participating companies are asked to draw up an action plan for the prevention of pellet losses and to initiate the implementation of the plan, including employee training.

“We invest a lot of energy into our resource-saving measures – so that we have to use less and less energy.”



## Nature – 4,000 trees planted and the reforestation of 12,000 trees initiated



Ecological footprint is a unit of measurement that indicates how much of the earth's surface area we would need in order to be able to continue to live as we are living now in the long term. This value currently corresponds to 1.7 Planet Earths – a figure that is on the rise. GIZEH is more than aware of this problem. As a result, we have ensured that this awareness is reflected in our initial analyses of our value chain, the aim being to reduce our ecological footprint with lasting effect. Various results have already been presented on the previous pages.

Alongside our conventional business activities, we also support a large number of nature conservation projects. They all share a common goal: protecting and restoring different ecosystems. We only work with certified partners such as the Welt-Wald-Klima-Initiative climate initiative of the "Senate of Economy" organisa-

tion and attach a great deal of importance to the quality and sustainability of the projects we support. For example, we plant one tree for every million containers we produce, helping to ensure the reforestation of approximately 4,000 trees every year.

As a company we also own around 4.4 hectares of forest and grassland in the Bergneustadt area which is managed and maintained sustainably. A project is currently being launched here to reforest areas damaged by storms and drought with around 12,000 trees. Besides the ecological benefits, these reforestation projects have another important effect: they help to extract CO<sub>2</sub> from the atmosphere and bind it in forests. We believe that these projects are a meaningful and necessary addition to the CO<sub>2</sub>-effective reduction measures that we are implementing on our business premises.

We make a contribution to these SDGs:



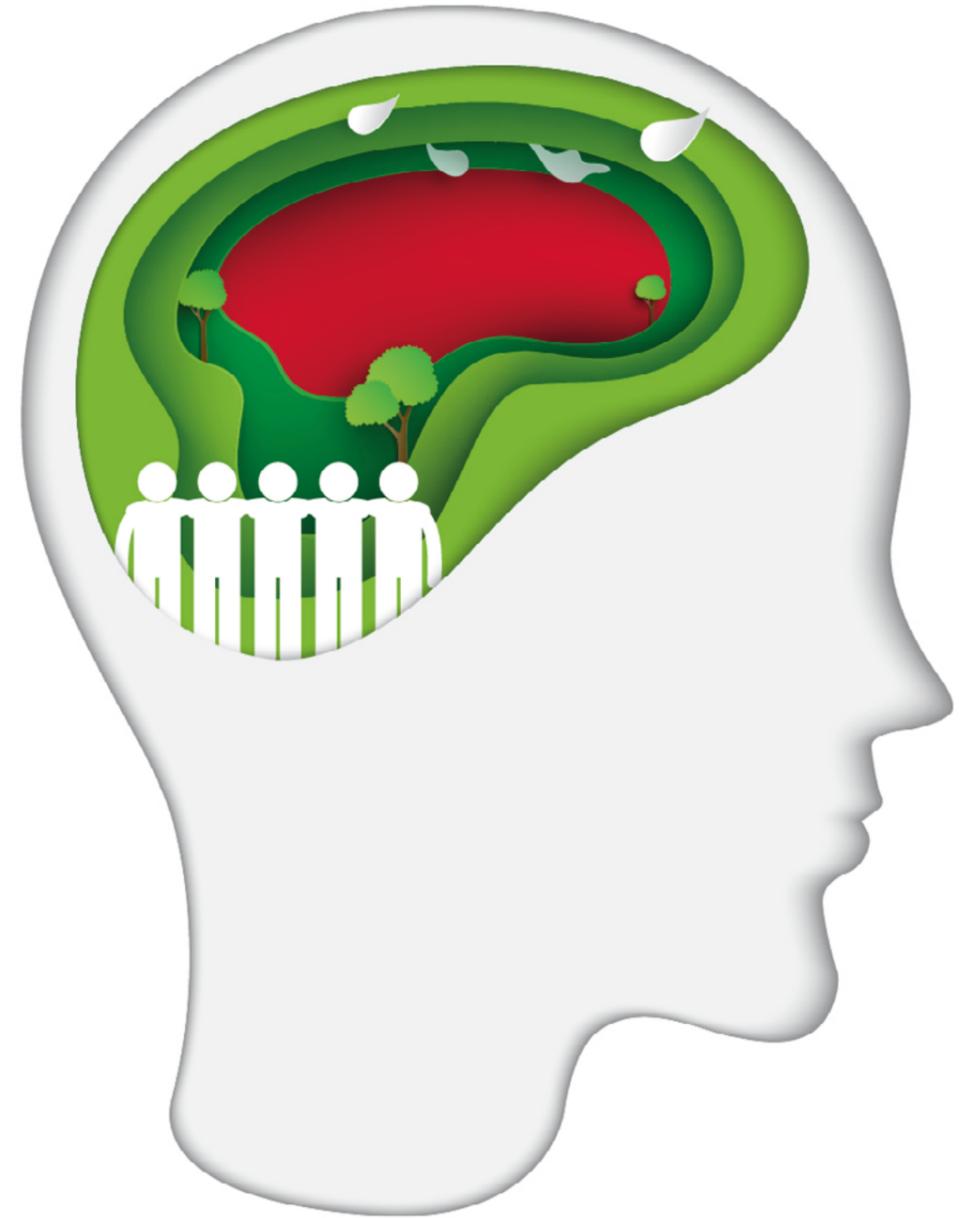
We make a contribution to these SDGs:



# 4

## OUR TEAM

Sustainably securing what makes us successful



# OUR TEAM

GIZEH – The facts at a glance

## Our highlights

- ✓ We are agile thanks to fast decision-making processes and flat hierarchies.
- ✓ GIZEH is committed to a family business culture.
- ✓ Time and again, GIZEH provides individual support to employees in cases of hardship.
- ✓ Important events are celebrated with all employees.
- ✓ We provide vocational training: 35 people are currently undergoing vocational training at GIZEH's German sites. 75 % of trainees are currently taken on after they complete their training.
- ✓ We provide ongoing training: both technical and interdisciplinary further training, such as language courses, shape our employees' careers.
- ✓ We are growing steadily and are constantly hiring new employees.
- ✓ New hires get to know the company thanks to a structured onboarding phase.
- ✓ The average length of service is 13 years – some of our colleagues are already the third generation of their families to work in the company.
- ✓ Fresh food is prepared daily in the canteen at our main site in Bergneustadt.
- ✓ Occupational pension provision and tax-free employer grants for capital formation purposes offered to employees.
- ✓ Spacious offices and state-of-the-art equipment are a matter of course for us.

## Our visions

- ✓ We will pay particular attention to the selection and internal development of talent.
- ✓ We attach a great deal of importance to cross-site networking among our employees and will make particular efforts to promote this in the future.
- ✓ We will enhance, and make greater use of, new recruitment tools.

## Our initiatives



## Sustainably securing what makes us successful

Our employees are the decisive factor in GIZEH's success. They master challenges and create value. They stick together, pull together and think proactively. Their creativity provides impetus new products and implements customer projects. These are all of the factors that have made GIZEH successful in recent years.

That is why we strive to intensify a corporate culture that opens up opportunities for this kind of working: fast decision-making processes and flat hierarchies are just as important as an open feedback culture and communication across all levels.

Agility has emerged as a buzzword in the world of business in recent years. Here at GIZEH, we have been putting this sort of agility into practice for 20 years now. We deliberately avoid open-plan offices, for example, in order to allow our employees to concentrate on their work in peace and quiet.

As a family-owned business, we are shaped by the traditional values that are generally associated with family businesses: reliability, solidarity and long-term thinking. This is also – but not only – why treating each other as family is an important part of our daily interaction with each other within the company. This is particularly evident when employees approach us and ask for individual support from the company because they find themselves in a position of hardship.

Other examples of our sense of community are the annual fundraising campaigns organised by vocational trainees for non-profit associations, various sports teams, summer parties in Bergneustadt and Christmas parties in the individual departments. One special reason to celebrate is the company's 100th anniversary. Unfortunately, the big anniversary celebration has had to be postponed to 2021 due to the current situation.

## Initial and further training

Training its own employees is a matter that is close to the GIZEH Group's heart. Young people can learn right from the start what it means to work for one of Europe's leading manufacturers of high-quality plastic packaging. This allows employees to grow with the company and shape the future.

GIZEH's German sites currently have 35 vocational trainees who are mentored by qualified employees during their training. 25 employees have the necessary qualifications for this: the instructor's licence. Since 2006, 92 trainees have successfully completed their vocational training with us. Today, in 2020, 39 of them are still at GIZEH. Trainees are generally taken on after their training and receive intensive support with regular feedback meetings in the first year after their training. 75 % of trainees were taken on in 2019. This allows many management positions to be filled from within our own ranks.

The German sites cooperate with local educational providers and universities and offer various training opportunities – for both technical and commercial occupations. There is also the option for students to complete sandwich degree courses at GIZEH. In addition to the high-quality on-site training, the trainees are also taught in English to ensure that they are ideally equipped for our globalised working world. We also promote individual participation in the European Commission's Leonardo da Vinci programme – an exchange programme that supports cross-border vocational training. In addition to the various vocational training programmes, we develop and train employees at GIZEH according to their individual needs. In particular, language training, especially in English and French, is readily available to all employees.

## Knowledge management

New employees at GIZEH are trained as part of an extensive onboarding process, giving them an insight into the specialist areas that are important to them. They have the opportunity to establish direct contact with their colleagues and minimise any problems that might arise at interfaces from the outset. The company's own intranet also provides access to the latest information – on processes and

topics from all areas of the company. The intranet, based on a Wiki, is maintained by all of the company's employees. Alongside providing information, protecting personal data is particularly important at GIZEH: in cooperation with the data protection officer, all HR processes are put to the acid test. This ensures that the data cannot be accessed by anyone who is not authorised to do so.



## Employee loyalty and social benefits

They say that family businesses think in terms of decades or generations – and not in quarters. This naturally also shapes our HR policy, with the result that our staff also remain loyal to GIZEH in the long term. An average length of service of 13 years bears testimony to this: it would seem that our employees enjoy working here.

Another special feature that we, as a family business, are particularly proud of is the fact that some employees are already the third generation of their families to work in the company. This is also because GIZEH always endeavours to provide work or vocational training for employees' children, provided that their skills and qualifications match the company's needs.

To ensure that our employees will continue to enjoy working at GIZEH in the future, fresh food is prepared daily in the canteen at the main site in Bergneustadt (and should there be any left over, ReFood turns it into environmentally friendly energy). For those employees who do not wish to use the canteen, we offer additional break rooms. We also offer occupational pension provision, tax-free employer grants for capital formation purposes and prepaid cards that are topped up based on the current situation. These cards can be used with over 20,000 partners at any time. Its employees' health is also a top priority for GIZEH: in addition to ergonomic workstation design, an influenza vaccination is offered to all employees every year.

## Diversity

For GIZEH, the person as an individual is at the centre of everything we do. Background, gender and other characteristics are irrelevant. Today, GIZEH represents 21 nations worldwide – and at the German sites in Bergneustadt and Elsterwerda, for example, women account for more than 30 percent of the workforce.



Johannes Heynen, Head of HR and Organisation

“Belonging to GIZEH - for some employees, it's almost a family tradition.”

We make a contribution to these SDGs:



# 5

## OUR FELLOW HUMAN BEINGS

Because the word “undertakings” contains the word “undertaking” for a reason



# OUR FELLOW HUMAN BEINGS

GIZEH – The facts at a glance

As a family-owned company that strives to operate in a socially and ecologically sustainable manner, our commitment extends beyond our fields of business.

## We support ...

- ✓ ... reforestation and organic farming in Ethiopia
- ✓ ... training for destitute young people in Ghana
- ✓ ... education for orphans and civil war victims in Northern Uganda
- ✓ ... projects to provide access to clean drinking water and safe sanitation worldwide
- ✓ ... the dreams of children suffering from cancer in Germany



## Because the word “undertakings” contains the word “undertaking” for a reason

As a family business, we take our responsibility towards our customers and employees seriously – as we do our responsibility towards our fellow human beings around the world. We are committed to specific, one-off and long-term aid projects in Germany and abroad. In particular, creating opportunities for support in difficult circumstances is one of our central

concerns. We present some of the partnerships we support in order to make our contribution to social cohesion below. Our commitment focuses on three main areas:

- Reforestation & environmental protection
- Vocational training
- Measures to support children

## Planting trees in Ethiopia

GIZEH Verpackungen is a sponsor of the “World Forest Climate Initiative”, a cooperation between the Senate of Economy in Germany and the World Forest Foundation. The main objective of the initiative is to implement worldwide reforestation and forest protection projects on 500 million hectares of land with an annual CO<sub>2</sub> reduction of approximately 5 billion tonnes.

The ecological and social benefits are also validated based on CCB standards.

### The location

The reforestation area is located in the mountainous region of southern Ethiopia, 300 kilometres south-west of the capital Addis Ababa. The project area extends over a total of 503 hectares into the highlands of Mount Damota in the north of the city of Soddo.

### Benefits and advantages

#### Socially fair:

- Co-determination and self-determination for local communities. Long-term and socially just employment relationships for the local population (over 100 employees).
- Training in sustainable agriculture: establishment of a tree nursery to grow common regional vegetables such as native spinach and maize, as well as medicinal plants.
- Part of the income goes to educational, health and environmental projects.

#### Makes ecological sense:

- Protected areas for biodiversity.
- Erosion and water protection thanks to reforestation.
- Protection from mudslides.
- Renaturation of streams.

Because sponsorship is not enough for us, we also participate in other reforestation programmes organised by CO<sub>2</sub>OL and Forest Finest, with this promise:

we plant a tree for every million containers we produce!

This means that GIZEH Verpackungen will be responsible for the reforestation of approximately 4,000 trees planted in Ethiopia every year.

### The project

Local communities have developed the reforestation project in Soddo together with the non-governmental organisation World Vision. The aim is to protect the heavily degraded forest on the slopes of Mount Damota and to plant new trees, contributing to the long-term regeneration of the region’s ecosystem. The members of the five communities living around Mount Damota are directly responsible for the project’s implementation and have already planted more than 48,000 new trees. The project is one of the first in the world to be awarded Gold Standard certification for land use and forestry projects.

## Free vocational training in Ghana

GIZEH Verpackungen is involved as a "trainer in Africa" through the organisation Opportunity International. This programme gives poor but highly motivated young people in Ghana free three-year vocational training, health insurance and work tools, which remain in their possession. They are trained as hairdressers,

cooks, tailors, car mechanics, painters or metalworkers. Completing their vocational training gives the young people prospects and helps to combat poverty and the exodus from the region in the long run.

[www.oid.org](http://www.oid.org)

## School education for orphans & civil war victims

In Africa, GIZEH supports the commitment of a team that is working in northern Uganda, a region plagued by civil war. Most of the victims of the civil war are children, more than half of whom live alone in the district of Gulu-North Uganda. The families and also the village communities in this region have largely been destroyed. Many children have fled or escaped the army but have subsequently suffered serious illness, become traumatised, suffer from infectious diseases and even starvation. They have no home and live in camps. There is limited medical care and opportunities for schooling and training are scarce. This is not the only reason why the children and young people in Gulu-North

Uganda benefit from fast assistance provided without red tape, in particular.

The Naume children's foundation is committed to the region of Gulu-North Uganda in the long term:

- School and further education
- Construction of a boarding school for needy children, mainly orphans
- Basic medical services
- Access to clean water and food

Foundation board members and volunteer teams travel to the crisis region at their own expense to implement the foundation's goals.

[www.naume-kinderstiftung.de](http://www.naume-kinderstiftung.de)

## Access to clean drinking water worldwide

As a member of the non-profit association Viva con Agua de Sankt Pauli e.V., GIZEH Verpackungen is committed to water projects across the globe. Viva con Agua aims to provide access to clean drinking water for everyone worldwide. The water projects supported are designed to be sustainable and are based on the WASH principle, which always includes sanitation and hygiene components to ensure

permanent access to clean drinking water. In order to achieve this objective, Viva con Agua supports a wide range of projects and activities at home and abroad and also attracts young people who are interested in making a social contribution at the same time.

[www.vivaconagua.org](http://www.vivaconagua.org)

## Making dreams come true for children suffering from cancer

Strahlemaennchen.de – this initiative, based in Finnentrop, makes dreams come true for children suffering from cancer. The idea is also to allow siblings and parents of these children to share in their child's joy. The measures are designed to distract from the terrible illness and impart a little zest for life.

[www.strahlemaennchen.de](http://www.strahlemaennchen.de)

## Goldeimer – Toilets for everyone

The non-profit company "Goldeimer" has developed more than 70 eco-friendly toilets, which are used at festivals, and sells its own recycled toilet paper carrying the "Blue Angel" eco label. GIZEH supports the company, whose mission is to educate people about the lack of sanitation worldwide and to support sanitation projects of its friends and partners Viva con Agua and Welthungerhilfe.

[www.goldeimer.de](http://www.goldeimer.de)

## There are numerous other larger and smaller local and regional projects.

"We are grateful for GIZEH's positive development. And we are committed to ensuring that GIZEH makes this sort of success possible for many more people."



Jacqueline Jung, Shareholder



Johannes Heynen, Head of Human Resources and Organisation

We make a contribution to these SDGs:



**We are looking forward  
to a sustainable future.**

**Legal notice**

Published by: GIZEH Verpackungen GmbH & Co. KG, Breiter Weg 40, 51702 Bergneustadt

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Editorial staff: Ralf Jung, Jacqueline Jung,  
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Layout: Yellow Tree, Siegen

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35, 40), Melanie Haas (bottom of p. 36), oid.org  
(p. 36 right), WorldForestClimateInitiative  
(p. 36 left)

Printed by: Groll Druck, Meinerzhagen

Printed on 100 % recycled paper

