



STOELZLE GLASS GROUP



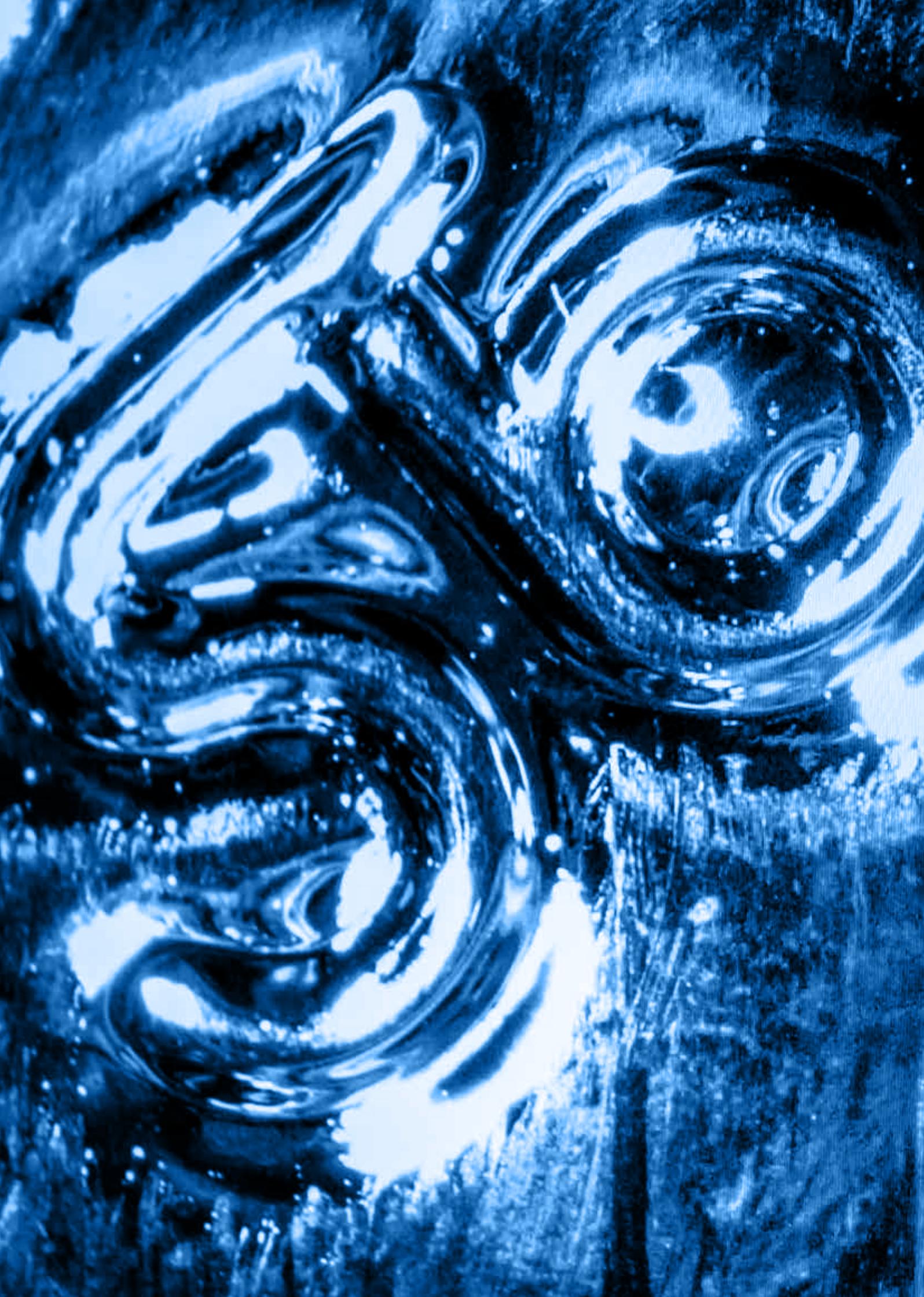
# SUSTAINABILITY REPORT 2019

Continuing our sustainable way for the next decade

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SUSTAINABILITY  
WILL LEAD  
THE STOELZLE  
GLASS GROUP  
SUCCESSFULLY  
INTO THE FUTURE.

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# PREAMBLE

## CEO Statement

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I'm pleased to present the Stoelzle Glass Group's second sustainability report. This report highlights our efforts and our responsibility for a sustainable and eco-friendly behaviour. We did not limit ourselves to reporting on a conscious resource and energy management, but also considered our social commitments towards our employees and business partners.

We are well aware that growth and the expansion of our production capacity could easily result in a negative impact on the environment and sustainability. Therefore the Stoelzle Glass Group invested significantly in initiatives and technologies which protect our environment. Today, we can be proud not only of meeting our legal obligations, but also of making a significant contribution to the environment as a result of our ongoing improvements and innovations. Our medium-term targets for 2025 and beyond continue to pursue this strategy.

Together with the increase in capacity, the steadily increasing number of personnel encouraged us to implement a wide range of activities aimed at employee development. Stoelzle places great value on training and competence, continuous further training, fostering young talent and of course keeping experienced, long-standing members of staff completely up to date. We rely on transparent and fast communication between all employees. To spread relevant information throughout the Group, we use a digital Stoelzle App which motivates our employees not only to read but to comment and even share what is going on at Stoelzle to externals.

Our focus still lies on occupational safety and the prevention of accidents at work: we learned that it is hard to reach our target in this respect and need to strengthen measures to ensure a safe working environment and safety-conscious employees.

We are proud to manufacture high-quality packaging for the pharmaceutical, food, spirits and cosmetics industries from the inert material that is glass. In times when the environmental impacts of packaging count more than design or quick availability, we are in the position to offer containers which can be recycled infinitely without compromising quality, flavour neutrality or functional safety. Glass packaging will become new containers over and over again as long as people support industry by disposing and sorting their waste properly. Glass is 100% natural and does not react with the content. This is essential for medicines as well as food or beverages. Besides, glass containers look great – our designers and technical engineers are pushing the boundaries daily to develop and manufacture outstanding bottles.

Besides design and quality, longevity will definitely be a USP and a key aspect of our Group's sustainability strategy in the future. This sustainability report and the conclusion of this project mark the first step – now it's a question of long-term further development and putting our values into practice and in order to lead the Stoelzle Glass Group successfully into the future.



DI Georg Feith, MBA  
CEO Stoelzle Glass Group

A stylized, handwritten signature in black ink, consisting of a large initial 'G' followed by several horizontal strokes.

# 1. COMPANY OVERVIEW

## Stoelzle Glass Group in a nutshell

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### STOELZLE GLASS GROUP

The Stoelzle Glass Group can look back on more than 200 years of glass production. It all started in 1805, when the Oberdorf glassworks was founded in Bärnbach, Austria; and then in 1871 a further glass production site was established in Köflach. In 1987 these two glassworks – named Stoelzle Oberglas AG – were taken over by CAG Holding, which is owned by Dr. Cornelius A. Grupp, who has since then been the sole private owner of all Stoelzle Glassworks. The network has been expanding continuously with the opening of several other European glass works (see Milestones in the company history on page 8). Currently, the Group consists of six production sites and three decoration facilities in Europe. Its registered office is located in Köflach, Austria, with four further offices in Vienna (Austria), Moscow (Russia), Milan (Italy), Cognac (France) and New York (USA).

The Group operates worldwide in its four strategic Business Units: PHARMA, SPIRITS, PERFUMERY & COSMETICS and CONSUMER. All of the manufacturing sites are strategically dedicated to one or two Business Units and operate as profit centers in which key functions such as Finance, Quality Management, CSR or Purchasing are controlled centrally.

At Stoelzle we take advantage of both our historical background and modern technologies. Industry 4.0 and IoT enable us to develop more than 300 innovative and appealing new products per year, many of them ending up the proud winners of internationally renowned Packaging & Design Awards. We rely upon the utmost high quality, on brilliant designs and stunning decoration in all our products.

Our vision is to be the first-choice partner for our customers and our employees by establishing a culture of mutual trust and by striving for high performance, flexibility and reliability.

	Headquarters in Köflach (AT)		350 Million euro turnover (2019)
	6 Production sites		3.2 Billion bottles output in a year
	3 Decoration sites		Values: Trust, Reliability, Transparency, Sustainability
	5 Sales offices (AT, RU, USA, IT, FR)		Quality Certifications: ISO GMP 15378, BRC IOP Food Packaging Standard, ISO 9001
	2,600 Employees worldwide		Environment & Energy Certifications: ISO 50001, ISO 14001

## ACTIVE AROUND THE WORLD

### ● PRODUCTION SITES

1. Stoelzle Oberglas GmbH (Köflach, AT)
2. Stoelzle Wymiarki Sp. z o.o. (Wymiarki, PL)
3. Stoelzle Union s.r.o (Heřmanova Huf, CZ)

### ● PRODUCTION & DECORATION SITES

4. Stoelzle Częstochowa Sp. z o.o. (Częstochowa, PL)
5. Stoelzle Masnières Parfumerie & Decoration SAS (Masnières, FR)
6. Stoelzle Flaconnage Ltd. (West Yorkshire, GB)

### ● SALES REPRESENTATIVES

### ● SALES OFFICES

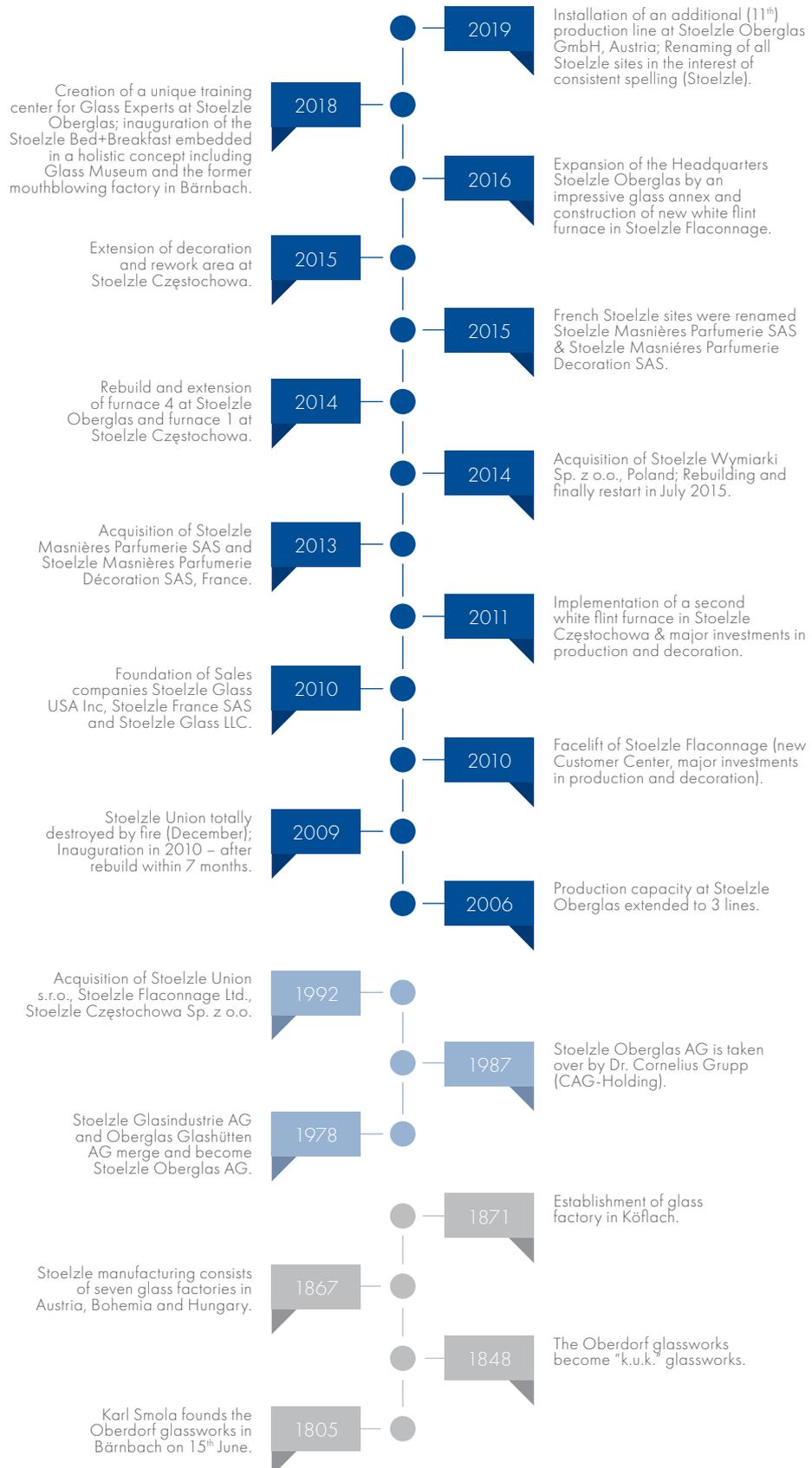
7. Stoelzle Glass USA Inc. (New York, USA)
8. Stoelzle Glass Russia LLC (Moscow, RU)
9. Stoelzle Oberglas GmbH (Vienna, AT)
10. Stoelzle Glas Italia srl (Milan, IT)
11. Stoelzle Glass Group (Cognac, FR)

### ● DISTRIBUTION CENTERS

12. Salt Lake City (Utah, USA)
13. Cranbury (New Jersey, USA)



## MILESTONES





## 2. SUSTAINABILITY

The regular publication of sustainability reports emphasizes the Stoelzle policy of taking sustainability seriously and of developing it constantly. Stoelzle wants to inform its stakeholders actively and continuously about our activities, achievements and targets for the future.

# SUSTAINABILITY MANAGEMENT



**“OUR SUSTAINABLE APPROACH  
PROTECTS WHAT MATTERS:  
PEOPLE & ENVIRONMENT”**



**2 SUSTAINABILITY REPORTS  
2016 & 2019**



- 1 *Compliance Management*
- 2 *Efficiency of Resources & Circular Economy*
- 3 *Energy & Carbon Footprint*
- 4 *Occupational Safety & Health Protection*
- 5 *Social Standards & Working Conditions*
- 6 *Sustainability in the Supply Chain*
- 7 *Customer & Consumer Awareness*



**1 common  
sustainability  
approach**

## MEMBERSHIPS AND PARTNERSHIPS

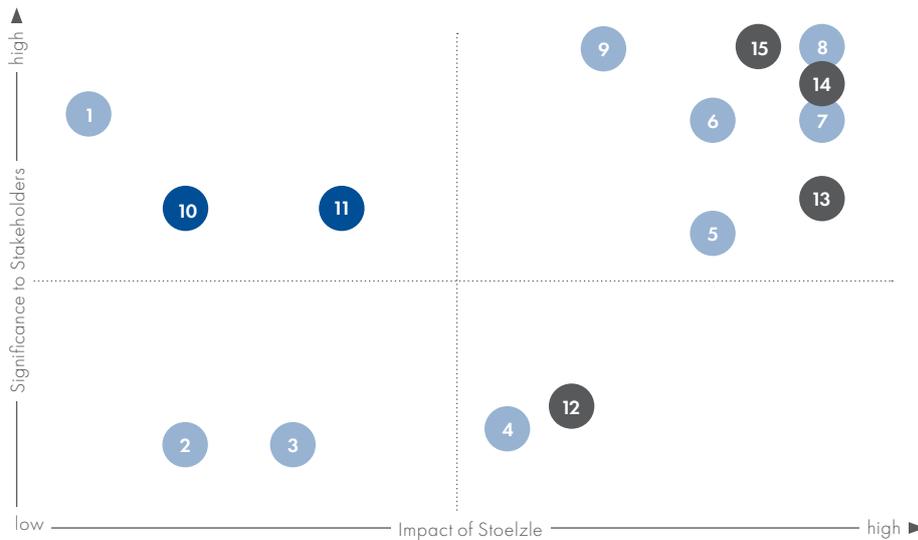
- National Associations of glass and ceramic industry
- Association of producer and supplier of medical devices
- Entreprise du Patrimoine Vivant – Living Heritage Company
- Cosmetic Valley Association
- HTS-Cluster Human-Technology Styria
- DGG – German Society for Technique in Glass Industry
- HVG: Metallurgical Association of the German Glass Industry
- GlassTrends – Consortium of worldwide operating industries
- Austrian Federal Geological Survey
- FEVE – European Glass Container Federation
- Furnace of the Future – Collective industry effort in collaboration with FEVE
- Close the Glass Loop – Collective industry effort in collaboration with FEVE
- Friends of Glass
- Montan University Leoben
- University of Applied Science FH Joanneum
- TH Deggendorf TAZ Spiegelau – Higher Education Institution for Technique
- British Glass Manufacturers Confederation

# 2. SUSTAINABILITY

## Our approach to sustainability

### ABOUT THE REPORT

This is Stoelzle’s second sustainability report. When we decided to issue our first sustainability report in 2016, we also decided to adhere to the GRI’s Reporting Guidelines. In this second report we still kept that as a basis and applied the internationally acknowledged GRI Standards reporting framework. This report has been prepared in accordance with the GRI Standards: Core option. To ensure that these principles are observed throughout both reports, an external consultant supported us in this project. The sustainability topics in the Stoelzle reports were defined internally by the Sustainability Team. In addition, in 2016 about 80 key stakeholders (customers – suppliers – employees) participated in an anonymous and independent stakeholder survey. The process resulted in the Materiality Matrix and definition of certain aspects of the first report which we can still rely upon for our second report. The material aspects were finally approved by the CEO.



Stoelzle Glass Group materiality analysis

#### ECOLOGICAL ASPECTS

- 1 Waste and safe storage
- 2 Works council and collective bargaining
- 3 Eco design
- 4 Transport and logistics
- 5 Use recycled materials and by products; Resource efficiency
- 6 Low carbon footprint; Energy
- 7 Emissions
- 8 Employee health and safety
- 9 Avoidance of problematic substances

#### SUPPLY CHAIN ASPECTS

- 10 Sustainable mining
- 11 Sustainable management of suppliers; Region and neighbours

#### SOCIAL ASPECTS

- 12 Equal opportunities
- 13 Employee communication & participation
- 14 Consumer awareness
- 15 Legal compliance

## SUSTAINABILITY FOR US MEANS ...

### PROTECTING THE ENVIRONMENT

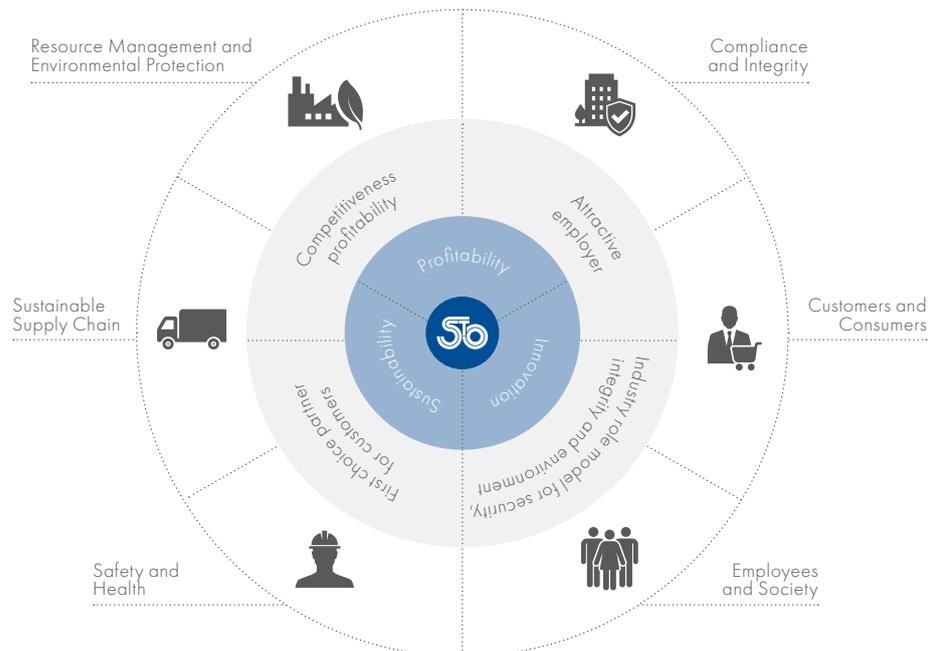
As a glass producer we are proud of the fact that glass is THE perfect packaging material: it is made from 100% natural materials and can be recycled and turned into new glass containers over and over again without losing quality. Compared to other packaging materials, glass does not pollute the environment. It is inert, what means that glass containers will not react to their contents, and do not contaminate them with hazardous substances. Thus, glass packaging protects both the content and the consumers. We are however aware of our energy-intensive production and strive in all processes and technologies to balance this impact with constant investments and improvements. We employ a CSR Manager who monitors and coordinates on a Group level all the initiatives and measures implemented by the single Stoelzle sites. Sustainability is a prerequisite for being successful in the future, and has therefore been included as a key aspect in the Group's strategy.

### SOCIAL RESPONSIBILITY

Stoelzle employees are fascinated by glass. This passion is alive and well, and is evident in the daily work carried out by our employees, from executive management to the operators on the lines. Our employee-focused approach is driven by the leadership principles of the "5 Ts" (Trust – Transparency – Target-driven – Teamwork – Talent Research). We set a high value on ethical behaviour both internally with our employees and in cooperation with business partners. Our Code of Conduct summarizes the guidelines and forms the basis of our behaviour towards all stakeholders.

### BEING A SUSTAINABLE PARTNER FOR OUR STAKEHOLDERS

Thanks to the successful growth of the Stoelzle Glass Group and its 4 strategic Business Units, stakeholders can trust Stoelzle as a reliable business partner that demonstrates respect for nature and its employees.



## THE MATERIAL ASPECTS WITH THE HIGHEST PRIORITY

	Legal compliance	Compliance with laws and local regulations concerning product liability, environmental aspects and worker protection are a top priority for us. We make sure that all legal requirements are adhered to.
	Employee health and safety	The health and safety of our employees is a fundamental sustainability topic. We make sure that working conditions prevent accidents and occupational diseases. We invest in the general well-being of our employees.
	Employee communication and participation	We strive for long-term relationships with our employees. Active communication is important. All employees – regardless of their positions in the company – shall receive training opportunities.
	Avoidance of hazardous substances	Avoiding hazardous substances – e.g. heavy metals like lead – in our products safeguards the health of the end user and is an important factor in environmental protection as a whole.
	Emissions	We endeavour to avoid all kinds of emissions into the environment (air emissions, water emissions). Compliance with legal limits is only the basic requirement in this respect.
	Energy and low carbon footprint	Glass production requires energy-intensive processes. Efficient use of energy in our production process, in our industrial premises and in our employee mobility, as well as the use of renewable energy sources, are important issues to us. By using modern technologies such as heat recovery, we can increase our energy efficiency, reduce our emissions and contribute to climate protection.
	Resource efficiency	Raw materials for our products as well as water for our production are valuable natural resources! The efficient use of these natural resources in the production of our products is an important issue to us.
	Use of recycled materials	The re-use of materials helps save resources. Using post-consumer cullet saves valuable raw materials. Reusable packaging material made of recycling materials also contributes to resource efficiency. Furthermore, the use of by-products from other industries has environmental benefits.
	Consumer awareness	It is important that consumers value products with sustainable packaging. Furthermore, consumers should be encouraged to dispose of packaging in an environmentally-friendly manner, and to recycle. This contributes to the circular economy.

## IN ADDITION, WE ALSO DECIDED TO REPORT ON THE FOLLOWING SUSTAINABILITY ASPECTS

	Waste and safe storage	Separation, storage and treatment of waste within our production sites ensures environmental protection and optimal recycling of the waste.
	Sustainable management of suppliers	Just as we observe sustainable management practices in our own production, it is also important to us that all our suppliers guarantee environment protection, ethically correct conduct, and fair/safe working conditions for their employees.

## CONTRIBUTION TO GLOBAL SUSTAINABLE DEVELOPMENT GOALS

In 2015, the “Agenda 2030 for sustainable development” was adopted at a United Nations summit. All 193 member states of the United Nations committed themselves to working towards the implementation of the Agenda 2030 with its 17 development goals (Sustainable Development Goals, SDGs) at national, regional and international level by 2030. In 2019, Stoelzle analysed the 17 development goals with a view to the importance of its business activities. In many of these areas, Stoelzle can make an important contribution to social development. However, the intensity of Stoelzle’s potential impact on the UN development goals varies. Against this background, the following development goals are particularly relevant.

### STOELZLE AND THE GLOBAL GOALS



#### Good Health and Well-Being

We pay close attention to clean production in all areas. Compliance with legal limits and the responsible use of chemicals and critical substances are minimum requirements.



#### Decent Work and economic growth

Through long-term investments and the corresponding innovation performance, we promote the local economy, contribute to regional added value and create numerous secure jobs. We reduce HS&E impacts of our activities, respect and protect labour rights and provide safe, secure and healthy working environments for all employees.



#### Responsible Consumption and Production

Glass is critical to ensuring sustainable consumption and production patterns. It is a permanent material that is infinitely recyclable, reusable, and refillable. In addition we are striving for an increased circular approach in processes and products.



#### Climate Action

As the Glass Industry is very energy intensive, we play a significant role when it comes to reducing emissions associated with the supply chain and passing on a healthy planet to future generations. With energy efficient equipment and increased cullet input we reduce our carbon footprint.



#### Peace, Justice and Strong Institutions

Internal compliance mechanisms ensure that corruption and bribery have no place in our company. In addition, Stoelzle is aware of its responsibility in the supply chain and is working to align it with environmental and social criteria.



#### Partnerships for the Goals

Stoelzle takes responsibility for its own activities, but also in its sphere of influence upstream (raw materials sourcing) as well as downstream (use and end-of-life). We invest in close partnerships with the stakeholders: customers, suppliers, knowledge institutes and communities along our value chain.



## STAKEHOLDER MANAGEMENT

In order to be able to work together with stakeholders, one has to conduct a dialogue first. Dialogue means respecting stakeholders' opinions, bringing in expertise and competence and learning from the partners' point of view. Every dialogue begins with the provision of transparent information. This helps stakeholders to be well informed and have trust. Trustful relationships with stakeholders help reduce existing tensions and avoid misunderstandings.

Every year the continuous stakeholder dialogue at Stoelzle includes numerous yearly personal discussions, training, interviews, surveys, clarifications, joint product developments, web platforms, regular media contacts, trade fairs and conferences, press interviews, as well as audits with our internal and external stakeholders.

### What are stakeholders?

- ▶ An individual or group that has an interest in any decision or activity of Stoelzle.
- ▶ Are affected by Stoelzle in any way.
- ▶ Have the right to influence Stoelzle's sustainable strategy.



### Stakeholders of Stoelzle Glass Group

- Internal Parties
- External Parties

STAKEHOLDER GROUPS	🕒	ENGAGEMENT
Owner & Supervisory Board	quarterly	Board meetings, conferences,
Management & Sister Plants	continuously	Management meetings, Group telephone calls
Employees	continuously	Employee dialogues & surveys, internal media, employee events, company meetings, mentoring programmes
Clients	continuously	Customer dialogues, customer surveys, social media, trade fairs, media
Suppliers and Contractors	continuously	Dialogues, trade fairs, training, audits
Work Councils	continuously	Dialogues
Local Stakeholders & Neighbourhood	continuously	Personal talks, plant tours, neighbourhood discussions
Science & Research	continuously	Round tables, R&D cooperation, lectures, discussions
Authorities	continuously	Events, submissions
Media	continuously	Press information, interviews, telephone conversations, informal exchange
Networks & Associations	continuously	Participation of (top) managers or technical experts in initiatives, forums and events, memberships in initiatives

## VALUE CHAIN

Stoelzle sees sustainability as an opportunity to improve its own performance, develop new markets, create value for its key stakeholders and make a positive contribution to the environment and society. In order to find out where and in what context sustainability-relevant effects of business activities and relationships occur, it is necessary to consider the entire value chain. Opportunities and risks with regard to the various aspects of economic, social and ecological sustainability arise not only in the direct sphere of influence of the Stoelzle Glass Group, but are also found in upstream and downstream processes.



**Corporate Social Responsibility (CSR)** mainly focusses on making corporate business activity and corporate culture sustainable in three aspects: Ecological, Social and Economic aspects.

**ECOLOGICAL ASPECTS**  
**Glass, Production:** choice of technologies, sustainable procurement

**SOCIAL ASPECTS**  
**Responsibility, Employees:** health and safety, business ethics

**ASPECTS ALONG THE SUPPLY CHAIN**  
**Suppliers, Customers & Consumers:** transportation, consumer health and safety, consumer awareness



### 3. RESPONSIBILITY

A responsible and lawful conduct, as well as respect for human rights, is an integral part of the Stoelzle Glass Group's corporate culture. This attitude is expected from all business partners and along the entire value chain. Stoelzle considers compliance and integrity to be a central requirement for ongoing business relations and this is how we secure our long-term corporate success.

# RESPONSIBILITY AND INTEGRITY

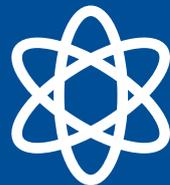


**“OUR VALUES AND STANDARDS ARE OF FUNDAMENTAL SIGNIFICANCE FOR OUR SUCCESS”**



## PERSPECTIVE → 2025

100% of compliance awareness training of all employees.



## STOELZLE CORE VALUES

- ▶ *Trust & Reliability*
- ▶ *Flexibility & Engagement*
- ▶ *Fairness & Loyalty*



**ZERO**  
CASES OF  
CORRUPTION



**ZERO**  
CASES OF  
UNFAIR  
COMPETITION



**TWO**  
SITES IN 2019  
WITH ETHICAL  
SMETA AUDITS

## CODE OF CONDUCT PRINCIPLES



Compliance with regulations



Respect for human rights



General business practices & integrity



Internal collaboration



Social responsibility



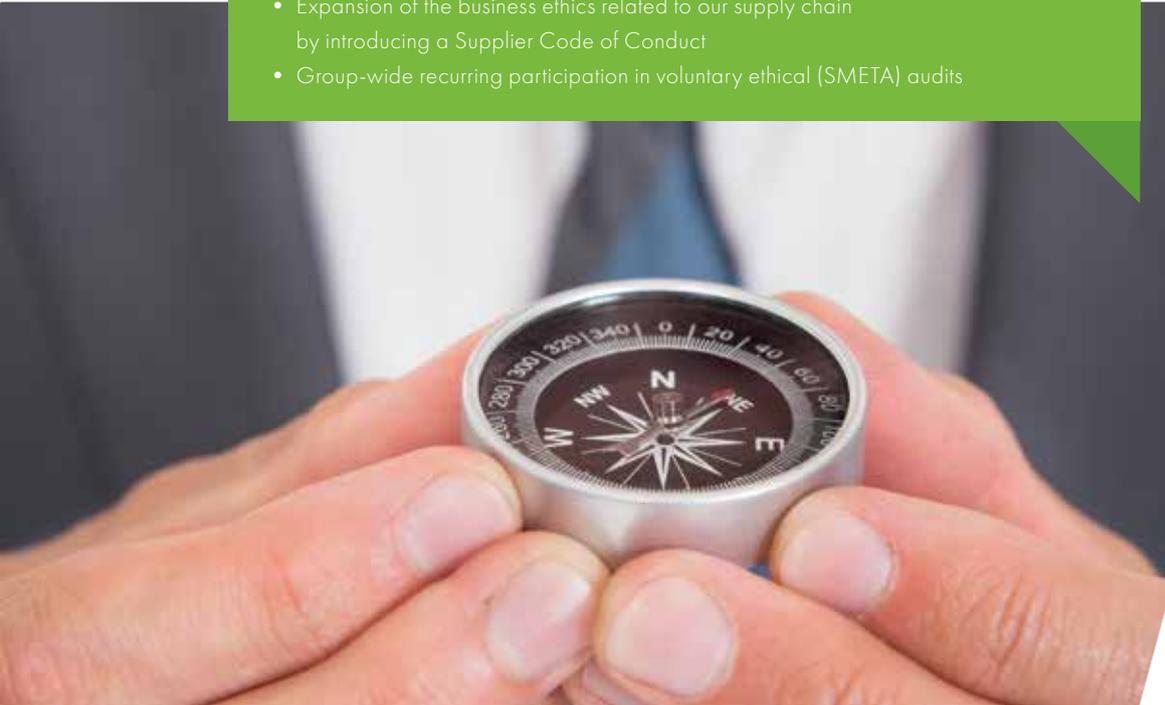
# 3. RESPONSIBILITY

## Business Ethics and Legal Compliance

### KEY MESSAGES

- Implementation of a Group-wide legal compliance structure and organization
- Expansion of the business ethics related to our supply chain by introducing a Supplier Code of Conduct
- Group-wide recurring participation in voluntary ethical (SMETA) audits

The Global Goals for sustainable development (SDG).

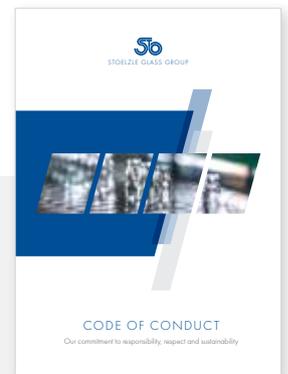


### MANAGING COMPLIANCE

The Stoelzle Code of Conduct is the basis of our Compliance Management. With this code, Stoelzle commits itself to compliance in general, and underlines the commitment of all employees to responsible behaviour and compliance with applicable law. In 2020 Stoelzle will conduct a Group-wide communication and training campaign on the topics of integrity and responsible conduct aimed at all employees. Compliance Management will be applied to all compliance issues, in particular to prevent corruption and anti-competitive behaviour, as well as to ensure that human rights are respected at all our sites. The key elements of the system include internal compliance regulations, legal monitoring, complaint management, employee training and communication.

### CODE OF CONDUCT

In 2019, the existing Code of Conduct was completely revised. In a Group-wide and interdisciplinary team, a value-based framework for legal conduct valid for all employees was created in several joint workshops.



THE NEW CODE OF CONDUCT ENCOMPASSES THE FOLLOWING PRINCIPLES:



In addition, IT-supported applications for legal databases in the area of quality, environmental law and working conditions were further expanded. In 2018, for example, a programme was launched to audit all locations. The aim of the audit is to ensure that all local environmental and occupational health and safety legislation, as well as company operating requirements, are being complied with. Independent local experts who are well acquainted with national and local law are consulted for the audit. Furthermore, Stoelzle keeps itself continuously up-to-date and proactively informed about new requirements with the help of nominated representatives and external consultants.

SOFTWARE-BASED LEGAL DATABASE



Legal compliance has been increased through the implementation of a software-based legal database in the field of environmental and working conditions: in Austria, France and the Czech Republic legal audits were conducted in the field of environmental and working conditions by independent third parties without any significant deviations in findings. The legal obligations are checked every six months to ensure their up-to-datedness and compliance. A Group-wide legal database is to be implemented by the end of 2020.

” THE KEY ELEMENTS OF THE SYSTEM INCLUDE INTERNAL COMPLIANCE REGULATIONS, LEGAL MONITORING, COMPLAINT MANAGEMENT, EMPLOYEE TRAINING AND COMMUNICATION.

BUSINESS ETHICS & ANTI-CORRUPTION

Our employees have the opportunity to ask questions about compliance issues to their managers or to the Stoelzle Group Compliance Contact. External stakeholders can revert to a whistleblower system, which has been integrated into the Stoelzle website. Within the company, eventual infringements can be reported anonymously via the Stoelzle Compliance Line. The Stoelzle Group Compliance Office deals with eventual infringements and sets necessary corrective actions. Despite the manifold scope of Stoelzle’s activities, we can report that no cases of anti-competitive behaviour, corruption, discrimination, unfair competition or related issues emerged in the reporting period.



#### PRODUCT LIABILITY AND COMPLIANCE

The Stoelzle Management System aims to avoid product liability cases. Due to the properties of glass, and despite extensive processes for assuring product safety, it is possible that glass breakage may put human health at risk during the use of said glass products. In such cases, Stoelzle works in close cooperation with the customer and provides support with its complete system of traceability. Glass containers for pharmaceutical use must also comply with the specifications established in pharmacopoeia monographs for pharmaceutical glass containers.

The Stoelzle sites in Austria and the Czech Republic, where processes and product ranges are specifically geared towards pharmaceutical products, are equipped with special facilities and equipment. This allows us to guarantee the pharmaceutical quality of the products. The labelling of the glass products, if applicable to the container, is carried out in accordance with the Finished Pack regulations in accordance with ISO norms (e.g. ISO 8362-4 for injection vials made from moulded glass), and especially in accordance with customer requirements. These requirements are defined in the internal documents, which guarantees the correct labelling. In the reporting year, there were no instances of non-compliance with product labelling. In the period under review, Stoelzle received no fines or sanctions with respect to non-compliance with the legal requirements of product liability.



### BUSINESS ETHICS & SUPPLY CHAIN

Stoelzle works together with its suppliers and partners throughout the entire value chain in order to initiate positive changes. This cooperation is based on the Supplier Code of Conduct written in 2019. With this guideline, Stoelzle is actively committed to improving sustainable performance along the value chain and thus in the final product in order to create positive effects and additional benefits for people and the environment. The implementation of this guideline will be part of the contractual agreement between Stoelzle and its partners and will be checked in the supplier audits. The rollout of our global Supplier Code of Conduct will start in 2020.



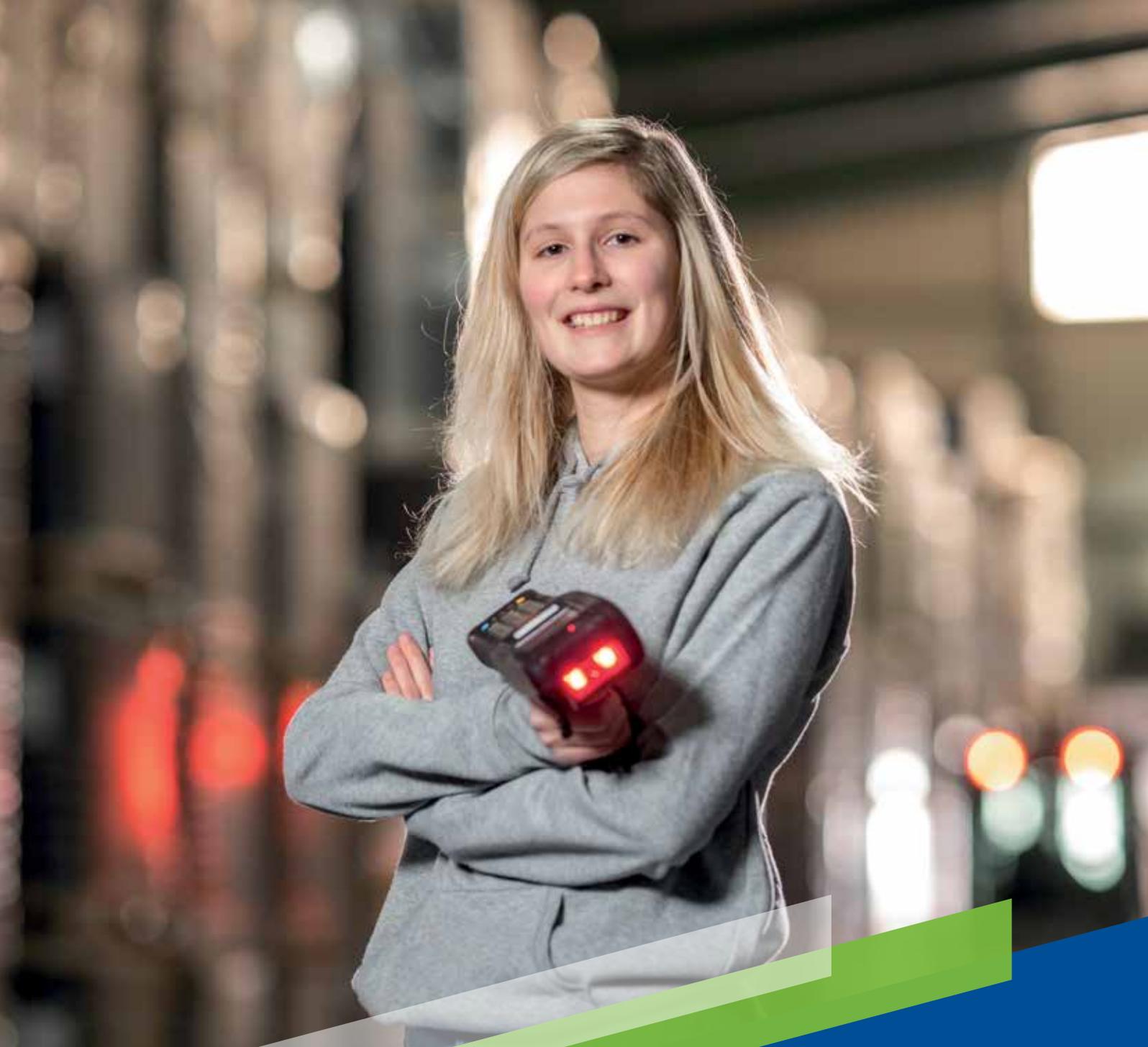
In 2019 SMETA audits were successfully carried out at our Polish plant in Częstochowa and at our British plant. These audits did not reveal any significant deviations.

Stoelzle also assumes its role as a responsible partner to our customers with regard to its value chains. Transparency is a basic prerequisite for the development of trust and long-term relations. Therefore, Stoelzle regularly informs its customers about the progress achieved in the fields of both sustainability and compliance with international CSR standards via CSR rating online platforms. Proof of compliance is ensured for our customers through two instruments: The SMETA (Sedex Members' Ethical Trade Audit), conducted by independent auditors, and the EcoVadis sustainability performance assessment.

### ROADMAP 2025 – BUSINESS ETHICS AND LEGAL COMPLIANCE

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Group-wide certification for ISO 14001 & ISO 45001	Group			○
Full implementation of Group (legal) compliance structure (ongoing)	Group			○
Group-wide installation of (legal) data bases (ongoing)	Group	○		○
Group-wide installation of pro-active system to screen upcoming legislation and regulations	Group	○	○	
Awareness/training programme for ethical behaviour based on Code of Conduct of all high risk employees	Group	○	○	

**Target 2020:** Continuously improving the high level of (legal) compliance.



## 4. EMPLOYEES

A fascination for the material of glass unites employees from all plants and offices of the Stoelzle Group. This passion is alive and well in the daily actions of glass production, in marketing and in the support departments and runs from top management through executives and glass experts to workers on the production lines. With the aid of our excellent glass experts, highly trained skilled workers and experienced marketing staff, we are able to maintain an export quota of 94% in over 90 countries across the globe and remain successful over the long term in an increasingly challenging world market.

# EMPLOYEES



**“OUR EMPLOYEES ARE THE FOUNDATION OF OUR SUCCESS AND OUR CORPORATE CULTURE”**



## HEALTH & SAFETY PERSPECTIVE → 2025

- 100% of accidents are reported and evaluated till 2021
- Group-wide implementation of occupational Health & Safety Management System according to ISO 45001

TOTAL TRAINING HOURS	Group
2017	30,742
2018	36,890
2019	38,732

EMPLOYEES PER AGE	2019
<30	464
30 – 50	1,567
>50	568

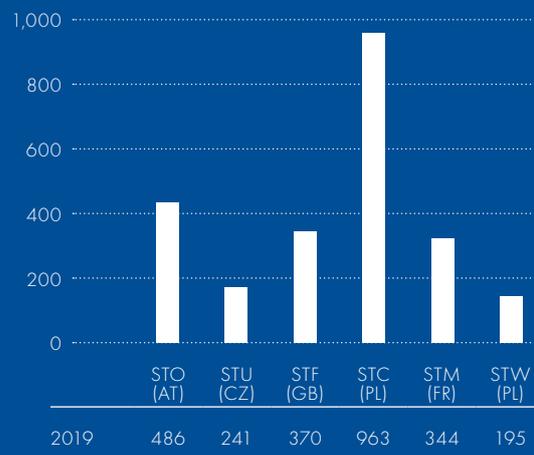
## PRINCIPLES

- **Lifelong learning regardless of origin, religion, age or gender**
- **Zero Accident Strategy – every accident is avoidable**

The ultimate aim of the Stoelzle Glass Group is to retain employees at the company long-term as a business vision characterized by the 5 T's:

- Trust**
- Transparency**
- Target Driven**
- Teamwork**
- Talent Research**

## EMPLOYEES PER REGION



## TOTAL HEADCOUNT





## 4. EMPLOYEES

### Sustainable human resources development

#### EMPLOYEE DEVELOPMENT AT STOELZLE GLASS GROUP

##### KEY MESSAGES

- Growing number of employees in the Group because of steady growth and investments
- Fostering an increase in the proportion of female employees
- Investing in youth: increase in apprentice- and internships
- Group-wide employee satisfaction survey
- Intensive professional education and promotion of competences

#### HUMAN RESOURCES MANAGEMENT AT STOELZLE GROUP

The ultimate aim of the Stoezle Glass Group is to retain employees at the company long-term. In order to achieve this, we offer an employee-friendly organizational structure, performance-oriented pay and excellent development opportunities in the international field, as well as a business vision characterized by the 5 T's: **T**rust – **T**ransparency – **T**arget Driven – **T**eamwork – **T**alent Research.

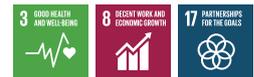
In total, six Human Resources managers and their teams are responsible for staff-related issues at the six sites. The Group's HR is responsible for the role of Head of Human Resources, which reports directly to the CEO of the Glass Group. All HR processes and policies are coordinated from there. Policies are tied to employment law in the respective countries. Shared key points across all plants are: the intensification of the production staff's technical training, the continuous further development of marketing staff, the reinforcement of managers as well as succession planning and the internal and external search for young talent. Furthermore, the topics of health and occupational safety as well as internal communication rank very highly and are accordingly strongly emphasized.

#### DEVELOPMENT OF HEADCOUNTS

Due to our successful market position, we are able to ensure that our employee figures follow a positive trend. The continual growth of the Stoezle Glass Group over the last few years has necessitated the establishment of units in the areas of technology, occupational safety, sales and quality management as well as in research and development, digitalization and continuous improvement, among others. The growth in the headcount occurred mainly due to the expansion of the Polish plant Częstochowa, the steady development of the most recent acquisition of the Wymiarki plant, and also the expansion of the Austrian plant with an additional line.

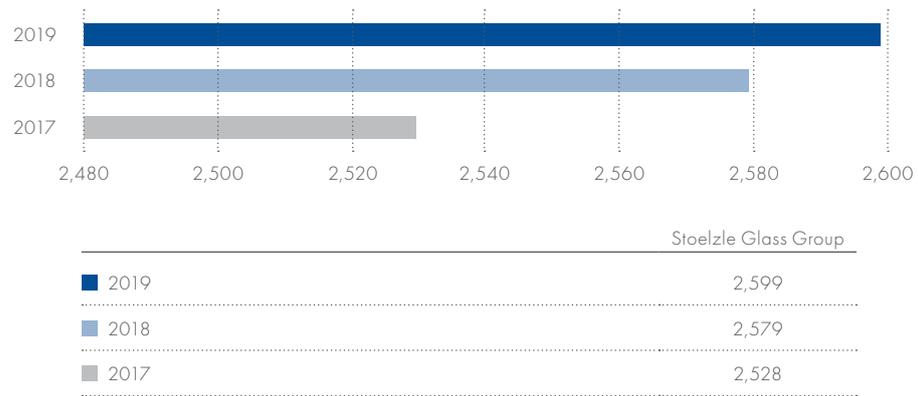
In England and the Czech Republic, the headcount remains quite stable. In recent years the focus has been placed on the recruitment of apprentices as part of the company's succession planning at the plant in Knottingley, UK.

The **Global Goals** for sustainable development (SDG).



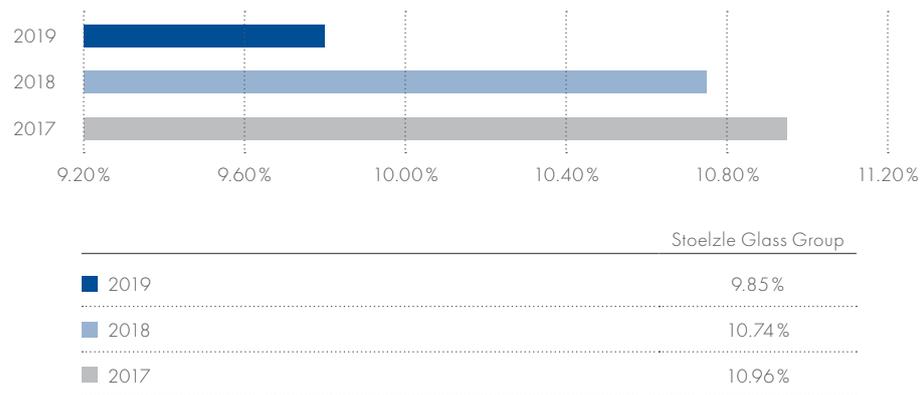


Total head count development of Stoelzle Glass Group



In 2019, 2,595 people (99.9%) were covered by collective agreements. Most of the employees at the Stoelzle Glass Group have a permanent employment contract (95%) and are employed full-time (97%). Only six percent of women were employed on a part-time basis in 2019 at the Stoelzle Glass Group.

Total turnover rate [%] of Stoelzle Glass Group



The turnover rate in Austria slightly increased from 5% in 2017 to 9% in 2019. At the English plant, the trend has been stable since 2018 at 7%. This is also true for the French plant where the rate is between 4% and 5%. Stoelzle Częstochowa and Stoelzle Wymiarki have had to face increasing job resignations in recent years (about 10% to 14%). This is a general development in Poland where employees change their jobs more regularly. The Polish job market has become very dynamic, to some extent as a result of the prosperous state of the Polish economy.

To reduce staff turnover, Stoelzle Częstochowa has decided to invest more time in the recruitment and selection phase to avoid possible layoffs. The implementation of new standards in on- and off-boarding, a focus on on-the-job and TWI training, rising competences and investment in people through courses, the strengthening of management awareness, greater contribution to team integration and also taking care of the provision of additional benefits will all positively influence the decrease in staff turnover. Nearly the same scenario affects the Czech plant in Heřmanova Huť. In Stoelzle Union, the dramatically increased fluctuation of employees between 2017 and 2019 (with a maximum of 23% in 2017) resulted from the large industrial construction nearby which caused a significant demand in human resources, mainly in automotive industry. In contrast to the glass industry, the automotive industry does not require weekend or night shifts. Furthermore, the economic situation in the region is excellent, resulting in an unemployment rate of 2.07%.

**Stoelzle Union:**

In order to keep current employees and attract new ones, a lot of positive incentives have been set up in Stoelzle Union between 2017 and 2019; like compensation for night shifts, a commuting reimbursement, meal vouchers, a recruitment bonus for newly hired staff and team building activities.



## SHARE OF FEMALE EMPLOYEES

The proportion of female employees in the glass industry is generally low. The low proportion – above all for manual work – is due to the physically difficult working conditions such as night work, heat and noise in production. Very few women apply for these roles. In order to counteract this, Stoelzle is redoubling its efforts to recruit female apprentices in apprenticeships such as machining, engineering and mechatronics. The aim is to train and retain female workers at the company and offer them further development prospects. The proportion of female workers has stayed quite stable at about 36%. In departments such as sorting and packaging or decoration, the proportion of women is higher at all sites, as these jobs do not involve such a high degree of physical exertion. In recruiting and succession planning, the target is set on female replacements in order to increase the share further, particularly in technical areas.

## SUCCESS STORIES FOR FEMALE CAREERS AT STOELZLE GLASS GROUP

### LYDIA HÖFFERER

After attending the technical school for agriculture and food, Lydia did not have to think about it for long: like her father and grandfather she wanted to work at STOELZLE OBERGLAS. She started at the age of 19 in the mould workshop, where she prepared the moulds for production. In the summer of 2019, she switched to the hot end and started her 2-year training period to become a machine operator. This job, which is rather untypical for women, is physically very challenging. Lydia has always been technically interested and wanted to work physically. Lydia's tasks include monitoring the production machine, troubleshooting, and checking bottles and weight. In her leisure time Lydia also works for the company's fire department.



### OLGA NIERADKA

Olga graduated from the West Pomeranian University of Technology Szczecin in 2016, earning a Master's degree in Chemical Technology. She started working in the melting department of STOELZLE WYMIARKI in February 2018. In March 2019, Olga became the Batch House & Furnace Manager. Her duties include supervision of the batch quality, the definition of furnace parameters, the supervision of prepared glass sets, keeping records of the furnace, control and analysis of the operation of the glass furnace and updating the chemical composition of the glass.



### KAMILA BARKE

Kamila Barke started with STOELZLE CZĘSTOCHOWA in 2011, having been employed through an external service company. At that time she was responsible for sorting glass products and also for quality checking. The following year she was recognized by her shift manager as an outstanding employee, and received her job contract at Stoelzle Częstochowa as a Process Controller. Based on her engagement and strong professional attitude, she was promoted to Process Control Coordinator in 2014. At that time she also finished her engineering studies. Kamila currently supports the Process Control department on Glass Production and successfully leads 28 process controllers. She coordinates new implementations and changes on production lines, working closely with the Quality Control department.





#### DIPL. ING. MICHAELA LEDVINOVÁ

Michaela graduated from the University of Chemistry in Prague, Faculty of Food Technology. She has been working as Quality Manager for STOELZLE UNION since November 2014. She is responsible for the management of the quality system and for good manufacturing practice – this covers system changes, the qualification of devices, products and processes. She also assures audits and applies CAPA plans to audit findings and to non-conforming products, risk analysis and the training of employees. Furthermore Michaela's responsibilities include complaint management, customer service and the management of the chemical and microbiological laboratory. She is appreciative of the varied workload, daily contact with people of different professions and communication with them that her current position offers.

#### CONTINUOUS PROGRESS IN GENDER EQUALITY AT STOELZLE MASNIÈRES PARFUMERIE

With one out of three workers being female, Stoelzle Masnières Parfumerie has constantly striven to increase the percentage of women in the workforce and especially in management positions since the plant was acquired by the Stoelzle Glass Group. While in 2016 there were no female managers in the manufacturing area, in mid-year 2017 the operational team of Stoelzle Masnières Parfumerie gained a new female manager in charge of supervising the 5 production shifts consisting of 120 workers. A female manager in such an area is a real exception in the manufacturing glass sector in France.

With another woman in a key position, Stoelzle Masnières Parfumerie maintained the quota of 50% females in the plant's management, compared to the average of 17% in France ("Ethics & Boards Survey" 05/11/2018).



In 2019 a new initiative was launched by the French administration to track the Gender Equality Index. Stoelzle Masnières Parfumerie obtained 89 points out of 100, scoring well above its main competitors and in the same range as some of its top customers, which are global giants in the beauty industry. After becoming a pioneer in gender equality, Stoelzle Masnières Parfumerie has also set the goal of becoming a role model with regard to the quota of females in its top management team.



## HEALTH – PHYSICAL AND MENTAL WELL-BEING

### KEY MESSAGES

- Various mental and physical health offers
- Standardized sickness leave interviews
- Initiatives to reduce the illness rate
- Creating awareness of the impact of shift work on health
- Systematic recording of health risks

Due to the continually ongoing operations – 24/7/365 – and the associated shift system, as well as the demanding work environment (particularly with respect to heat and noise in production), maintaining employee health is of great importance. We view physical and mental health as a basic prerequisite for the motivation and performance of Stoelzle employees. For this reason, there are numerous measures in place in the individual plants.

” OF THE 2,600 EMPLOYEES AT THE STOELZLE GLASS GROUP, OVER 1,000 WORK IN AREAS OF PARTICULAR STRESS (HEAT, NOISE AND NIGHT WORK), AND ARE THE PARTICULAR FOCUS OF OUR EFFORTS IN THE FIELD OF HEALTH.

In Austria, weekly visits by an occupational physician who carries out workplace evaluations and consultations ensure that neither harmful activities are performed, nor that employees are exposed to influences that are injurious to health. In addition, there are mandatory checks on heat resistance in critical areas (at the start and at regular intervals of two years). As an additional bonus for all employees, we are proud have been offering a collaboration with a local health center since 2016. This covers massage, treatments, health talks (for example on the subjects of sleep, nutrition and smoking), Nordic walking, water gymnastics and back exercises, and psychological counseling. In 2019 **Stoelzle Oberglas** evaluated all the health offers. Our employees proved to be satisfied with the various choices. Based on this evaluation, the health programme was complemented by Yoga courses and in-house Shiatsu massages. In addition, freshly cooked meals as well as regional fresh fruits are available daily in the canteen for the whole staff.

STO

In England, employee health is monitored through an Occupational Health Nurse, wherein an initial medical screening is conducted as part of the employee's induction to establish a baseline. Subsequent health checks take place in accordance with legislation, job requirements and assessment following a period of absence to determine a phased return plan. The nurse has an open door policy and is on site three days a week. In addition, well-being initiatives are offered in order to foster and promote a healthy workforce. Due to the increasing illness rate since 2017, the Bradford Factor has been implemented at **Stoelzle Flaconnage** with agreement from the Union to monitor absence. The theory is that short, frequent and unplanned absences are more disruptive than longer absences.

STF

STU

In the Czech Republic at **Stoelzle Union**, in addition to mandatory checks within the framework of preventative programmes, "Flexipass vouchers" are provided to the employees. This means that in cases where there has been no accident at work within a particular quarter, employees receive a voucher for the swimming pool, massages and other health-promoting activities.

STC

**Stoelzle Częstochowa** is also focusing on improving the environment with regard to health by providing fresh fruit for employees, and has opened a new canteen in June 2019 that offers fresh food on a daily basis. In addition, attractive private medical healthcare is offered and fully financed by the company. Stoelzle Częstochowa provides access to doctors of every specialization with over 1,200 possible comprehensive laboratory and diagnostic tests (like MRI, endoscopies etc.) in more than 1,300 private high-standard medical offices throughout Poland, naturally with the full spectrum of occupational health examinations, preventive visits and tests, and also doctor's home visits. All these measures aim to ensure quick and high-quality health support for Stoelzle Częstochowa's workers. The Polish plant is very active and involved in collaborations with local sports clubs, and enables its employees and their families to take part in different kinds of sporting events. By supporting local sports and culture, the Stoelzle brand is becoming increasingly recognized on the market.

STM

At **Stoelzle Masières Parfumerie Décoration**, in addition to sick leave interviews, medical controls have been implemented after long absences from work. Since work in the decoration industry requires many manual tasks, we offer support via an external occupational physician and ergonomist who checks and gives advice on workers' activities and the environment in their department. Finally, following an employee survey, the French site decided to offer health and wellness activities with joint financial participation starting from 2020.

VIEW IN THE FUTURE

The target for the years ahead is to provide employees with more information about health. Starting in 2020, the implementation of a Health and Safety Management System that meets ISO 45001 is planned on a Group level with a certification scheme for all sites. This will further help to increase employee awareness about these important topics.



ROADMAP 2025 – EMPLOYEE HEALTH

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Initiatives to foster health and well-being (e.g. health offers such as massage, physiotherapy, ...)	Group	○		
Improve effectiveness of sick leave interviews	Group		○	
Creating awareness for the impact of shiftwork to health	Group		○	
Systematic recording of health risks	STO		○	
Systematic recording of health risks	Group			○

Target 2025: Reducing sick leave as an impact of shiftwork on health per employee.



## SAFETY – A SAFE WORKPLACE AS BASIC PREREQUISITE

### KEY MESSAGES

- Standardized accident reporting throughout the Stoelzle Glass Group
- Implementation of ISO 45001 – Health & Safety Management system at all sites until 2025
- Comprehensive technical safety-related investigation of high-risk machines
- Software supported Group-wide workplace, hazardous substance and accident evaluation

### HEALTH AND SAFETY MANAGEMENT AT STOELZLE

The basis for the success of any company is always the people who are committed to the company. A safe workplace is a prerequisite, which means the company is constantly striving to become accident-free, underpinning all its efforts within the Stoelzle Glass Group with regular feedback of experiences. Quarterly Group meetings for site HSE responsible persons, monthly reports, internal audits and mutual visits serve to reinforce communication in this working area. Among other things, the exchange of information on the results of workplace evaluations and root cause analyses after occupational accidents contributes significantly to improving our health and safety management. With the appointment of H&S Representatives who report directly to plant management at each site, as well as health and safety committees – which also include representatives of our agency workers – Stoelzle ensures H&S requirements are integrated into all business processes. It also ensures compliance with legislation and our principles, as well as the regular monitoring and reporting of the same. Since 2017, the organization of all topics relating to occupational safety has been coordinated and further developed by a Group-wide HSE manager.

The prevention of accidents at work is to be ensured by means of continuous risk assessment, characterized by constant inspection of the premises and operating spaces and the subsequent removal of potential hazards. These evaluations are carried out directly at the workplace at regular intervals, but also after occupational accidents or changes in the working environment. Depending on competence and responsibility, these evaluations are carried out by our in-house safety specialists together with the department heads, taking routine and non-routine activities into account. If necessary, these evaluations are supported by external experts. Since 2019, a standardized software-based methodology has been used on a Group level.

### REPORTINGS

Every employee or external worker has the opportunity and obligation to report work-related accidents or unsafe situations to the plant's safety experts, either indirectly via the heads of department or directly through our software-supported reporting system.



Mandatory regular safety training for all employees and external workers draws attention to safety hazards and increases the safety awareness of every single employee. In order to further improve the mitigation of health and safety risks, Stoelzle will even advance its commitments beyond legal



Starting from 2020, the entire Group will be certified by 2025.



requirements by implementing a certified occupational health and safety management system in accordance with ISO 45001.

In order to achieve uniformly high standards throughout the Group in dealing with potentially hazardous substances, it is necessary to standardize the associated processes in question. The respective project for a Group-wide hazardous substance database started in 2018 and will be rolled out in the coming years.

### NUMBER OF ACCIDENTS AT WORK

In 2017, a uniform definition for "work accidents" and "lost time" was disseminated across the Group. Every accident at work is recorded by the Group-wide reporting system from the first day of absence. This enables benchmarking within the Group, the glass industry and the industry as a whole.



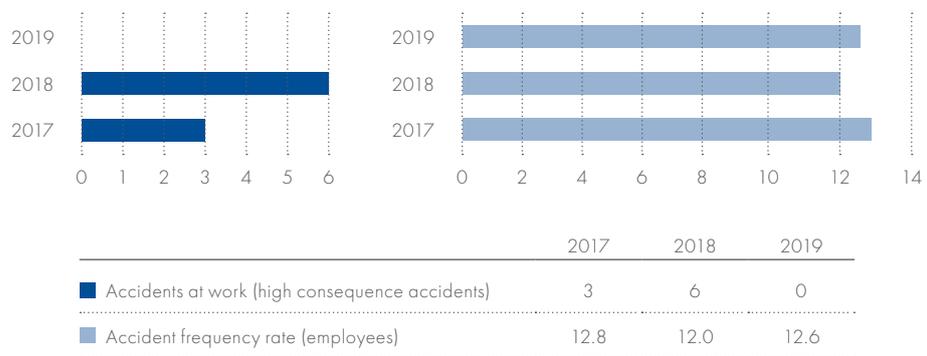
### RISK OF ACCIDENTS IN HEAVY INDUSTRY

Compared to other branches of industry, the risk of accidents is higher in heavy industry, which includes the glass industry. The manufacture and handling of glass involves cutting and burn risks, and also risks associated with the use of heavy machinery (IS machines). Special risks also arise, for example, from working under high temperatures, noise and shift work systems. Selected workplaces also come with certain physical requirements, such as lifting heavy loads and assembly line work.

The growing awareness of occupational safety has led to an improved level of reporting at all Stoelzle sites, and has ultimately resulted in a higher number of situations reported unsafe and accidents. However, accident prevention initiatives and a growing awareness of improved occupational safety at Stoelzle sites have led to a decline in the number of accidents at work.

No accidents at work more than 180 lost days (=high consequence accidents) in 2019 throughout the Group (2018: 6; 2017: 3).

The accident frequency rate (employees) – calculated from the number of work accidents per 1 million productive working hours – was 12.6 in 2019 Group-wide (2018: 12.0; 2017: 12.8).



Although numerous measures have been taken to improve performance in this area, in 2018 a fatal accident occurred due to an accumulation of several regrettable circumstances. The management immediately initiated a detailed investigation of the incident and took measures to rule out any recurrence of such accidents.



PROJECTS & INITIATIVES

<p><b>STOELZLE GLASS GROUP</b></p> <p>In order to reduce the risk for employees when handling heavy machinery, an evaluation programme on machine safety was launched in 2017. Step by step, high-risk machines such as robotic and crane systems or IS machines are being inspected with manufacturers and external safety engineers beyond the legal requirements for operators.</p>	<p><b>STOELZLE GLASS GROUP</b></p> <p>It is very important to Stoelzle that all visitors and external companies at Stoelzle Group sites are as safe as possible. Therefore a Group-wide safety folder was introduced in 2018 to provide instruction for visitors and suppliers.</p>
<p><b>STOELZLE OBERGLAS (AT)</b></p> <p>Since 2018, digital tools have been helping Stoelzle employees in Austria to demonstrate their commitment to occupational safety at all levels: With their smartphones staff can, for example, report accidents and unsafe situations at work, and create and save photo documentation.</p>	<p><b>STOELZLE CZĘSTOCHOWA (PL)</b></p> <p>In 2019, communication on the subject of occupational safety was redesigned, and a “Safety Excellence” campaign was started. In addition, existing rules for the prevention of serious accidents resulting from dangerous activities, the so-called “Cardinal Rules”, are increasingly being communicated and tracked.</p>
<p><b>STOELZLE FLACONNAGE (UK)</b></p> <p>Stoelzle Flaconnage has been working closely with an IOSH (Institution of Occupational Safety and Health) accredited local training provider in order to train managers, shift managers and operators in the IOSH Managing Safety course – a course designed to improve the culture of safety awareness in the organization. IOSH is a world-leading developer of certified safety and health training courses.</p>	<p><b>STOELZLE UNION (CZ)</b></p> <p>In 2019 at the Czech plant, the focus has been on fire protection. Tasks previously covered by external specialists will now be taken over by a well-trained in-house employee. In the future, training and education in the field of firefighting will be carried out in a standardized manner under internal supervision.</p>
	<p><b>STOELZLE MASNIÈRES (FR)</b></p> <p>In order to raise awareness of occupational safety and unsafe situations at all hierarchy levels, interdisciplinary safety site tours began in 2019. Findings are discussed in a safety committee for improved understanding and learning.</p>

ROADMAP 2025 – EMPLOYEE SAFETY

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Occupational Health & Safety Management System	Group		○	○
Comprehensive safety-related checks of high-risk machines (ongoing)	Group	○		○
Programme to increase health & safety awareness within all hierarchy levels	Group	○		○
Standardized site walk scheme with interdisciplinary teams	Group	○		○

Target 2025: Reducing the accident rate.



## TRAINING & DEVELOPMENT

### KEY MESSAGES

- Long-established leadership programmes
- Talent management programmes in order to react to demographic changes and provide the best-educated staff wherever needed
- Training centre for glass manufacturing in Stoelzle Masières and Stoelzle Oberglas
- Facing the challenge of Industry 4.0
- Further improvement of competences
- Implementation of the STOELZLE APP



Technological change, automation, Industry 4.0, capacity for innovation, research & development, flexibility, continuous improvement, dealing with change, a shortage of skilled staff, demographic development and knowledge transfer are just a few of the examples of the challenges which Stoelzle has been facing in international competition. Quick and successful product development, use of key technologies, efficiency in innovation, planning and production processes are necessary in order to seize opportunities and determine markets. For this, Stoelzle needs people who can identify risks flexibly and quickly in these complex systems, account for sources of error and find solutions. Stoelzle depends on glass experts with many years of experience and a high level of expertise.

Training and development has always ranked highly at Stoelzle. In the future, it will be more necessary than ever to invest even further in employee qualifications. Advancing automation and digitalization will increase the demand for highly qualified, skilled workers. At the same time, the falling proportion of the younger generation will make the acquisition of young talent increasingly difficult. These circumstances affect all sites and make it necessary to take evasive action now and invest in excellent training and development. The first steps in this direction have already been put in place Group-wide over the last few years. The structured introduction of new employees is an important part of the onboarding process. Upon joining, each new employee receives the



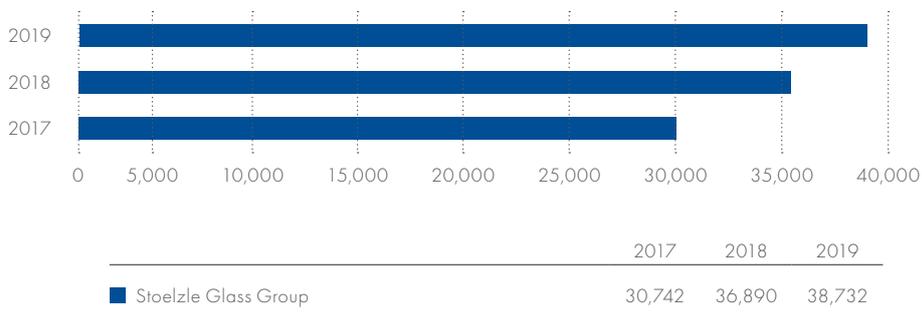
necessary training for their role. Great emphasis is placed on continued further training in all specialist areas in order to retain and improve the high quality of our products.

Stoelzle Masnières Parfumerie and Stoelzle Oberglas are proud to have their own in-house training centre for glass manufacturing. The Stoelzle Masnières’s training centre was recognised & certified by the French administration in March 2017. In Stoelzle Masnières the training centre is already well established.

STO IN-HOUSE TRAINING CENTRE

In Austria a similar one was newly built and opened in 2018. It is fully equipped with IS machines, an IRIS inspection control and specific technical equipment. Hot End Operators, skilled workers and apprentices are trained regularly in order to continuously improve their skills.

The individual training requirements per plant are recorded annually via employee performance appraisals i.e. via a needs assessment with the executives. After an evaluation of the training requirements by the local HRM, the necessary training is put together into a training plan and approved by the local management.



Training hours of employees have undertaken.

The number of training hours per employee has grown considerably in the years under review. One reason for this was the development at the site in France, where safety training and particularly expert training were intensified. Over the past 5 years, Stoelzle Masnières Parfumerie invested a lot in training for its employees. Due to the more intensive use of automation on the lines and a stronger focus on on-boarding training and leader-led development programmes within the organization, the plant was successfully able to continue improving the capabilities of the workforce, offering more opportunities to gain new market shares.

The explanation for the big step forward in training at Stoelzle Częstochowa is the fact that the employees are encouraged to take responsibility for their own development, working with their line managers to devise personal development plans to support the achievement of their individual aspirations that are consistent with company objectives. Over the last two years up to the end of 2019 Stoelzle Częstochowa provided formal internal training on areas and skills including: continuous improvement & Kaizen workshop, automation & maintenance, negotiation skills & communication skills; executive coaching with 360-degree feedback.



### LEAN MANAGEMENT

A further focus is on providing training within Industry, the element of lean programmes that provides training skills for supervisors and focuses on conducting on-the-job training for production and decoration staff. Therefore, the number of training hours per employee has grown considerably.



### LEADERSHIP PROGRAMMES

In order to continue improving leadership competence among shift managers, foremen and members of the middle management, the Stoelzle Leadership Curriculum was launched in 2008 at the Austrian plant. This comprehensive programme comprises the topics of project and change management, communication and conflict management, team management and the essence of leadership. Furthermore, all participants receive individual coaching and implement their own improvement project. To date, the programme has been successfully rolled out at the plants in England, the Czech Republic and France. Our goal is for every Stoelzle manager to undertake such a programme in order to build a standardized understanding of leadership across the Group.

In 2020, also in Stoelzle Częstochowa, the gap in leadership training will be closed by setting many activities in the field of development. The most important ones will be the succession and high potential programme, a leadership development plan, and training for all levels of supervisors. There has been a private development programme for members of senior management since 2014. The mix of nationalities achieved by the participation of several CAG Holding companies is especially enriching for the participants. 360-degree feedback, as well as coaching sessions and a fireside evening with the owners and other high-ranking guests from the world of business, are as much a part of the programme as the training modules Leadership, Strategy, Organisations and Process Management, Financial Data and Change Management.



INDIVIDUAL COACHINGS

Since 2016, there has been the option of regular individual coaching for selected teams or individual managers. Here, the aim is to further develop participants in the areas of leadership and personality and to support them in their daily challenges.



TALENT MANAGEMENT & SUCCESSION PLANNING

The search for young talent within the entire Stoelzle Glass Group is of strategic importance. Highly motivated employees, with great commitment and a high level of dedication, performance and potential as well as the desire to further develop should be recognized as early as possible and further developed in a targeted manner. Together with management, HR identifies possible candidates and thus creates a Group-wide talent pool. The identification of successors for our business-critical positions is an additional key factor. Defining these critical roles, identifying the top talents, supporting them in their development, identifying succession gaps as well as creating an attractive environment for the top talents will secure the successful future of Stoelzle.



Talent management cycle including succession planning

APPRENTICESHIP

Apprentices are trained at the plants in Austria, England and France. These training sessions vary from country to country. The training of qualified, skilled staff is of great importance at the Glass Group. Every year young people start their training. As one of the leading manufacturers of packaging glass, Stoelzle knows very well the significance of qualified, specialised staff.

The UK plant cooperates with British Glass to get apprentices who focus on becoming machine operators. In Austria a new apprenticeship – namely Glass Process Engineer – was coined on the initiative of Stoelzle Oberglas and a second renowned glass manufacturer. The aim was to close a gap in training which had so far caused headaches to glass manufacturers. As it is becoming increasingly difficult to find qualified specialists for glass production nowadays, the new apprenticeship creates attractive opportunities for a wide range of applications.



### GIRLS, GIRLS, GIRLS ...

One of the key points of the last few years was to encourage girls to move into technical apprenticeships. These efforts are already showing initial success.

As a particular incentive for outstanding apprentice performance, the best apprentices are chosen to participate in an exchange programme between the English and Austrian plants. For one to two weeks per year, these apprentices work abroad and gain experience on site at their sister plant. This is a good way of getting to know about other plants, employees and foreign cultures.

## EMPLOYEE COMMUNICATION

Communication with and to the employees has been identified as a key element for the Stoelzle Glass Group. All employees are to be informed about the business objectives of Stoelzle. Based on these objectives, individual goals for employees can be defined and communicated in the Appraisal interviews. Communication is already an integral part of the Management System.

### THERE ARE VARIOUS FORMS OF COMMUNICATION

- Daily production or morning meetings
- Open door culture
- Screens and notice boards in different areas of the sites used as information tools and work support
- Paper-based documents (information letters from the management, organizational information sheets)
- Personal meetings and interviews
- Regular Group-wide, business unit or site-related meetings
- Regular workshops
- Regular work meetings with announcements from the management
- STOELZLE APP

### STOELZLE APP



In February 2019, Stoelzle introduced its own company app for a modern digital – internal – communication. In its user interface and functions, the application resembles common social platforms such as Facebook or LinkedIn. It was adopted for Stoelzle with some additional functions. Within the first four weeks after its launch, half of all Stoelzleans at the Köflach location had already become enthusiastic users of the app. The postings include various kinds of important information from different business segments



such as Management, Human Resources, Quality Management, Occupational Safety, but also all sorts of interesting things about events or discounts. The significant advantage of the app is the fast availability of its content, as all employees can also check the news on the application during working hours. Additional application features such as the virtual marketplace, the library, the messenger service or the bonus wallet have quickly become very popular. Native language versions of the app had been implemented at the plants in Poland, France and the Czech Republic by the end of 2019.



ENTREPRISE DU PATRIMOINE VIVANT (EPV)

Stoezle Masnières Parfumerie has posted its new vision and mission statement on a central wall within the plant. The statement underlines the importance of building a “New Masnières” by working in partnership internally to create an environment where people can thrive and are enabled to deliver sustainable organizational performance. In line with this vision, Stoezle Masnières Parfumerie has made good progress towards achieving a number of key HR priorities such as communication and the implementation of regular skip level and town meetings with all employees. This new process of 2-way communication enables people to provide better feedback, new ideas or suggestions which could affect products, processes and services. It has a profound impact on how teams work to better satisfy both clients and company.

AWARD

In 2018 Stoezle Masnières was rewarded by the French state with the recognition of the label “Entreprise du Patrimoine Vivant”, for excellence in the traditional and industrial know-how of the company.



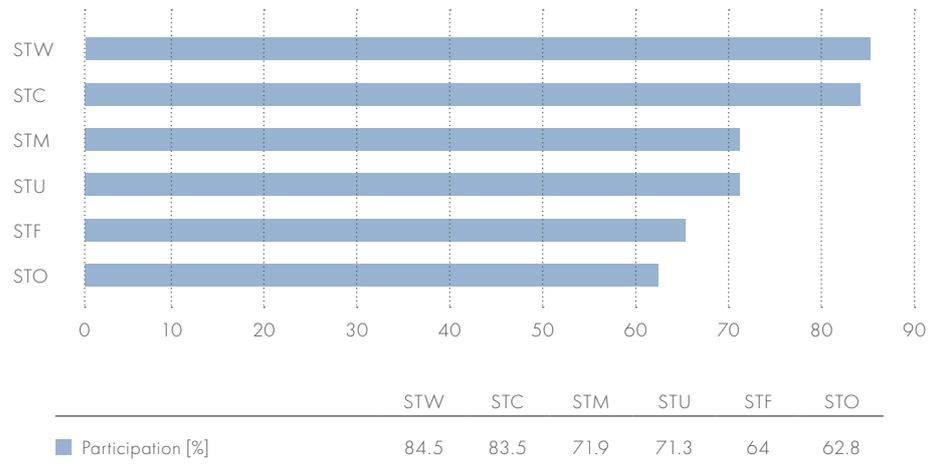
EMPLOYEE SURVEY

To help us with the understanding and development of the best suitable and employee-friendly working environment, we conducted our first Group-wide employee survey in June 2019. The consistently good to very good response rates in the plants showed that there is great interest in expressing an opinion about the company. We had the strongest participation in Stoezle Wymiarki, closely followed by Stoezle Częstochowa. In the middle field were Stoezle Masnières Parfumerie and Stoezle Union, followed by Stoezle Flaconnage and Stoezle Oberglas. A total of 1,907 employees out of the 2,572 invited took part.

We wanted to know what our employees think about their job satisfaction, motivation, ability to work, as well as their commitment to the company, and what they think about our employer image, corporate culture and idea management at Stoezle. The results provided us with valuable information in order to derive improvements for the workplaces and were a good basis for further measures and activities.



**Employee Survey:** A total of 1.907 employees out of the 2.572 invited took part.



Satisfaction with job security and benefits was rated highest across all plants. The evaluations showed that the overall level of commitment was very high, as was identification with the company. The fact that customer wishes have the highest priority at Stoelzle has been considered very positive. We identified the potential for improvement in some areas such as working conditions, work-life balance, organisation and management as well as development and career opportunities, information and communication. It is important to emphasize, however, that the results of the individual plants were very different. Also within a plant, the results for each department are to be considered very differently. They will be analysed in detail.

By the end of 2019, all the results had been communicated to the staff. The next steps are for the local management teams to complete the analysis and the determination and implementation of the most important initiatives and improvement measures. Moreover, the active participation of the employees, e.g. in working groups, will be required in order to be able to drive noticeable changes forward.



#### SURVEY PLANNING

The next survey is planned for 2022. This gives us the opportunity to measure where and to what extent we have actually made progress.

## ROADMAP 2025 – EMPLOYEE COMMUNICATION AND PARTICIPATION

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Ongoing training programmes for employees who have already received initial trainings	Group			○
Follow up training for graduates of the leadership programmes	Group			○
Inter-Plant-Visits on operators level (Trainings)	Group			○
Relaunch sales onboarding & refreshing trainings	Group	○		
Employee satisfaction survey	Group			○

**Target 2025:** Maintain and promote training opportunities and employee satisfaction.



## 5. GLASS

Glass is the ultimate packaging material. It is sustainable, infinitely recyclable without loss of quality, reusable and refillable, safe to store food and drinks in, and is made from naturally occurring ingredients. It is also beautiful! The Stoezle Glass Group operates sustainably because we dedicate ourselves to being environmentally friendly whilst producing innovative and exciting products.

# EFFICIENCY OF RESOURCES AND CIRCULAR ECONOMY



## “ON OUR WAY TO A CIRCULAR ECONOMY”

From an environmental point of view, a maximum share of recycling material is highly favourable, saving energy, CO<sub>2</sub> and pristine raw materials.



### 10% CULLET INCREASE CORRESPONDS WITH

- ↓ up to 4 % savings of CO<sub>2</sub> emissions
- ↓ up to 3 % savings of energy consumption

### 100% HEAVY METAL FREE

colours in our decoration processes



## PCR PERSPECTIVE → 2021

Project 5-10-20: Target of using up to 20% PCR in at least one flint furnace, up to 10% in another and 5% in all other furnaces producing extra-white flint glass.

### PERSPECTIVES 2025

100% of all sites have Group-wide standardized hazardous substance management implemented. An increasing share of post-industrial by-products will reduce the raw material consumption.

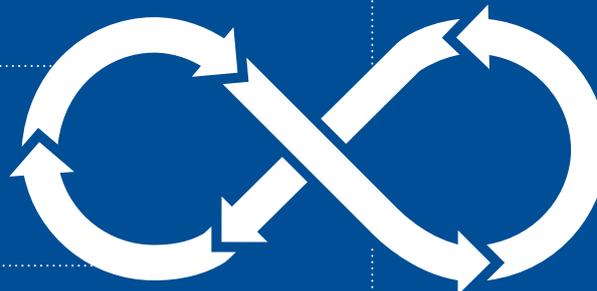
## ENDLESS RECYCLING



Recyclate and raw material



Recycling



Collection



Consumption: use and reuse



Production

TOTAL WATER CONSUMPTION	2018	2019	MATERIALS USED	2018	2019
Ground Water [m <sup>3</sup> ]	498,496	518,568	Cullet & industrial by-products [to]	119,084	141,096
3 <sup>rd</sup> -party Water [m <sup>3</sup> ]	241,044	285,488	Non-renewable materials [to]	352,887	397,544



## 5. GLASS

### Great Material – Great Products

#### KEY MESSAGES

- Increase the reuse of industrial by-products (Calumite, Process Soda)
- Constant search of providers of new by-products
- Water efficiency: Group-wide focus on the increase in recirculation of process water (e.g. from hot glass chutes)

#### SELECTION OF RAW MATERIALS AND RESOURCE EFFICIENCY

The raw materials needed to make glass are as follows: sand, soda ash, limestone, dolomite, feldspar, sodium sulphate, and colourants. These materials are naturally occurring ingredients selected to comply with required high-quality specifications via our ISO QM procedures. Raw materials are sourced as locally as possible, particularly high-volume materials such as sand and limestone.

#### AS LITTLE RAW MATERIAL AS POSSIBLE TO SAVE RESOURCES

In addition to the above-mentioned raw materials we add as much 'cullet' (recycled glass) as possible to minimize raw material consumption. 'Cullet' is a combination of glass from our internal processes plus from external sources. External cullet is generally known as PCR (Post Consumer Recyclate) and is covered in depth on page 46. All our plants are constantly investigating local sources for industrial by-products in order to decrease the amount of raw material consumed.

#### INDUSTRIAL BY-PRODUCTS IN GLASSES

- **Calumite:** is a recycled waste material from the steel industry. Its use saves virgin raw materials as well as melting energy. The Group uses 7,900 tonnes/year in total, saving the same tonnage in raw materials and 0.3% of Group furnace energy.
- **Process Soda:** another industrial by-product in use in the Austrian and Czech plants – a recycled source of soda ash, which also replaces some of the virgin raw material. Current usage is 1,900 tonnes/year with plans for expansion in 2020.
- **Biomass ash:** an ongoing research and development project, investigating the use of waste biomass ash (from electricity generating plants) into glass.



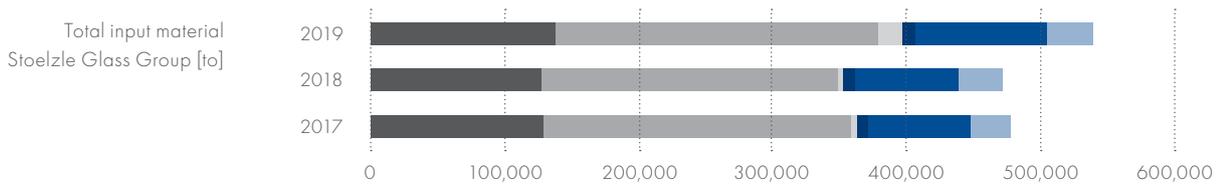
The **Global Goals** for sustainable development (SDG).



The total amount of industrial by-products used in Stoelzle Glass Group glasses has progressively increased from 8,500 tonnes/year in 2015 to 9,800 tonnes/year in 2019, and will continue to grow in future years.

### THE MARKETS OF STOELZLE GLASS GROUP

The markets that the Stoelzle Glass Group serve are a mix of pharmaceutical, perfumery, spirits and consumers. Our usage of raw materials from year to year depends on the mix of these markets and the levels of business activity. Also, our business grows either through acquisition or internal facility enhancement, hence the trend of raw materials usage is increasing overall; as can be seen in the following graph showing our raw material and cullet input in recent years.



	2017	2018	2019
Carbonates	128,904	127,773	138,883
Sand	230,209	221,776	239,266
Others	3,708	3,338	19,395
Industrial by-products	8,498	8,521	9,796
Internal cullet	76,163	78,088	97,233
Post consumer cullet	30,105	32,476	34,067

### REDUCING PROCESS MATERIAL WASTE

The glass-making process is inherently resource-efficient due to the endless recyclability of glass as a manufacturing material. Production rejects/cullet immediately returns to the furnace for remelting via internal conveying and crushing equipment. The preparation of the raw materials by a 'Batch Plant' is essentially an automated mechanical process using silos, weigh-scales and mixing/conveying equipment to handle granular and powder materials. A well-designed and maintained batch plant ensures minimum wastage of this material. For this reason, the Stoelzle Glass Group is constantly investing in new equipment.

### WATER MANAGEMENT

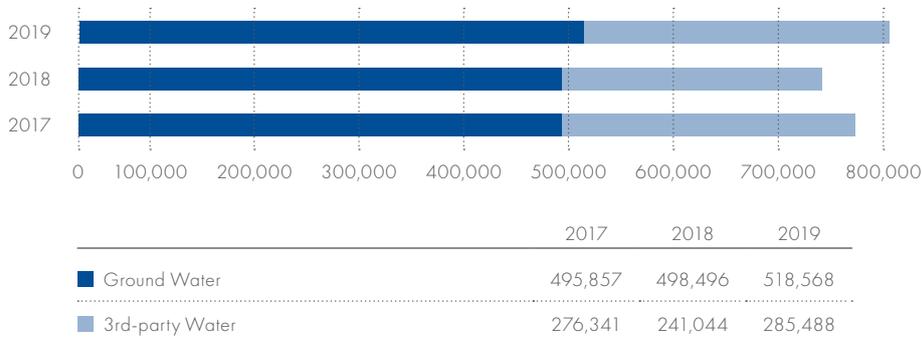
Water is an important resource for container glass manufacturing. It is used for many critical cooling duties within the process. For most of these duties around the Group, water is on closed-loop recirculating systems and is treated with softener and other additives where appropriate. The biggest volume is used on the hot glass chutes to the bottle making machines where a plume of water is used to transport and cool hot glass streams. Water supplies across the Group vary; Austria and France have on-site sources with groundwater (supplemented by municipal supply), the rest use municipal systems only.



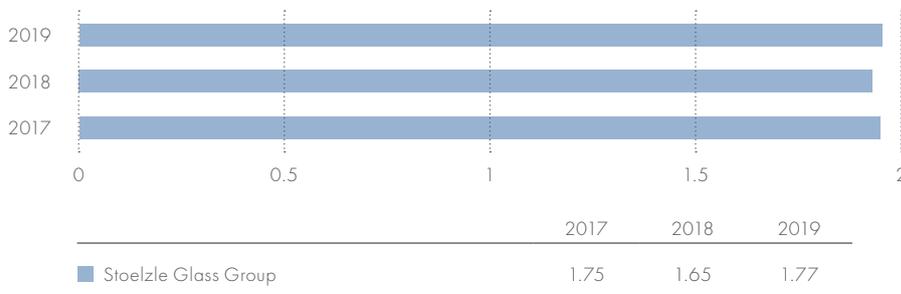
We have evaluated all our sites for water risks with the well-known **Water Risk Filter 5.0** Methodology, developed by WWF. The Water Risk Filter's risk assessment is based on a company's geographic location, which informs a site's basin-related risks as well as characteristics concerning the nature of its operation. All our sites operate in non-water stress areas.



The trend of total water consumption as well as water intensity in m<sup>3</sup> per ton of melted glass across the Group over the last few years is slightly increasing, but intensifying recirculating measures, particularly on the hot glass chutes, will improve situation in the next years.



Total water consumption  
Stoelzle Glass Group [m<sup>3</sup>]



Water intensity Stoelzle Glass  
Group [m<sup>3</sup>/to melted glass]

### REUSING THE PROCESS WATER

For the Czech site in Heřmanova Huf (STU), the main source of water is drinking water from the public water supply. In the past, the water system was open and without recirculation. Due to the installation of new pipes and an accumulation tank for collecting warm water, the new system is now partially closed with loops for reusing water. By reusing the process water, 15,000 m<sup>3</sup> of drinking water can be saved and is not discharged to the local sewer system every year.



## ROADMAP 2025 – SELECTION OF RAW MATERIALS

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Batch plant improvements	STM, STW, STO		○	
Development of new by-product sources	STO/Group			○
Recirculation of hot glass chute water	Group		○	

Target 2025: Increased raw material and water efficiency.



## USE OF RECYCLED CULLET

Modern day glass is in principle made from basic raw materials (Sand, Soda, Lime, etc) and crushed glass (cullet). To reduce the consumption of natural raw materials and thus preserve resources, we strive towards the use of cullet and other industrial by-products as raw materials. To this end, waste glass (post-consumer recycle, PCR, and glass from industrial sources alike) is thus re-used in the production of new glass instead of being wasted as landfill. In addition to the circular economy approach, using recycled materials within glass production helps to save energy and CO<sub>2</sub> (due to less consumption of raw materials containing carbonates) and is an important aspect of sustainable production.

### KEY MESSAGES

- We have set ourselves the target of increasing the PCR share on our flint furnaces throughout the Group, saving raw materials, energy and CO<sub>2</sub> (Project 5-10-20); Also on our amber and green furnaces we are striving to further increase the PCR share by 5%.
- A main objective is the further improvement of internal cullet recycling, especially the recycling of feeder-coloured cullet.
- Our aim is to cooperate closely with customers in order to increase recycling content in secondary packaging.



SAND



SODA



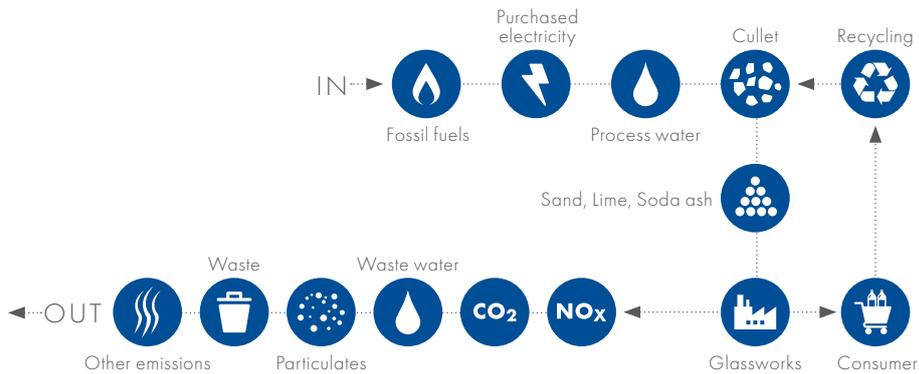
LIME



CULLET

### ON OUR WAY TO A CIRCULAR ECONOMY

From an environmental point of view, a maximum share of recycling material is highly favourable, saving energy, CO<sub>2</sub> and pristine raw materials. This is reflected by the recent collective attempt of the glass industry to increase recycling rates across Europe. This initiative, led by the container-glass association FEVE, is not only beneficial to the environment but also addresses the increasing demand for high-quality PCR cullet and will enable producers to raise their cullet share. In addition, the Stoelzle Glass Group has set an internal target to further increase the cullet share in all our sites, with emphasis on producing high quality extra-white flint glass with a certain share of PCR.



The use of cullet is key from a circular economy, environmental sustainability and competitiveness point of view. A main raw material in our Glass business unit is cullet. This is mixed with virgin raw materials (such as sand and soda ash) as input to the melting process.

### PROJECT 5-10-20

Our efforts to increase PCR in flint glass are summarized as “Project 5-10-20”, with the target of using up to 20% PCR in at least one flint furnace, up to 10% in another and 5% in all other furnaces producing extra-white flint glass. We successfully took the first step towards this goal when we used 20% of PCR cullet (40% total cullet) in one of our flint furnaces during a 2019 campaign to maximize the furnace capacity in a period of increased demand. For the 10% cullet furnace, we, together with one of our largest customers in the spirits sector, developed a roadmap to increase the use of PCR cullet in one flint furnace at the Częstochowa site by the end of 2020.

#### SUCCESSFULLY TRIALED

At our Masnières site, where the highest quality flint glass for perfumery and cosmetics is produced, we successfully trialed 5% of PCR addition, with only a marginal effect on glass colour.

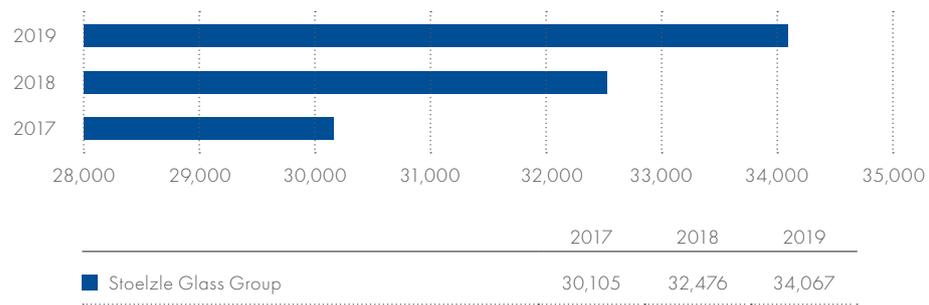


Increasing the share of recycled content and especially PCR also requires increasing quality control to ensure a continuous production of high quality glass. In 2016 we discovered a problem with lead contamination in one amber cullet source. This resulted in a temporarily decreased cullet share, which was necessary to ensure the high quality standards of our packaging materials for the Pharma and Consumer sectors. This has led us to establish an on-site procedure for the daily measurement of lead content in PCR used in our amber and green glass furnaces. With this, we are sure to fulfill the high standards of quality our packaging materials require in the aforementioned sectors.

One of the key pillars of this endeavour is the development and support of a local cullet supplier to ensure the availability of high-quality PCR cullet.

Furthermore, in 2019 the Stoelzle Glass Group committed itself to upgrading the laboratory facilities at the Austrian site to establish a central laboratory in order to increase the internal quality control options for raw materials and glass throughout the Group. Overall, over the last few years, the level of Stoelzle Group PCR usage has been static, mainly due to limitations in PCR quality and the high quality demands needed to produce premium extra-white flint glass. The average Group share runs at 6%. However, the planned approach of Project 5-10-20 and other outlined initiatives and targets listed below in the Roadmap will deliver an improved performance going forward.

Total PCR consumption  
Stoelzle Glass Group [to]



## ROADMAP 2025 – PCR/RECYCLING

Target 2025: Increase of cullet share and packaging recycling.

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Increase of cullet share on flint furnaces (5–10–20)	Group	○	○	
Increase of cullet on amber and green furnaces by 5%	STO, STU		○	
Identification of additional sources of high quality cullet	Group	○	○	
Feeder coloured cullet re-melting	STF		○	○

## AVOIDANCE OF HAZARDOUS SUBSTANCES

Glass is the perfect packaging material – it can be endlessly recycled, preserves the taste and integrity of food and beverages, and does not release hazardous substances into its content. This is confirmed by the U.S. FDA, which attributed the status “generally recognized as safe” to glass. Glass and its raw materials generally do not contain heavy metals or other hazardous substances. Possible sources of these substances can be found in recycling materials (PCR) as well as decoration products. In order to minimize the introduction of heavy metals from PCR, we are in close contact with suppliers and have established a measurement and inspection plan.

### KEY MESSAGES

- Our highest aim is product safety: we ensure full compliance with all limitations for heavy metal impurities in our products (glass and decoration) and their migration into packed goods of customers; Additionally we aim for a minimum content of all heavy metals (e.g. from PCR).
- We aim to establish a standardized hazardous substance management procedure throughout the Group.
- All new substances used in bulk glass or decoration are subject to risk assessment regarding their impact on environmental, health and product safety.

In the decoration sector we have committed ourselves to not using heavy-metal decoration products at all. In addition to ensuring that all legal thresholds are adhered to for our products, we are continuously on the lookout for opportunities to keep the introduction (via recycling materials) and use of hazardous substances to an absolute minimum.



#### ECO-FRIENDLY COLOURS

Stoelzle stands for high-quality and attractive glass packaging. This means fulfilling customer wishes with respect to the colour and design of the containers. By doing so, Stoelzle has already for several years now been decorating only with heavy metal-free colours, which contain absolutely no heavy metals such as cadmium, lead or others. The Stoelzle Glass Group is also strictly refusing to use such products with respect to a better quality of recycling glass. All substances used at Stoelzle are checked and approved before being allowed to enter the production and decoration processes. Energy saving initiatives and investments are supporting the Group's sustainability targets: Electrostatic disc and special airflow equipment are saving ca. 30 – 40% of raw material in the spray processes.



In the field of lacquering, Stoelzle uses from the start of its operations only water-based and solvent-free lacquers.

#### AVOIDANCE OF HEAVY METALS IN GLASS PRODUCTS

While no heavy metals are used in the production of any Stoelzle product, small quantities (especially of lead) can be introduced into the glass mainly via the use of recycling glass. For glass packaging, EU directive 2001/171/EG sets a limit for heavy metals of 200 ppm by weight, if the heavy metals in question are not added deliberately during the manufacturing process but instead

come from secondary raw materials, such as processed cullet. Through the international sale of glass packaging, however, we deliberately set ourselves the stricter rule of maintaining a heavy metal presence of consistently below 100 ppm by weight for flint and amber glass.

One instrument to ensure this is the aforementioned monitoring concept for lead in cullet. This monitoring concept proved effective when in 2018 the Austrian plant was able to preventively identify lead contamination in PCR cullet, and thus prevent a problematic increase in lead content by blocking the respective cullet delivery.



Our main focus thus lies on the quality of the raw materials used and on ensuring adherence to the threshold values with rigorous quality control.

### MANAGING HAZARDOUS MATERIALS

As in every heavy industry, hazardous substances can also be necessary as auxiliary substances and lubricants for the operation and maintenance of various production and tooling machines. These hazardous substances are evaluated by the hazardous substance and environmental officers of each site with regard to risks for our workers and the environment. The aim of this evaluation is to reduce the number of hazardous substances itself by substituting them with less hazardous alternative substances.

This also ensures proper storage in accordance with legal requirements, precautionary measures in occupational safety, security and fire protection and the corresponding necessary training of our employees. In order to further improve this process, we will introduce a Group-wide hazardous substances database, aiming to support all plants with their hazardous material management approach.



In order to protect people and environment with regard to unplanned releases of hazardous substances, the hazardous material storages in our Austrian and Czech plants have been completely renewed over the past 3 years.

## ROADMAP 2025 – AVOIDANCE OF HAZARDOUS SUBSTANCES

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Increase of the UV-printing possibilities at Stoelzle Glass Group decoration sites (further reduction of impact and energy saving)	STF, STC, STD		○	
100% heavy metal-free decoration	STF, STC, STD	○		
Implementation of a standardized hazardous substance management	Group			○

**Target 2025:**  
Reducing number of hazardous substances.



## 6. PRODUCTION

Worldwide awareness of environmental concerns has never been so high profile. Future targets for CO<sub>2</sub> reduction are affecting most decision makers. Glass manufacture is an energy-intensive industry, so we have our part to play. The Stoelzle Glass Group continues to improve environmental credentials with continuous investment in the most efficient equipment and initiatives to reduce energy consumption and CO<sub>2</sub> emissions.

# PRODUCTION FOOTPRINT



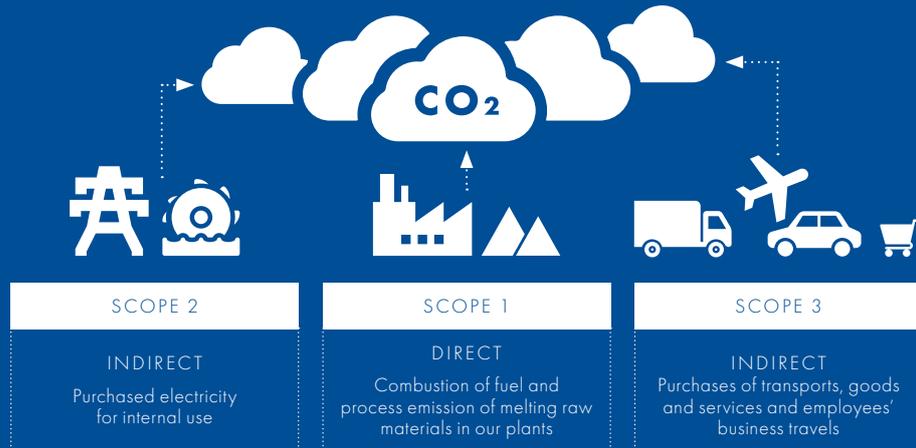
**“WE KEEP ON IMPROVING OUR ENVIRONMENTAL CREDENTIALS AND REDUCING ENERGY CONSUMPTION AND CO<sub>2</sub> EMISSIONS BY CONTINUALLY INVESTING IN THE MOST EFFICIENT EQUIPEMENT”**



## PERSPECTIVE → 2025

- 100% of our sites have implemented an energy and/or environmental management system (ISO 50001; ISO 14001)
- 100% of our sites have implemented Stoelzle Group-wide standardized waste management system

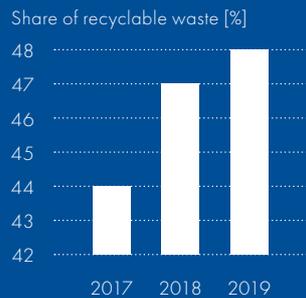
## EMISSIONS ALONG THE VALUE CHAIN



ENERGY INTENSITY	2018	2019
Energy intensity ratio (energy efficiency) MWh/to melted glass at Stoelzle Glass Group	2.52	2.50



Total amount of waste in tonnes > Stoelzle Glass Group	
Hazardous waste	981 to
Non-hazardous waste	3,326 to



## Total amount of GHG emissions 2019 (Scope 1 + Scope 2)

**317,535**

Total direct (Scope 1) GHG emissions [to CO<sub>2</sub>]  
**219,710**

Indirect (Scope 2) GHG emissions [to CO<sub>2</sub>]  
**97,825**



# 6. PRODUCTION

Let's put it all together

## KEY MESSAGES

- Reductions of the energy consumption through best engineering and efficiency measures
- Implementation Environmental and Energy Management Systems across the whole Group
- 50% of all sites have already implemented energy or environmental management systems
- 100% electricity from renewable energy in Stoelzle Masnières Parfumerie
- 16% higher energy efficiency with implementation of new furnace in STF

The Global Goals for sustainable development (SDG).



## ENERGY MANAGEMENT

### ISO14001 AND 50001

A Group-wide energy and environmental policy is the basis for resource-saving activity. The Stoelzle Glass Group is working constantly to reduce its energy consumption and its environmental impact in general. The energy and environmental management at Stoelzle focuses on recording and monitoring key data to enable the development and management of measures to improve energy efficiency and reduce greenhouse gas emissions. In 2015 we began to implement energy and environmental management systems throughout the whole Group. At present, the Austrian, Czech and since 2019 the French sites are certified to ISO 14001 or ISO 50001.

### TRENDS AND INNOVATION

As an active member of FEVE (European Container Glass Confederation), the Stoelzle Glass Group remains up-to-date with European strategies, roadmaps and directives. Stoelzle Oberglas is also involved in the R&D trial furnace currently being proposed by FEVE, which aims to substantially reduce melting energy and CO<sub>2</sub>. Its design and energy mix moves the emphasis towards electric melting, following the general approach followed by most energy intensive industries. All our plants also belong to their local national Confederation groups for the same reasons as above. Technical staff across the Group regularly attend relevant seminars and exhibitions to keep up to date with current technology and trends.



The Stoelzle Glass Group currently assist in **energy and CO<sub>2</sub> reduction initiatives**. Specific studies, which aims to ease decision making and choosing technologies for major project investments, are conducted on our behalf.

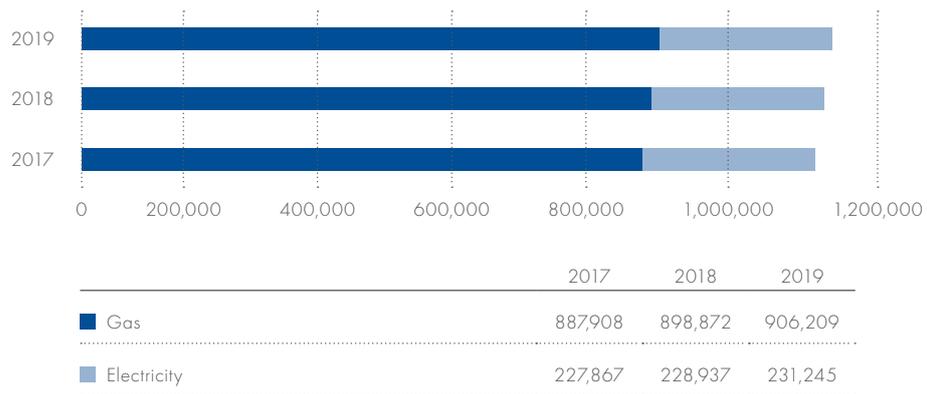


### ENERGY CONSUMPTION

The energy sources used on site are predominantly gas and electricity. Most of the natural gas consumed on site is used for melting in the furnace, followed by IS machines, forehearths, and lehrs. A material share of the heat generated is lost again due to the flue gas. To ensure that this heat does not get lost unused, around 18,000 MWh are supplied into a local district heating network at the Austrian site each year by means of heat recovery. With this thermal energy, about 1,900 households are supplied with more climate-friendly heat. In comparison with gas heating systems, 4,300 tons of CO<sub>2</sub> can be saved every year.

Electricity is used to boost the furnace melting rate via in-glass electrodes, for fan air cooling on the furnace and bottle-making (IS) machines, and for all other miscellaneous uses. However, the biggest usage of electricity is for the generating of compressed air. The majority of compressed air is used on the IS machines. Consequently, the Stoelzle Glass Group has focused on improving the energy efficiency of its compressor equipment. This has involved a substantial investment in the replacement of old compressors with up-to-date equipment of the appropriate type plus intelligent overall systems control.

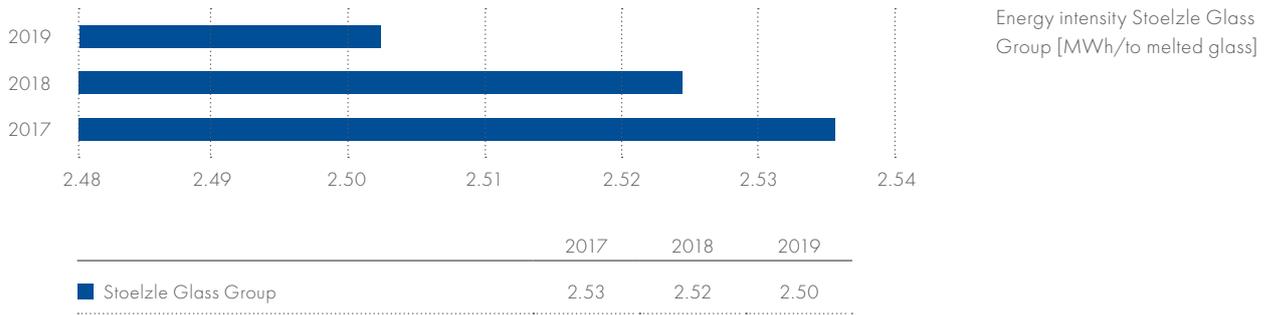
Total energy consumption Stoelzle Glass Group [MWh]



### ENERGY EFFICIENCY

In general, we can see a clear positive trend for the Group in terms of energy efficiency. Energy consumption at each plant varies depending on the products manufactured at each site. In the case of perfumery and pharma, the quality demands and operating temperatures are relatively high, generally requiring more energy. Our sites in France, Austria and the Czech Republic are therefore more energy-intensive compared to the others. In addition to having lower operating temperatures, our plants in Poland and the UK have higher furnace tonnage utilization than the rest, leading to better relative energy efficiency per tonne of glass melted.

The Stoelzle Glass Group continually seeks the latest innovations, particularly during furnace rebuilds, when all areas of the plant can benefit from investment-related energy saving improvements. The main factor driving this result is the improved furnace energy efficiency. Similar efficiency improvements are planned in 2021 with the rebuilding of the furnace in France (Stoelzle Masnières Parfumerie). Increased insulation levels and the latest design aspects are the main reasons for these improvements.



FURTHER MEASURES FOR ENERGY AND CO<sub>2</sub> REDUCTION

In our Częstochowa plant, a Warehouse/Decorating Department lighting project reduced energy consumption by 75%, saving 300 MWh/year. All new engineering projects throughout the Group now have a carbon risk assessment carried out as part of their purchasing justification. The following projects are currently under consideration:

- Batch/cullet preheating system for Stoezle Union. Established technology that uses the furnace chimney waste gas to heat up the batch and cullet in the furnace batch silo. Estimated energy savings of 12 – 15 %.
- Batch preheating including batch granulation for Stoezle Flaconnage. Differs from Stoezle Union in that cullet levels are much lower, meaning batch ‘clumping’ in the silo is a bigger risk, needing the extra process of batch granulation. However, granulation also protects against the batch carry-over risk of blockages in the regenerators.
- Compressed air production directly from furnace waste gas by use of a heat exchanger and turbine using the Rankine Cycle process. Feasibility study to be done in Stoezle Częstochowa.
- Previously mentioned in Chapter 5 – increased use of secondary raw materials Calumite, Process Soda and Biomass Ash will all reduce CO<sub>2</sub> emissions.

SOLAR POWER

The recently installed solar power installation on the roofs of our Austrian plant is delivering good results, with the average yearly output from this predicted to be 1,800 MWh/year of green electrical energy. This solar energy is supplied to local grid and replaces energy with a negative carbon footprint. This saves about 480 tonnes of CO<sub>2</sub> yearly.

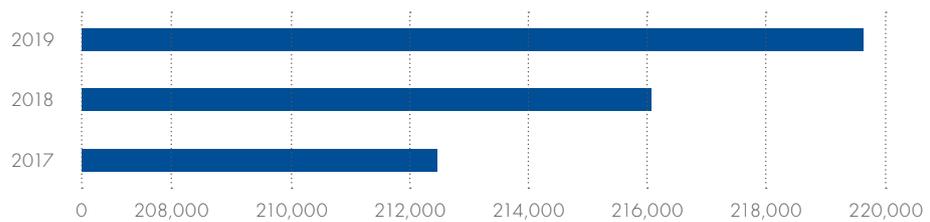


### CARBON FOOTPRINT AND CO<sub>2</sub> EMISSION MANAGEMENT

Carbon emissions are directly linked to production; to how much glass is melted and the age of the furnaces. Carbon emissions derive from the raw materials and the energy used (predominantly natural gas). Every raw material as well as natural gas has its own emission factor indicated by the European Parliament in the EU-ETS Phase 3, upon which the CO<sub>2</sub> calculations within this report are based.

Since the glass industry is also obliged to participate in the EU emissions trading system (ETS), which prices every tonne of emitted CO<sub>2</sub>, a close management of CO<sub>2</sub> emissions is pivotal to the long-term success of the Stoelzle Group. We are only able to reduce carbon emissions by using the best techniques; hence we have appointed responsible persons at every plant to monitor the issue and find ways to improve or reduce carbon emissions. This is documented on a monthly basis and its results are accumulated to identify how much will be used at every site per year. Every year, the Group submits official reports to the Board concerning the use of carbon certificates during an ETS period.

Total amount of CO<sub>2</sub> emissions is increasing due to business expansion, however the intensity of CO<sub>2</sub> emissions is reducing, which partly mitigates the overall effect of this expansion. In the coming years, this intensity will fall further following furnace rebuilds.



Total direct GHG emissions [to CO <sub>2</sub> ]*	2017	2018	2019
■ Stoelzle Glass Group	212,350	215,016	219,710

\*only CO<sub>2</sub> is considered as GHG relevant within Stoelzle

Direct emission intensity [kg CO <sub>2</sub> /to melted glass]	2017	2018	2019
Stoelzle Glass Group	482	480	484

The final graph shows a stable trend for intensity of CO<sub>2</sub> emissions from electricity usage ("Scope 2 emissions"). The national factors applied to the calculation of this measure are dependent on each country's proportion of renewable sources. These emission factors are given by our energy providers according legal requirement by EU Power Labelling Ordinance and have significant impact on the resulting CO<sub>2</sub>/melted tonne of glass figure. However, due to the high share of renewable energy in its electricity mix, Stoelzle Masnières Parfumerie has greatly reduced its contribution to Scope 2 emissions within the Group.

Indirect (Scope 2) GHG emissions intensity [kg CO <sub>2</sub> /to melted glass]	2017	2018	2019
Stoelzle Glass Group	253	250	215



## ROADMAP 2025 – ENERGY AND CARBON FOOTPRINT

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Cullet preheater installation	STU		○	
Batch/cullet preheating system (including briquetting)	STF		○	
Compressed air from furnace waste gas (ORC)	Group		○	○
Furnace rebuilds and efficiency improvement targets	Group	○	○	○
Full assessment of scope 2 and 3 emissions	Group			○

Target 2025: Increase of the energy efficiency.

## AIR AND WATER EMISSIONS

Clean air and water, and thus emission control and prevention, is a strong focus of the Stoelzle Glass Group. The use of natural gas as the main fuel in all our furnaces ensures we are using the cleanest form of fossil fuel energy with low emissions. Furthermore, Stoelzle has invested significantly in recent years in the installation of ‘state-of-the-art’ furnaces and filter systems at all plants. Going one step further, every future furnace (re)build will include measures to reduce NOx and SOx emissions.

### KEY MESSAGES

- Continuous measurements, latest technologies and implemented environmental management systems guarantee that Stoelzle is always at the forefront when it comes to minimizing its environmental footprint
- Further reduction of emissions is an ongoing target of the Stoelzle Glass Group
- Water treatment equipment is installed at all sites

## AIR EMISSIONS

The main sources of emissions into the air in glass factories are the furnaces. The level of emissions always depends on the design and adjustment of burners and furnaces as well as the combustion conditions. The latter is especially important as these are strongly influenced by the type and quality of glass produced in the furnace.

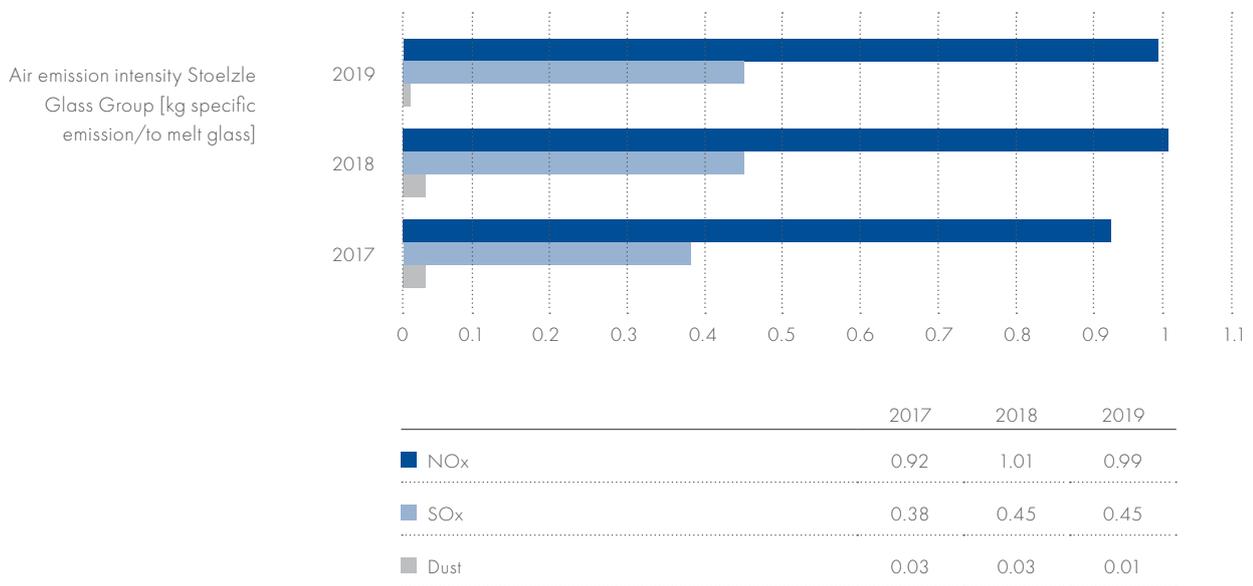
The major air emissions in glass production are CO<sub>2</sub> (covered in the previous chapter), NO<sub>x</sub>, SO<sub>x</sub> and dust. All of these are measured/monitored and are within strict legal limits. Depending on local legislation further emissions need to be measured: HF, HCl, As, Cd, and noise. Emission reduction is a key aspect in every furnace rebuild or new build within the Stoelzle Glass Group. Several special design features, which specifically target NO<sub>x</sub> reductions, are incorporated into the new furnaces. For the future, the Group has set itself the target of installing additional devices for NO<sub>x</sub> and SO<sub>x</sub> reduction in forthcoming furnace rebuilds.

As an additional way of improving emission levels, we have started to equip our furnaces with automatic control of the combustion conditions, ensuring continuous optimum performance.



OVERVIEW OF EMISSION INTENSITIES

NO<sub>x</sub> emissions are strongly influenced by the combustion process. Since the production of high quality extra-white flint glass requires highly oxidised conditions (higher oxygen levels causes higher NO<sub>x</sub> levels), reduction of NO<sub>x</sub> emissions via adjusting the combustion has proven challenging. In general the graph shows an increasing level of NO<sub>x</sub> emission intensity, with Stoelzle Oberglas, Stoelzle Union and Stoelzle Flaconnage decreasing, while the furnace in Stoelzle Masières Parfumerie – due to approaching the end of its lifetime, shows an increase in emission intensity (furnace rebuild is scheduled for 2021).



The SO<sub>x</sub> emissions intensity across the Group varies. This is largely due to local glass quality and batch formulation requirements, where the oxidation state of the glass needs to differ to stabilize refining and colour control. In addition, business growth has affected this due to increased tonnage pull on the furnaces. Nevertheless, all furnaces comply with the legal permitted levels, which are based on mg/Nm<sup>3</sup> in the furnace waste gas.



IPPC DIRECTIVE

In summary, all our plants fulfill all regulatory standards of the Integrated Pollution Prevention and Control (IPPC); nevertheless the company has committed itself to further investments in technologies aimed to reduce the overall output of emissions. We are constantly investigating new technologies and, if applicable for us, set ourselves the target of implementing them for testing at one of our sites.



NOISE EMISSIONS

The glass industry is an industry with a very long tradition. Some of our locations are more than 200 years old. In the course of urbanization, cities and housing estates have grown around our facilities. Of course, we are aware that besides nitrogen, sulphur and dust emissions, noise emissions are also affecting our neighborhood. For this reason, we make the effort to minimize our noise emissions beyond the legal requirements when constructing new buildings or purchasing new aggregates. In addition, at our Austrian site we are in a constant dialogue with our neighbours to be able to address their concerns and expectations directly.

WATER EMISSIONS

As described in the previous chapter, water plays an important role in glass manufacturing. The biggest volume is used for flushing the hot glass chutes and so the general site quality of water emissions is mainly affected from this source of water. The glass industry uses oil to lubricate movable parts in the production machine. This releases Sulphur and Carbon into the water. The main treatment performed focuses on oil removal as well as cooling. It is standard in the Stoelzle Glass Group to close water cycles wherever possible and to treat the water before it is released into the municipal sewer systems or local water bodies. To ensure this policy, every site is equipped with oil separators. It is required by the authorities to make waste water measurements according to the national law. These requirements vary between online and offline measurements depending on the location. The minimum standard carried out in all Stoelzle plants is biannual offline measurement by accredited companies.

LEGAL LIMITS

In the Stoelzle Glass Group, all plants are compliant with the legal limits of the local authorities and no unplanned water discharges occurred in the reporting period. Currently, the amount of water discharge is not measured. Water discharge is estimated as the sum of withdrawal water for process cooling.



STOELZLE GLASS GROUP	2017	2018	2019
■ Water discharge [m³]	465,617	469,019	488,149



Despite the challenge of differences in Group-wide national limits as well as reporting requirements, we are working on a global reporting system for better benchmarking. It is planned to report additionally the amount of suspended solids discharged every year to municipal sewers or rivers by our sites within the next reporting period.

### ROADMAP 2025 – EMISSIONS

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Group standard for waste water emissions and measurements	Group		○	○
DeNOx and DeSOx devices upon furnace rebuilds	Group	○	○	○
Optimization of contaminated shear process water separation	STO, STC, STF	○	○	

Target 2025: Improvement of emissions monitoring and air/water treatment.

### WASTE MANAGEMENT

Waste Management is recognized as an important factor in the Stoelzle Glass Group, as we want to separate different waste types to enable effective collection and proper handling. We also want to reduce waste. In order to achieve our targets, we need monitoring, management and corresponding data to improve the process.

#### KEY MESSAGES

- Implementation of a Group-wide homogeneous waste management system
- Improving waste collection through training and campaigns to increase awareness
- More than 48% recyclable waste 2019\*
- 4% less hazardous waste intensity per melted ton\*

\*Based on the total annual waste quantity – without taking into account irregular annual construction site waste.





WASTE MANAGEMENT & CIRCULAR ECONOMY

The worldwide consumption of resources is increasing due to population growth. In order to meet this demand and to take the issue of limited resources into account, innovative approaches such as Circular Economy are required. At Stoelzle, we support the new EU Resource Efficiency Roadmap and provide products made from permanent material for a true Circular Economy, which is recognized as a key driver in the elimination of waste. In addition, we plan the economical use of resources as early as the product development stage and to design products (including transport packaging) in such a way that as little raw material and packaging material as possible is consumed and as many material cycles as possible can be closed.

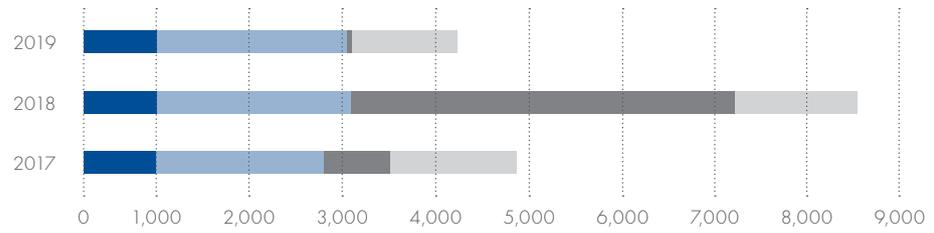
In addition, Stoelzle is continuously looking for opportunities to eliminate waste generation wherever possible, as this is the most environmentally friendly approach. But nevertheless, the handling of waste materials also is an important issue for Stoelzle. Waste is managed specifically site per site with clear responsibilities, clearly defined different waste fractions, proper separation and systematic collection. The sites report their amount of waste in a Group-wide report, which is monitored and controlled by the Group Environmental Manager. In order to minimize the volume of waste, we develop recycling and processing concepts that are adapted to legal requirements and existing disposal structures in the various plants. In 2020 we will also start with a feasibility study to recycle our filter dust internally in order to reduce our amount of hazardous waste.

WASTE TYPES AND GENERATION

Within Stoelzle, we have different fractions and outputs of waste. The amount of waste differs from site to site, depending on the product range and customer requirements concerning quality and packaging.

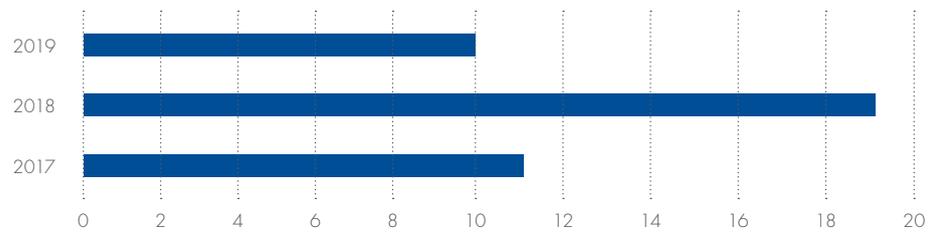


Total waste amount per fraction Stoezle Glass Group [to/a]



	2017	2018	2019
■ Hazardous waste	1,023	1,007	981
■ Recyclable waste	1,772	2,060	2,036
■ Construction site waste	827	4,121	39
■ Municipal waste	1,203	1,282	1,251
	<b>4,825</b>	<b>8,471</b>	<b>4,307</b>

Waste intensity Stoezle Glass Group [kg/to melted glass]



	2017	2018	2019
■ Stoezle Glass Group	11	19	10

It was recognized that Group-wide waste management should be standardized. An increased awareness of waste and how to handle and collect it properly is to be achieved by training employees and providing sufficient waste containers at all times. Our environmental programmes are dedicated to increasing the recycling rate wherever feasible.



## ROADMAP 2025 – WASTE MANAGEMENT

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Increase share of recyclable waste	Group	○		○
Cooperation with clients to reduce secondary packaging material	Group			○
Group-wide awareness training	Group	○	○	
Project to assess internal filter dust recycling	Group			○
Separation of internal waste stream monitoring for decoration	STF, STC, STD		○	

Target 2025:  
Reduction of waste.



## 7. SUPPLIERS

Supplier management is of considerable importance in the purchasing process of raw materials, packaging materials and external services. Our supplier management strategy encompasses the following: a qualification process for new suppliers; the monitoring of suppliers via annual supplier audits in accordance with an audit plan; and an annual performance evaluation. Transparency towards our suppliers is just as important to us as mutual appreciation and the maintenance of long-term business relations.

# SUPPLIERS



**“WE ENSURE THE TRANSPARENCY WITHIN SUPPLY CHAIN BY STANDARDIZED SUPPLIER AUDITS BASED ON ECOLOGICAL AND SOCIAL CRITERIA”**



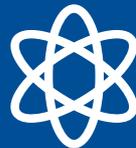
## PERSPECTIVE → 2021

100% of all suppliers (< 150,000 EUR purchasing volume) have signed the Stoelzle Supplier Code of Conduct

## STRUCTURE OF SUPPLIERS



**2019** > 3,000 SUPPLIERS IN THE STOELZLE GLASS GROUP



## STOELZLE CORE AREAS

- ▶ Raw materials
- ▶ Packaging materials
- ▶ Decoration materials



## REGIONAL ALLOCATION OF SUPPLIERS

> 90 % WITHIN EUROPE

## SUPPLIER AUDITS





# 7. SUPPLIERS

## Sustainable Supplier Selection

The Global Goals for sustainable development (SDG).

### KEY MESSAGES

- A common supplier policy for the Stoelzle Group
- Group-wide purchasing standards including a sustainable lead buyer concept
- Standardized supplier audits based on ecological and social criteria



### SUPPLY CHAIN MANAGEMENT

Implementing sustainability along the supply chain is an essential aspect of our business strategy. At present, we are working on the development and Group-wide implementation of standards. The number of suppliers of raw materials, packaging materials, decoration materials and services has risen from approx. 2,500 to over 3,000 in the reporting period and promises to be a big challenge for supplier management. This mainly affects the field of packaging material, in which Stoelzle has to fulfill a variety of customer requirements. When it comes to evaluating and selecting suppliers, the quality of the supplied materials and the suppliers' quality systems play a decisive role in addition to all commercial aspects. Sustainability aspects have been gaining increasing significance for some time now, and have therefore been integrated into the supplier management strategy.

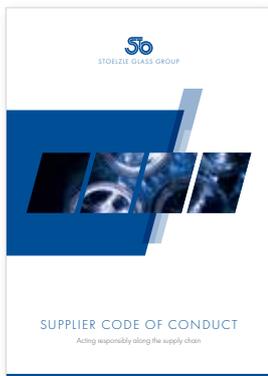


### SUSTAINABLE SUPPLIER SELECTION

In 2019 a new purchasing manual – including a lead buyer concept – was implemented by our Group Purchasing Manager. This manual standardises purchasing processes and defines lead buyers, who are responsible on a Group level for supplier audits and supplier management with regard to specific product groups, e.g. pallets. Since Stoelzle purchases globally from more than 3,000 single suppliers, ethical as well as environmentally relevant principles are also included in our supplier audits. This standardisation shall ensure that all of the Stoelzle Glass Group’s suppliers meet the requested sustainability standards.

### AUDITION OF ALL ASPECTS OF SUSTAINABILITY

Ecological and social aspects are part of regular performance audits and significantly influence the supplier’s evaluation. This standardised process was introduced by the Group Purchasing Manager and will gradually be rolled out to all Stoelzle sites. Suppliers that have been rated via risk assessment particularly important are audited both by Purchasing and CRS manager so that the best possible evaluation of all sustainability aspects is ensured. The Stoelzle policy on sustainable procurement is published on the company website and has also been communicated actively to approximately 50 % of Stoelzle’s suppliers.



### SUPPLIER CODE OF CONDUCT

A new “Supplier Code of Conduct” will be introduced in 2020. This code, which reflects our values and principles, aims to establish sustainable procurement as an essential factor and shall raise suppliers’ awareness as a prerequisite for future collaboration.

### INTENSIVE TRAINING OF PURCHASING DEPARTMENTS WITH REGARD TO SUSTAINABILITY

In September 2019, Stoelzle started Group-wide training for all purchasing managers. Over a period of several months, our purchasing managers were trained in presentation and general negotiation techniques. This training also focused on strengthening the participants’ awareness of quality and sustainability issues.

## ROADMAP 2025 – SUSTAINABLE SUPPLIER MANAGEMENT

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
Stoelzle Supplier Code of Conduct acknowledgment by all suppliers	Group	○		
Integration of sustainability criteria in all audits of supplier and participation of CSR responsible persons in supplier audits	Group		○	
Acknowledgment of sustainable purchasing policy by all suppliers	Group		○	
Development of group culture for sustainable purchasing	Group			○
Sustainable KPIs in quarterly purchasing reports	STO	○		

**Target 2025:** 100% of all suppliers are covered by our Sustainable Management System.



## 8. CUSTOMERS & CONSUMERS

In our strategic business segments "Pharma, Spirits, Perfumery and Cosmetics", Stoelzle supplies premium quality glass packaging to more than 1,800 customers in over 90 countries. Our customers place great value on the quality and safety of the products, as well as on a high level of service, adherence to delivery dates and flexibility.

Customer satisfaction therefore ranks very highly at the Stoelzle Glass Group.

# CUSTOMERS & CONSUMERS



**"OUR CUSTOMERS ARE AT THE CENTER OF ALL OUR DECISIONS – CUSTOMER SATISFACTION IS OF THE HIGHEST PRIORITY"**



**PERSPECTIVE → 2020**

Awarded with EcoVadis Gold Medal



**PERSPECTIVE → 2021**

100% of sites have implemented new CRM software

## HIGH QUALITY PROPERTIES OF GLASS:



**100 % INERT**



**100 % NATURAL**



**100 % RECYCLABLE**

Transparent communication of sustainable progress by CSR platforms (EcoVadis, SEDEX)

**Nothing is lost: permanent materials at the heart of the EU Circular Economy**

→ Working closely with FEVE on the "Close the Glass Loop" project for 90 % average EU collection rate of used glass packaging by 2030.





# 8. CUSTOMERS & CONSUMERS

Excellent glass for excellent customers

## KEY MESSAGES

- Customer satisfaction is of the highest priority – development and implementation of a software-supported Customer Relationship Management (CRM)
- Optimization of NPD process with software support
- Transparent Group-wide customer communication by SEDEX and EcoVadis
- Increasing consumer awareness regarding glass as the best packaging material offering many advantages

## CUSTOMER SATISFACTION

Our customers are at the center of all our decisions. For this reason, the Stoelzle Glass Group decided to implement a more efficient, software-based Customer Relationship Management System (CRM), allowing us to raise our customer relationships to a new level. All information shared with our customers through meetings, calls, visits, price offers and quality reviews is stored and protected by the CRM data tool. The data is then easily accessible to the sales team at any time. This means that the customer will always get the same high quality level of interaction within the Stoelzle sales team. This software-based solution additionally helps reduce e-mails and paper-based documentation and thus contributes to a reduction in our environmental footprint.

## TRANSPARENT GROUP-WIDE CUSTOMER COMMUNICATION

Over the past few years, the issue of sustainability has become more and more important. The protection of the environment, as well as social and safe working places are now key issues in enquiries, in performance evaluations made by customers and in audits. These issues also have an impact on the decision to place orders.

In order to make our sustainability approach – as well as our progress in these areas – accessible to our customers at all times beyond the scope of this report, Stoelzle Group is active on different social, ethical and environmental platforms which we have been using to communicate our progress and achievements with our customers since 2013. As a result of our continuous improvements and efforts to make our processes and structures more sustainable, we have been awarded the EcoVadis Silver Medal as a responsible partner in the supply chain of our customers. Our aim is to further improve this rating and commit to constant voluntary ethical SMETA audits. These audits encompass all aspects of responsible business practice and were successfully conducted in our Polish and British sites in 2019 with no critical findings.

## INCREASING CONSUMER AWARENESS

The Stoelzle Glass Group actively supports the values and activities of the container glass industry as a member of FEVE (European Federation of the Glass Container Industry) and its movement

The Global Goals for sustainable development (SDG).



### Customer Relationship Management (CRM):

On top of the improved customer management service, CRM is also a strong tool for complying with the European General Data Protection Regulation.



"Friends of Glass". Stoelzle promotes glass in its public presence on the Internet (Stoelzle website, email signatures), in newsletters and journals (Glass International Magazine), in product advertising as well as in other media such as television in local reports. Our main goal is to raise consumer awareness regarding the outstanding properties of glass and its unique characteristic within the circular economy.

**High Quality Property**

**of Glass:** glass is a very environmentally friendly and sustainable material that can be endlessly recycled.

It is an inert, pure and 100% all-natural material and the safest choice of packaging for a wide range of consumer products.

**GLASS AND ITS ADVANTAGES**

Be it healthy food, trendy drinks or precious perfumes, consumers are looking for quality in the products they purchase. Glass preserves the vitamins, taste, fizziness, freshness and fragrance of the contents by acting as a natural barrier. Besides, this barrier additionally protects from potentially harmful bacteria and changes in temperature and environment. Even the colour of glass can make a difference: amber glass provide superior protection from UV rays.

Glass is also the safest packaging material for drugs and other healthy products. Glass containers for pharmaceutical use, which are produced at our Austrian and Czech sites, must comply with especially high standards given by European and United States pharmacopoeias. Strictly adhering to these standards guarantees the high pharmaceutical quality of our products.

**”NOTHING IS LOST: PERMANENT MATERIALS AT THE HEART OF THE EU CIRCULAR ECONOMY.**

A study by the Italian institute "Stazione Sperimentale del Vetro", published in 2016, confirms the high-quality properties of glass as a "permanent material": a glass container – produced, used, carefully collected and re-sorted – once again becomes a new raw material for a new container, without any loss of quality or change in its properties.

We are also working closely with FEVE on the "Close the Glass Loop" project in order to make the post-consumer rejects available again for glass production. 'Close the Glass Loop' is an industry platform with the aim of uniting the glass collection and recycling value chain, and establishing a material stewardship programme which will result in more bottle-to-bottle recycling. We aim to increase the quantity and quality of available recycled glass—so that people don't just recycle, but recycle more and better.



**Together we want to achieve:** a 90% average EU collection rate of used glass packaging by 2030 (up from the current average of 76%) and a better quality of recycled glass, so more recycled content can be used in a new production loop.

[feve.org/about-glass/introducing-close-the-glass-loop](https://feve.org/about-glass/introducing-close-the-glass-loop)

**ROADMAP 2025 – CUSTOMER & CONSUMER AWARENESS**

TARGETS AND MEASURES	SITE/GROUP	2020	2021	~2025
New CRM software implementation in all sites	Group		○	
New Product Development software "NPD" implementation and Group roll out	Group	○		
Promotion of Stoelzle's commitment towards CSR by increasing EcoVadis score and number of SMETA audits	Group	○	○	○

**Target 2025:** increase of the competitive edge of the Stoelzle Group through customer satisfaction.



## 9. APPENDIX

According to the criteria of the Global Reporting Initiative (GRI Standards: Core option), all General Standard Disclosures and the Specific Standard Disclosures for all aspects of relevance according to the materiality analysis have been described in this Report on the basis of the GRI Standards. The following GRI Content Index contains the relevant references, indicating the chapters and page numbers.

## 9. APPENDIX

### GRI CONTENT INDEX – IN ACCORDANCE WITH THE GRI-STANDARDS: OPTION CORE

Code	Short name of the disclosure	Page	Remarks and Omissions
<b>GENERAL DISCLOSURES</b>			
<b>ORGANIZATIONAL PROFILE</b>			
GRI 102-1	Name of the organization	82	
GRI 102-2	Activities, brands, products, and services	6	
GRI 102-3	Location of headquarters	82	
GRI 102-4	Location of operations	7	
GRI 102-5	Ownership and legal form	82	
GRI 102-6	Markets served	6 – 7	
GRI 102-7	Scale of the organization	6, 24	
GRI 102-8	Information on employees and other workers	76 – 77	
GRI 102-9	Supply chain	16	
GRI 102-10	Significant changes to the organization and its supply chain	–	No significant changes to the organization's supply chain.
GRI 102-11	Precautionary Principle or approach	50	
GRI 102-12	External initiatives	14	
GRI 102-13	Membership of associations	10	
<b>STRATEGY</b>			
GRI 102-14	Statement from senior decision-maker	5	
<b>ETHICS AND INTEGRITY</b>			
GRI 102-16	Values, principles, standards, and norms of behaviour	10, 12, 18	
<b>GOVERNANCE</b>			
GRI 102-18	Governance structure	12	
<b>STAKEHOLDER ENGAGEMENT</b>			
GRI 102-40	List of stakeholder groups	15	
GRI 102-41	Collective bargaining agreements	26, 77	
GRI 102-42	Identifying and selecting stakeholders	15	
GRI 102-43	Approach to stakeholder engagement	11 – 12, 15	
GRI 102-44	Key topics and concerns raised	11, 13	
<b>REPORTING PRACTICE</b>			
GRI 102-45	Entities included in the consolidated financial statements	7	
GRI 102-46	Defining report content and topic Boundaries	11	
GRI 102-47	List of material topics	13	
GRI 102-48	Restatements of information	–	There are no restatements of information.
GRI 102-49	Changes in reporting	–	This report is the first published sustainability report of Stoelzle.
GRI 102-50	Reporting period	–	The report covers information for the period from 1 January 2019 to the 31 December 2019. Most indicators additionally cover the years 2017 and 2018.

Code	Short name of the disclosure	Page	Remarks and Omissions
GRI 102-51	Date of most recent report	11	Stoelzle issued an internal sustainability report in 2016 that was not published. This report is the first published sustainability report of Stoelzle.
GRI 102-52	Reporting cycle	–	Stoelzle will apply a biennial reporting cycle starting in 2019.
GRI 102-53	Contact point for questions regarding the report	82	
GRI 102-54	Claim of reporting in accordance with the GRI Standards	11	
GRI 102-55	GRI Content Index	72 – 75	
GRI 102-56	External assurance	–	No external assurance.

## MATERIAL TOPICS

### LEGAL COMPLIANCE

Management Approach 2016			
GRI 103-1	Explanation of the material topic and its boundaries	17 – 19	
GRI 103-2	Management approach and its components	18 – 22	
GRI 103-3	Evaluation of the management approach	18 – 22	
Anti Corruption 2016			
GRI 205-3	Confirmed incidents of corruption and actions taken	18, 20	
Anti Competitive Behaviour 2016			
GRI 206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	18, 20	
Environmental Compliance 2016			
GRI 307-1	Non-compliance with environmental laws and regulations	–	In 2019, no significant fines or non-monetary sanctions for non-compliance with environmental laws have been imposed on Stoelzle.
Socioeconomic Compliance 2016			
GRI 419-1	Non-compliance with laws and regulations in the social and economic area	18, 20	

### EMPLOYEE HEALTH AND SAFETY

Management Approach 2016			
GRI 103-1	Explanation of the material topic and its boundaries	23 – 24, 29, 31	
GRI 103-2	Management approach and its components	29 – 33	
GRI 103-3	Evaluation of the management approach	29 – 33	
Occupational Health and Safety 2018			
GRI 403-1	Occupational health and safety management system	30 – 31	
GRI 403-2	Hazard identification, risk assessment, and incident investigation	31 – 32	
GRI 403-3	Occupational health services	29 – 30	
GRI 403-4	Worker participation, consultation, and communication on occupational health and safety	31, 33, 38	
GRI 403-5	Worker training on occupational health and safety	31 – 33	
GRI 403-6	Promotion of worker health	29 – 30	
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	48 – 50	
GRI 403-9	Work-related injuries	32, 79	

### EMPLOYEE COMMUNICATION AND PARTICIPATION

Management Approach 2016			
GRI 103-1	Explanation of the material topic and its boundaries	23 – 25, 34, 38	

Code	Short name of the disclosure	Page	Remarks and Omissions
GRI 103-2	Management approach and its components	25 – 28, 34 – 40	
GRI 103-3	Evaluation of the management approach	25 – 28, 34 – 40	
<b>Employment 2016</b>			
GRI 401-1	New employee hires and employee turnover	26, 77 – 78	
<b>Training and Education 2016</b>			
GRI 404-1	Average hours of training per year per employee	78	
GRI 404-2	Programmes for upgrading employee skills and transition assistance programmes	36 – 38	
<b>AVOIDANCE OF HAZARDOUS SUBSTANCES</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	41 – 42, 48	
GRI 103-2	Management approach and its components	42, 48 – 50	
GRI 103-3	Evaluation of the management approach	48 – 50	
<b>Customer Health and Safety 2016</b>			
GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	21, 48	
<b>EMISSIONS</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	51 – 52, 57	
GRI 103-2	Management approach and its components	57 – 60	
GRI 103-3	Evaluation of the management approach	57 – 60	
<b>Water and Effluents 2018</b>			
GRI 303-4	Water discharge	59	Only total water discharge reported.
<b>Emissions 2016</b>			
GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	58	Measurements were conducted by an external third party (authority). Calculations are based on an internal method using volume flows and a daily tonnage. POP, VOC and HAP are not reported.
<b>ENERGY AND LOW CARBON FOOTPRINT</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	51 – 53	
GRI 103-2	Management approach and its components	52 – 57	
GRI 103-3	Evaluation of the management approach	52 – 57	
<b>Energy 2016</b>			
GRI 302-1	Energy consumption within the organization	54, 79 – 80	
GRI 302-3	Energy intensity	54 – 55, 80	
<b>Emissions 2016</b>			
GRI 305-1	Direct (Scope 1) GHG emissions	56, 80	Only CO <sub>2</sub> is considered as GHG relevant within Stoelzle. There are no biogenic GHG emissions. Emissions are calculated based on regulatory standard methods (IPPC). Emission factors are based on standardized laboratory analysis.
GRI 305-4	GHG emissions intensity	56, 80	Only CO <sub>2</sub> is considered as GHG relevant within Stoelzle.
<b>RESOURCE EFFICIENCY</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	41 – 43, 57	

Code	Short name of the disclosure	Page	Remarks and Omissions
GRI 103-2	Management approach and its components	43 – 45	
GRI 103-3	Evaluation of the management approach	43 – 45	
<b>Materials 2016</b>			
GRI 301-1	Materials used by weight or volume	44, 80	
<b>Water and Effluents 2018</b>			
GRI 303-1	Interactions with water as a shared resource	44 – 45, 57	
GRI 303-2	Management of water discharge-related impacts	44 – 45	
GRI 303-3	Water withdrawal	45, 81	A breakdown of the total water withdrawal by freshwater and other water is not reported.
<b>USE OF RECYCLED MATERIALS</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	41 – 42, 46	
GRI 103-2	Management approach and its components	46 – 48	
GRI 103-3	Evaluation of the management approach	46 – 48	
<b>Materials 2016</b>			
GRI 301-2	Recycled input materials used	80	
<b>CONSUMER AWARENESS</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	67 – 69	
GRI 103-2	Management approach and its components	68 – 70	
GRI 103-3	Evaluation of the management approach	68 – 70	
<b>Marketing and Labeling 2016</b>			
GRI 417-1	Requirements for product and service information and labeling	21	
GRI 417-3	Incidents of non-compliance concerning marketing communications	21	
<b>WASTE AND SAFE STORAGE</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	60	
GRI 103-2	Management approach and its components	60 – 62	
GRI 103-3	Evaluation of the management approach	60 – 62	
<b>Effluents and Waste 2016</b>			
GRI 306-2	Waste by type and disposal method	62, 81	Waste is reported in the categories hazardous, recyclable, construction-site and municipal waste.
<b>SUSTAINABLE MANAGEMENT OF SUPPLIES</b>			
<b>Management Approach 2016</b>			
GRI 103-1	Explanation of the material topic and its boundaries	22, 63 – 65	
GRI 103-2	Management approach and its components	22, 64 – 66	
GRI 103-3	Evaluation of the management approach	22, 64 – 66	
<b>Supplier environmental assessment 2016</b>			
GRI 308-1	New suppliers that were screened using environmental criteria	–	100% of A-Suppliers and 55% of all suppliers are screened using environmental criteria.
<b>Supplier social assessment 2016</b>			
GRI 414-1	New suppliers that were screened using social criteria	–	100% of A-Suppliers and 55% of all suppliers are screened using social criteria.

## ADDITIONAL EMPLOYEE DATA

Dimensions		Unit	2019	2018	2017
<b>INFORMATION ON EMPLOYEES AND STAFF TEMPORARY (EXTERNAL) = CONTRACTORS</b>					
NUMBER OF EMPLOYEES BY REGION					GRI 102-8
STO					
Number of employees	female		118	105	112
Number of employees	male		368	360	361
Number of employees	total		486	465	483
STU					
Number of employees	female		80	83	85
Number of employees	male		161	159	155
Number of employees	total		241	242	240
STF					
Number of employees	female		79	78	80
Number of employees	male		291	293	265
Number of employees	total		370	371	345
STC					
Number of employees	female		461	507	484
Number of employees	male		502	488	493
Number of employees	total		963	995	977
STM					
Number of employees	female		102	101	101
Number of employees	male		242	236	234
Number of employees	total		344	337	335
STW					
Number of employees	female		57	52	46
Number of employees	male		138	117	102
Number of employees	total		195	169	148
<b>Number of employees</b>	<b>total</b>	<b>HC</b>	<b>2,599</b>	<b>2,579</b>	<b>2,528</b>
NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT BY REGION					GRI 102-8
STO (permanent contract)					
Number of employees	female		113	99	93
Number of employees	male		363	364	320
STU (permanent contract)					
Number of employees	female		67	71	76
Number of employees	male		146	142	136
STF (permanent contract)					
Number of employees	female		79	78	80
Number of employees	male		291	293	265
STC (permanent contract)					
Number of employees	female		440	472	429
Number of employees	male		473	428	407
STM (permanent contract)					
Number of employees	female		95	96	93
Number of employees	male		224	222	221
STW (permanent contract)					
Number of employees	female		56	45	34
Number of employees	male		125	95	88
<b>Number of employees</b>	<b>female</b>	<b>HC</b>	<b>850</b>	<b>861</b>	<b>805</b>
<b>(permanent contract)</b>	<b>male</b>	<b>HC</b>	<b>1,622</b>	<b>1,526</b>	<b>1,437</b>
	<b>total</b>	<b>HC</b>	<b>2,472</b>	<b>2,387</b>	<b>2,242</b>

	Dimensions	Unit	2019	2018	2017
STO (temporary contract)					
Number of employees	female		5	14	41
Number of employees	male		5	6	29
STU (temporary contract)					
Number of employees	female		15	17	19
Number of employees	male		13	12	9
STF (temporary contract)					
Number of employees	female		-	-	-
Number of employees	male		-	-	-
STC (temporary contract)					
Number of employees	female		29	60	86
Number of employees	male		21	35	55
STM (temporary contract)					
Number of employees	female		18	14	13
Number of employees	male		7	5	8
STW (temporary contract)					
Number of employees	female		14	18	14
Number of employees	male		1	11	12
<b>Number of employees</b>	<b>female</b>	<b>HC</b>	<b>47</b>	<b>69</b>	<b>113</b>
<b>(temporary contract)</b>	<b>male</b>	<b>HC</b>	<b>80</b>	<b>123</b>	<b>173</b>
	<b>total</b>	<b>HC</b>	<b>127</b>	<b>192</b>	<b>286</b>

## NUMBER OF EMPLOYEES BY EMPLOYMENT TYPE

GRI 102-8

**With full-time employment**

Number of employees	female		847	895	888
Number of employees	male		1,666	1,647	1,605
<b>Number of employees</b>	<b>total</b>	<b>HC</b>	<b>2,513</b>	<b>2,542</b>	<b>2,493</b>

**With part-time employment**

Number of employees	female		50	32	30
Number of employees	male		36	5	5
<b>Number of employees</b>	<b>total</b>	<b>HC</b>	<b>86</b>	<b>37</b>	<b>35</b>

## NUMBER OF STAFF TEMPORARY (EXTERNAL) = CONTRACTORS

GRI 102-8

Number of staff	Contractors working for Stoelzle total	HC	243	192	184
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## COLLECTIVE BARGAINING AGREEMENTS

## PERCENTAGE OF TOTAL EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

GRI 102-41

Number of employees	total	number	2,595	2,576	2,526
Percentage of employees	total	%	100%	100%	100%

## NEW EMPLOYEES AND EMPLOYEE TURNOVER

## NUMBER OF EMPLOYEES THAT LEFT THE COMPANY

GRI 401-1

Number of employees	female	HC	105	114	109
Number of employees	male	HC	151	163	168
<b>Number of employees</b>	<b>total</b>	<b>HC</b>	<b>256</b>	<b>277</b>	<b>277</b>
Rate of employee turnover	female	%	11.71%	12.31%	11.87%
Rate of employee turnover	male	%	8.87%	9.86%	10.43%
<b>Rate of employee turnover</b>	<b>total</b>	<b>%</b>	<b>9.85%</b>	<b>10.74%</b>	<b>10.96%</b>

	Dimensions	Unit	2019	2018	2017
NUMBER OF EMPLOYEES THAT LEFT THE COMPANY					GRI 401-1
Number of employees	< 30	HC	66	84	97
Number of employees	30 – 50	HC	108	149	141
Number of employees	> 50	HC	82	44	39
<b>Number of employees</b>	<b>total</b>	<b>HC</b>	<b>256</b>	<b>277</b>	<b>277</b>
Rate of employees turnover	< 30	%	14.22%	17.61%	21.09%
Rate of employees turnover	30 – 50	%	6.89%	9.58%	9.03%
Rate of employees turnover	> 50	%	14.44%	8.04%	7.69%

NUMBER OF NEW EMPLOYEE HIRES BY GENDER					GRI 401-1
Number of new employee	female	HC	115	128	156
Number of new employee	male	HC	187	213	206
<b>Number of new employee hires</b>	<b>total</b>	<b>HC</b>	<b>302</b>	<b>341</b>	<b>362</b>
Rate of new employee	female	%	12.82%	13.82%	16.99%
Rate of new employee	male	%	10.99%	12.89%	12.80%
<b>Rate of new employee hires</b>	<b>total</b>	<b>%</b>	<b>11.62%</b>	<b>13.22%</b>	<b>14.32%</b>

NUMBER OF NEW EMPLOYEE HIRES BY AGE GROUP					GRI 401-1
Number of new employee	< 30	HC	113	145	136
Number of new employee	30 – 50	HC	139	166	188
Number of new employee	> 50	HC	50	30	38
<b>Number of new employee hires</b>	<b>total</b>	<b>HC</b>	<b>302</b>	<b>341</b>	<b>362</b>
Rate of new employee	< 30	%	24.35%	30.40%	29.57%
Rate of new employee	30 – 50	%	8.87%	10.68%	12.04%
Rate of new employee	> 50	%	8.80%	5.48%	7.50%

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE					AVERAGE HOURS OF TRAINING THAT EMPLOYEES HAVE UNDERTAKEN	GRI 404-1
Employees training hours	female	hours	12,936	11,879	9,117	
Employees training hours	male	hours	25,796	25,011	21,625	
Employees training hours	total	hours	38,732	36,890	30,742	
Average employees training hours	female	hours/HC	14.4	12.8	9.9	
Average employees training hours	male	hours/HC	15.2	15.1	13.4	
Average employees training hours	over all employees	hours/HC	14.9	14.3	12.2	

AVERAGE HOURS OF TRAINING THAT EMPLOYEES HAVE UNDERTAKEN					GRI 404-1
Employees training hours	Management	hours	1,867	3,679	3,450
Employees training hours	White Collar	hours	6,957	5,199	6,272
Employees training hours	Blue Collar	hours	26,991	26,277	19,343
Employees training hours	Apprentices	hours	2,917	1,736	1,677
<b>Hours of training</b>	<b>total</b>	<b>hours</b>	<b>38,732</b>	<b>36,890</b>	<b>30,742</b>
Average employees training hours	Management	hours/HC	17.13	34.06	30.00
Average employees training hours	White Collar	hours/HC	24.50	19.84	28.00
Average employees training hours	Blue Collar	hours/HC	12.44	12.06	8.93
Average employees training hours	Apprentices	hours/HC	78.84	57.85	72.91

	Dimensions	Unit	2019	2018	2017
<b>WORK-RELATED INJURIES</b>					
<b>WORK-RELATED ACCIDENTS (RATES BASED ON 1 MILLION WORKED HOURS)</b>					
<b>HOURS WORKED</b> <span style="float: right;">GRI 403-9</span>					
Hours worked	employees	hours	4,280,571	4,170,437	4,156,470
Hours worked	staff temporary (external) = contractors	hours	446,935	483,125	303,211
<b>Hours worked</b>	<b>total</b>	<b>hours</b>	<b>4,727,506</b>	<b>4,653,562</b>	<b>4,459,681</b>
<b>NUMBER OF FATAL WORK-RELATED INJURIES</b> <span style="float: right;">GRI 403-9</span>					
Number of injuries	employees	incidents	0.00	1.00	0.00
Number of injuries	staff temporary (external) = contractors	incidents	0.00	0.00	0.00
<b>Number of injuries</b>	<b>total</b>	<b>incidents</b>	<b>0.00</b>	<b>1.00</b>	<b>0.00</b>
Rate of injuries	employees	rate	0.00	0.24	0.00
Rate of injuries	staff temporary (external) = contractors	rate	0.00	0.00	0.00
<b>Rate of injuries</b>	<b>total</b>	<b>rate</b>	<b>0.00</b>	<b>0.21</b>	<b>0.00</b>
<b>NUMBER OF HIGH-CONSEQUENCE WORK-RELATED INJURIES</b> <span style="float: right;">GRI 403-9</span>					
Number of injuries	employees	incidents	0.00	6.00	3.00
Number of injuries	staff temporary (external) = contractors	incidents	0.00	0.00	0.00
<b>Number of injuries</b>	<b>total</b>	<b>incidents</b>	<b>0.00</b>	<b>6.00</b>	<b>3.00</b>
Rate of injuries	employees	rate	0.00	1.44	0.72
Rate of injuries	staff temporary (external) = contractors	rate	0.00	0.00	0.00
<b>Rate of injuries</b>	<b>total</b>	<b>rate</b>	<b>0.00</b>	<b>1.29</b>	<b>0.67</b>
<b>NUMBER OF RECORDABLE WORK-RELATED INJURIES</b> (INCLUDING ALL INCIDENTS: FATAL/NON-FATAL/IMPAIRMENT/OTHERS) <span style="float: right;">GRI 403-9</span>					
Number of injuries	employees	incidents	54.00	50.00	53.00
Number of injuries	staff temporary (external) = contractors	incidents	2.00	1.00	7.00
<b>Number of injuries</b>	<b>total</b>	<b>incidents</b>	<b>56.00</b>	<b>51.00</b>	<b>60.00</b>
Rate of injuries	employees	rate	12.62	11.99	12.75
Rate of injuries	staff temporary (external) = contractors	rate	4.47	2.07	23.09
<b>Rate of injuries</b>	<b>total</b>	<b>rate</b>	<b>11.85</b>	<b>10.96</b>	<b>13.45</b>

## ADDITIONAL ENVIRONMENTAL DATA

	Dimensions	Unit	2019	2018	2017
<b>ENERGY CONSUMPTION WITHIN THE ORGANISATION</b> <span style="float: right;">GRI 302-1</span>					
Natural gas	non-renewable	MWh	906,209	898,872	887,908
<b>Fuel consumption from non-renewable sources</b>	<b>total</b>	<b>MWh</b>	<b>906,209</b>	<b>898,872</b>	<b>887,908</b>
<b>Fuel consumption from renewable sources</b>	<b>total</b>	<b>MWh</b>	<b>0</b>	<b>0</b>	<b>0</b>

	Dimensions	Unit	2019	2018	2017
<b>PURCHASED ENERGY FROM OUTSIDE THE ORGANISATION</b>					
GRI 302-1					
Electricity consumption	purchased	MWh	231,245	228,937	227,867
<b>Purchased energy</b>	<b>total</b>	<b>MWh</b>	<b>231,245</b>	<b>228,937</b>	<b>231,245</b>
<b>SELF-GENERATED ENERGY WITHIN THE ORGANISATION</b>					
GRI 302-1					
Electricity generated	self-generated	MWh	1,492	593	
District heating generated	self-generated	MWh	20,509	18,419	17,710
<b>Self-generated energy</b>	<b>total</b>	<b>MWh</b>	<b>22,001</b>	<b>19,012</b>	<b>17,710</b>
<b>SOLD ENERGY TO THIRD PARTY ORGANISATIONS</b>					
GRI 302-1					
Electricity sold	sold	MWh	1,492	593	
Heating energy sold	sold	MWh	20,509	18,419	17,710
<b>Sold energy</b>	<b>total</b>	<b>MWh</b>	<b>22,001</b>	<b>19,012</b>	<b>17,710</b>
<b>Purchased energy consumption</b>	<b>total</b>	<b>MWh</b>	<b>209,244</b>	<b>209,925</b>	<b>210,157</b>
<b>ENERGY CONSUMPTION WITHIN THE ORGANISATION</b>					
GRI 302-1					
Total energy consumption	total	MWh	1,137,453	1,127,809	1,115,774
<b>ENERGY INTENSITY</b>					
<b>ENERGY INTENSITY RATIO</b>					
GRI 302-3					
Total absolute energy consumption	Numerator	MWh	1,137,453	1,127,809	1,115,774
Ton of melted glass	Denominator	tons	454,180	448,240	440,767
Energy intensity ratio (energy efficiency)		MWh/ton	2.50	2.52	2.53
<b>TOTAL GREENHOUSE GAS EMISSIONS</b>					
<b>SCOPE 1 + 2 EMISSIONS</b>					
GRI 305-1					
Gross direct GHG emissions	Scope 1	tons CO <sub>2</sub> -equiv.	219,710	215,016	212,350
Gross indirect GHG emissions	Scope 2	tons CO <sub>2</sub> -equiv.	97,825	112,234	111,349
<b>GHG EMISSIONS INTENSITY</b>					
<b>DIRECT (SCOPE 1) EMISSIONS INTENSITY</b>					
GRI 305-4					
Total direct (scope 1) GHG emissions	Numerator	kg CO <sub>2</sub> -equiv.	219,709,629	215,016,076	212,350,010
Ton of melted glass	Denominator	tons	454,180	448,240	440,767
Direct (Scope 1) emissions intensity		kg CO <sub>2</sub> -equiv./ton	484	477	482
<b>MATERIALS USED BY WEIGHT OR VOLUME</b>					
<b>NON-RENEWABLE MATERIALS USED</b>					
GRI 301-1					
Non-renewable materials used	virgin material	tons	397,544	352,887	362,820
Non-renewable materials used	secondary materials	tons	9,796	8,521	8,498
Non-renewable materials used	virgin & secondary materials	tons	407,340	361,407	371,318
<b>RECYCLED INPUT MATERIALS USED</b>					
<b>RECYCLED INPUT MATERIALS</b>					
GRI 301-2					
Internal cullets	Stoelzle cullets	tons	97,233	78,088	76,163

	Dimensions	Unit	2019	2018	2017
External cullets	industry and post-consumer	tons	34,067	32,476	30,105
Share of cullet	industry and post-consumer	%	6.3	6.8	6.3

## WATER WITHDRAWAL

TOTAL WATER WITHDRAWAL FROM ALL AREAS BY SOURCE GRI 303-3

Surface water	uncritical areas	m <sup>3</sup>	0	0	0
Groundwater	uncritical areas	m <sup>3</sup>	518,568	498,496	495,857
Seawater	uncritical areas	m <sup>3</sup>	0	0	0
Third-party water (incl. municipal water)	uncritical areas	m <sup>3</sup>	285,488	241,044	276,341
<b>Water withdrawal by source</b>	<b>total</b>	<b>m<sup>3</sup></b>	<b>804,056</b>	<b>739,540</b>	<b>772,198</b>

TOTAL WATER WITHDRAWAL FROM ALL AREAS WITH WATER STRESS GRI 303-3

Total water withdrawal	critical areas	m <sup>3</sup>	0	0	0
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WATER USE (M<sup>3</sup>) PER TON OF MELTED GLASS OWN INDICATOR

Total water consumption		m <sup>3</sup>	804,056	739,540	772,198
Water use per ton of melted glass			1.77	1.65	1.75

## WASTE

WASTE OUTPUT GRI 306-2

Hazardous waste	total	tons	981	1,007	1,023
Non-hazardous waste	total	tons	3,326	7,464	3,802
<b>Total waste amount</b>	<b>total (haz. + non-haz.)</b>	<b>tons</b>	<b>4,320</b>	<b>8,471</b>	<b>4,825</b>

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The sustainability report was created with utmost care, in order to secure correctness and completeness of details in all parts. The key figures were rounded. Rounding, typesetting and printing errors can nevertheless not be completely ruled out.





STOELZLE GLASS GROUP

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