STÖLZLE GLASS GROUP

SUSTAINABILITY REPORT 2016

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THE STÖLZLE GLASS GROUP RECYCLES MORE THAN 100,000 TONNES OF GLASS PER YEAR, THUS SAVING RAW MATERIALS AND ENERGY.

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COMPANY OVERVIEW

Stölzle Glass Group at a glance

STÖLZLE GLASS GROUP

The story of the Stölzle Glass Group started in 1805, when the Oberdorf glass works was founded. In 1871 the glass factory in Köflach was established. In 1987 the Austrian glass plant Stölzle-Oberglas AG was taken over by Dr. Cornelius A. Grupp (see Milestones of the company history on Page 6). Currently, the Group consists of six production sites and three decoration facilities in Europe.

Its registered office is located in Köflach/Austria, with three further offices in Vienna (Austria), Moscow (Russia) and New York (USA). Stölzle manufactures moulded glass containers for the pharmaceutical, spirits, food, perfumery and cosmetic industry in a huge variety of different designs and sizes. The product range is complemented by the Medical Laboratory division, offering laboratory equipment, instruments, closures and packaging solutions in small batches.

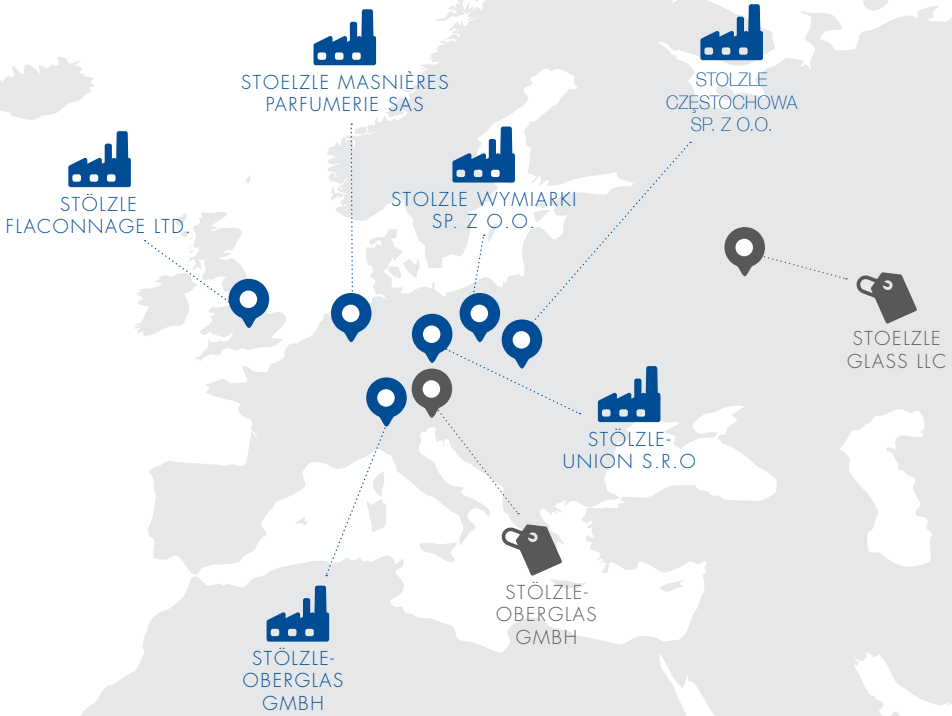
Our VISION is to be the first-choice partner for our customers and our employees by establishing a culture of mutual trust and by striving for high performance, flexibility and reliability.

MANUFACTURERS

- **Stölzle-Oberglas GmbH**
  Köflach, AT
- **Stölzle-Union s.r.o**
  Heřmanova Huť, CZ
- **Stolzle Częstochowa Sp. z o.o.**
  Częstochowa, PL
- **Stolzle Wymiarki Sp. z o.o.**
  Wymiarki, PL
- **Stoelzle Masnières Parfumerie SAS**
  Masnières, FR
- **Stölzle Flaconnage Ltd.**
  West Yorkshire, GB

FURTHER OFFICES

- **Stölzle-Oberglas GmbH**
  Vienna, AT
- **Stolzle Glass USA, Inc.**
  New York, USA
- **Stoelzle Glass LLC**
  Moscow, RU



9 European production and decoration sites

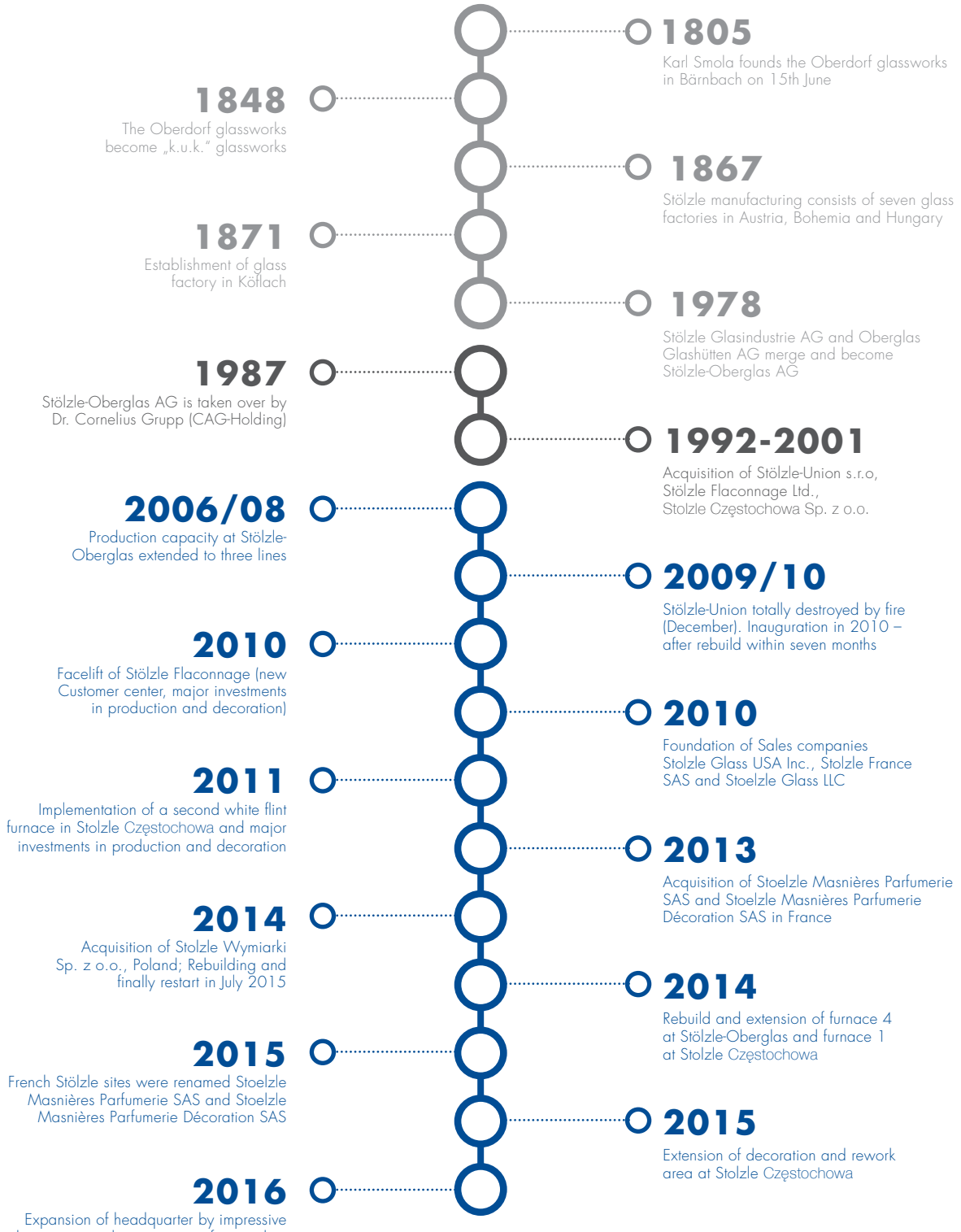
3 billion bottles output per year

300 million euro turnover

2,365 total employees

MILESTONES

Company history



1805
Karl Smola founds the Oberdorf glassworks in Bärnbach on 15th June

1848
The Oberdorf glassworks become „k.u.k." glassworks

1867
Stölzle manufacturing consists of seven glass factories in Austria, Bohemia and Hungary

1871
Establishment of glass factory in Köflach

1978
Stölzle Glasindustrie AG and Oberglas Glashütten AG merge and become Stölzle-Oberglas AG

1987
Stölzle-Oberglas AG is taken over by Dr. Cornelius Grupp (CAG-Holding)

1992-2001
Acquisition of Stölzle-Union s.r.o, Stölzle Flaconnage Ltd., Stolzle Częstochowa Sp. z o.o.

2006/08
Production capacity at Stölzle-Oberglas extended to three lines

2009/10
Stölzle-Union totally destroyed by fire (December). Inauguration in 2010 – after rebuild within seven months

2010
Facelift of Stölzle Flaconnage (new Customer center, major investments in production and decoration)

2010
Foundation of Sales companies Stolzle Glass USA Inc., Stolzle France SAS and Stoelzle Glass LLC

2011
Implementation of a second white flint furnace in Stolzle Częstochowa and major investments in production and decoration

2013
Acquisition of Stoelzle Masnières Parfumerie SAS and Stoelzle Masnières Parfumerie Décoration SAS in France

2014
Acquisition of Stolzle Wymiarki Sp. z o.o., Poland; Rebuilding and finally restart in July 2015

2014
Rebuild and extension of furnace 4 at Stölzle-Oberglas and furnace 1 at Stolzle Częstochowa

2015
French Stölzle sites were renamed Stoelzle Masnières Parfumerie SAS and Stoelzle Masnières Parfumerie Décoration SAS

2015
Extension of decoration and rework area at Stolzle Częstochowa

2016
Expansion of headquarter by impressive glass annex and construction of new white flint furnace in Stölzle Flaconnage

CONTENT

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SUSTAINABILITY WILL LEAD THE STÖLZLE GLASS GROUP SUCCESSFULLY INTO THE FUTURE

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FOREWORD

CEO Statement

The Stölzle Glass Group is pleased to present its first sustainability report. This report underscores our actions and sense of responsibility with respect to resources and the environment, and reflects our social commitment towards our employees and business partners. Over the last few years, the Stölzle Glass Group has been growing steadily. Linked with this growth and expansion of production capacity, Stölzle has invested heavily in the field of environmental protection. 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 2020 and beyond continue to pursue this strategy. Due to our capacity expansion, numerous activities designed for employee development have been implemented. Stölzle 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.

At present, our focus lies on occupational safety and preventing accidents at work: we have not quite reached our target in this respect and must strengthen measures to ensure a safe working environment and safety-conscious employees. From the inert raw material of glass, we develop, manufacture and market high-quality packaging for the pharmaceutical, food, spirits and cosmetics industries. Thanks to its unlimited recyclability, only glass can claim the capacity to go back into the production process over and over again; to be re-used endlessly without compromising on quality, flavour-neutrality or functional safety. This fundamental unique selling point with regard to longevity will be a key aspect in 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 putting it into practice and long-term further development to lead the Stölzle Glass Group successfully into the future.

Dkfm. Johannes Schick
CEO Stölzle Glass Group

01

SUSTAINABILITY

Our approach to sustainability

SUSTAINABILITY

Our approach to sustainability

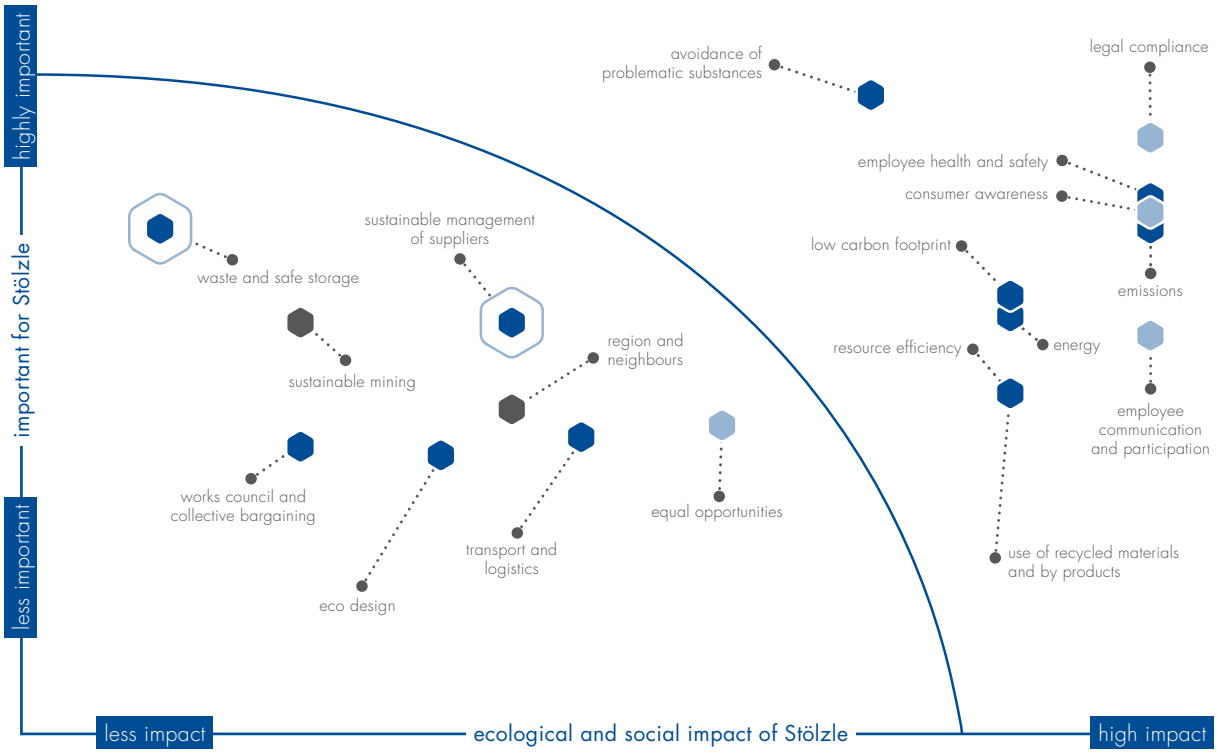
The publication of the first sustainability report emphasizes the Stölzle policy to take sustainability seriously and to develop it constantly. Stölzle wants to inform its stakeholders about the activities, achievements and targets for the future actively and continuously.

ABOUT THE REPORT

When Stölzle decided to issue its sustainability report, we also decided to adhere to the GRI's Reporting Guidelines (G4). To ensure that these principles are observed throughout the report, an external consultant supported us in this project.

The sustainability topics in the Stölzle report were defined internally by the Sustainability Team. In addition, 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 report on the next page. The material aspects were finally approved by the CEO.

STÖLZLE GLASS GROUP MATERIALITY ANALYSIS



SUSTAINABILITY FOR US MEANS ...

... Protecting the environment

We as a glass producer are proud of the fact that glass is a perfect material, as it does not pollute the environment, is endlessly recyclable, does not react to its content, and does not contaminate this with hazardous substances. Stölzle balances its energy-intensive production with constant investment and improvement in processes and technologies.

... Social responsibility

The fascination for glass unites all Stölzle employees. This passion is alive and well, and is evident in the daily work carried out by all employees, from executive management to the operators on the lines. The employee-focused approach is driven by a vision of the "5 T's" (Trust – Transparency – Target-driven – Teamwork – Talent Research).

... Being a sustainable partner for our stakeholders

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

THE MATERIAL ASPECTS WITH THE HIGHEST PRIORITY ARE AS FOLLOWS	
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.
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.
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 wellbeing 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.
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.
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 to save resources. Using post-consumer cullets 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.
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 ensure 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 ensure fair and safe working conditions for their employees, environmental protection and an ethically correct conduct.

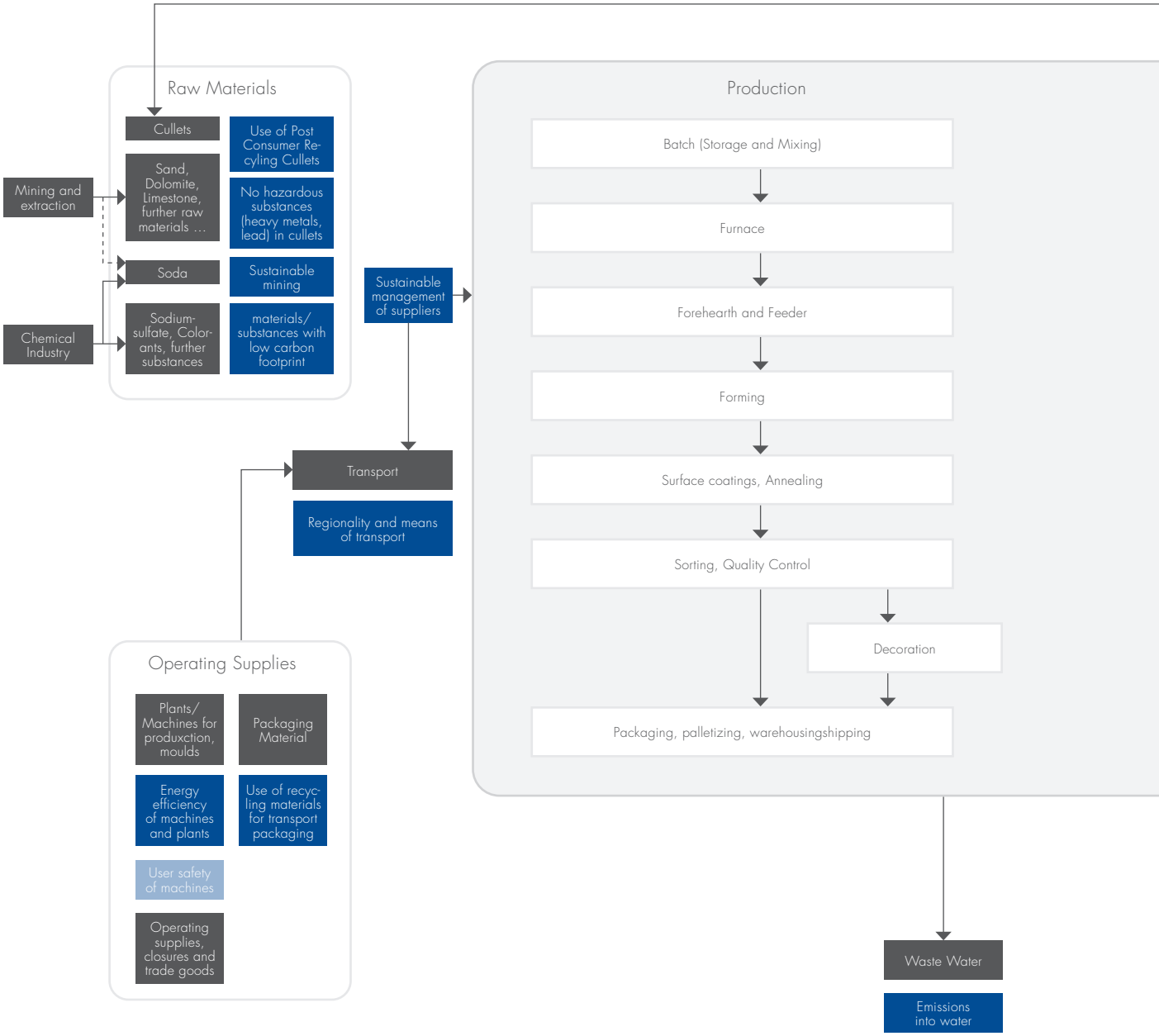
STAKEHOLDER MANAGEMENT

The most important stakeholders have been evaluated and identified by the Stölzle Sustainability Team. The communication with the stakeholders is taking place via various communication channels (communication with Key stakeholders see Chapters "Customers and consumers", "Employees" and "Sustainable supplier selection").

Graph: *Stakeholder Diagram*

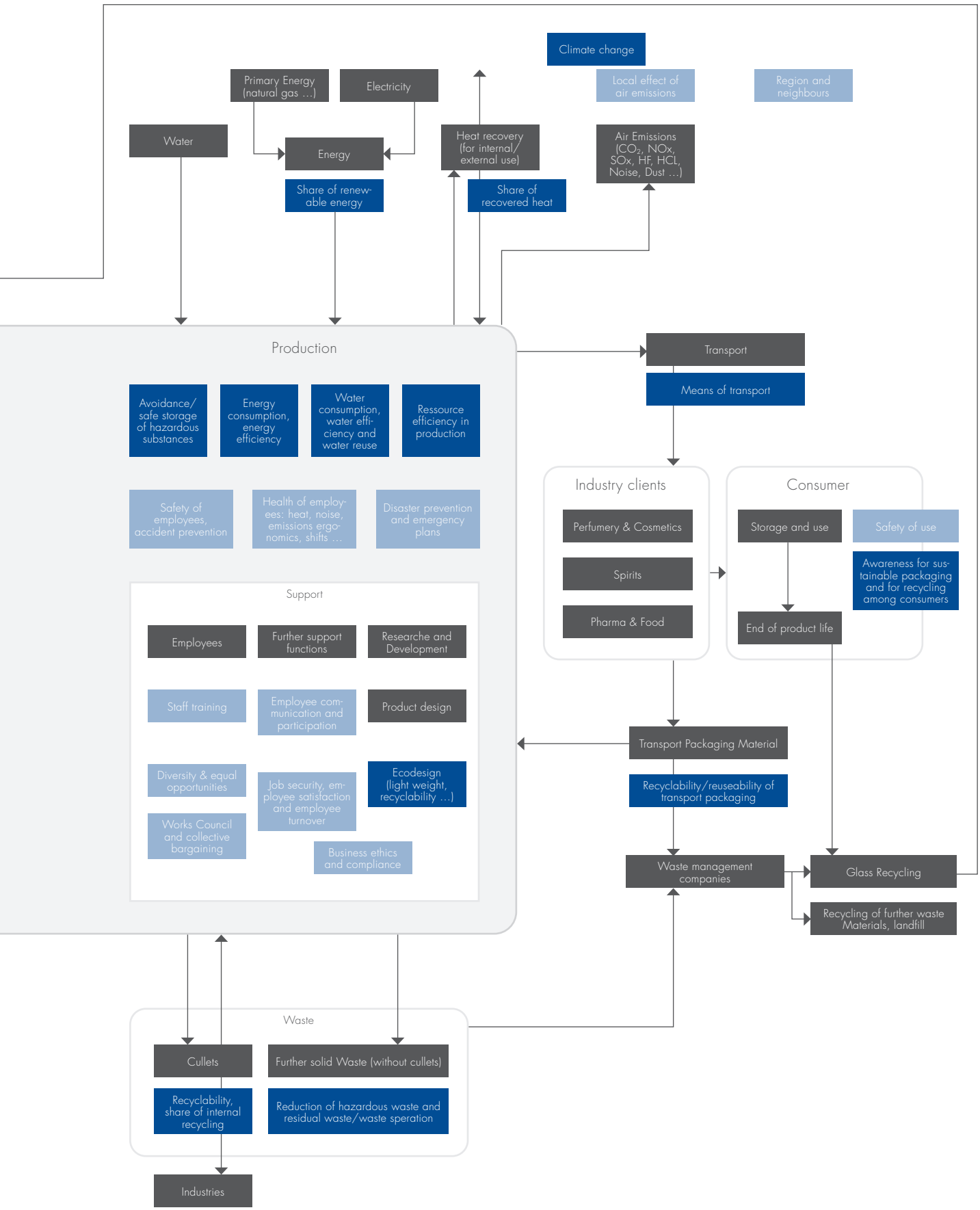
SUPPLY CHAIN

Sustainability in the Stölzle life cycle



Legend Value Chain

● Identified essential environmental aspect ● Identified essential social aspect


Climate change
Primary Energy (natural gas …)
Electricity
Local effect of air emissions
Region and neighbours
Water
Energy
Heat recovery (for internal/ external use)
Air Emissions (CO_2, NOx, SOx, HF, HCL, Noise, Dust …)
Share of renew-able energy
Share of recovered heat
Production
Transport
Means of transport
Avoidance/ safe storage of hazardous substances
Energy consumption, energy efficiency
Water consumption, water effi-ciency and water reuse
Ressource efficiency in production
Industry clients
Consumer
Safety of employees, accident prevention
Health of employ-ees: heat, noise, emissions ergo-nomics, shifts …
Disaster prevention and emergency plans
Perfumery & Cosmetics
Storage and use
Safety of use
Spirits
Awareness for sus-tainable packaging and for recycling among consumers
Pharma & Food
End of product life
Support
Employees
Further support functions
Researche and Development
Staff training
Employee com-munication and participation
Product design
Diversity & equal opportunities
Job security, em-ployee satisfaction and employee turnover
Ecodesign (light weight, recyclability …)
Works Council and collective bargaining
Business ethics and compliance
Transport Packaging Material
Recyclability/reuseability of transport packaging
Waste management companies
Glass Recycling
Recycling of further waste Materials, landfill
Waste
Cullets
Further solid Waste (without cullets)
Recyclability, share of internal recycling
Reduction of hazardous waste and residual waste/waste speration
Industries

02

RESPONSIBILITY

Business ethics and Legal compliance

RESPONSIBILITY

Business ethics and Legal compliance

As a producer of packaging for beverage, food and pharma products, product liability is core to all our business practices. Stölzle sets a high value on ethical behaviour, strict refusal of corruption and bribery, as well as strict adherence to legal requirements in cooperation with business partners, but also internally with employees.

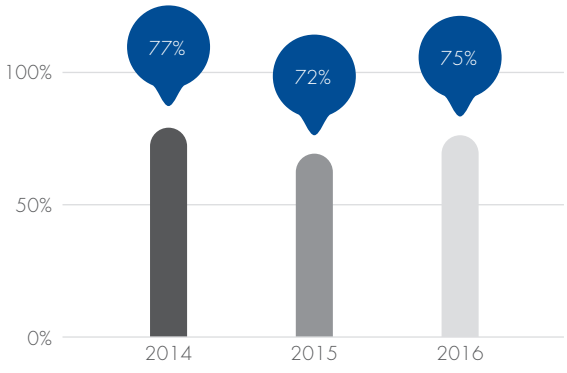
KEY MESSAGES/TARGETS

1. Legal compliance: All legal requirements met, no sanctions or fines received.
2. Our target: Implementation of a Group-wide Legal Compliance structure and organisation.
3. Renewal of our Code of Conduct in progress.
4. We make our ethical standards transparent in independent and international supplier platforms such as ECOVADIS and SEDEX.
5. As members of FEVE, we supported EU policies for Circular Economy and Environmental Footprinting in 2016.

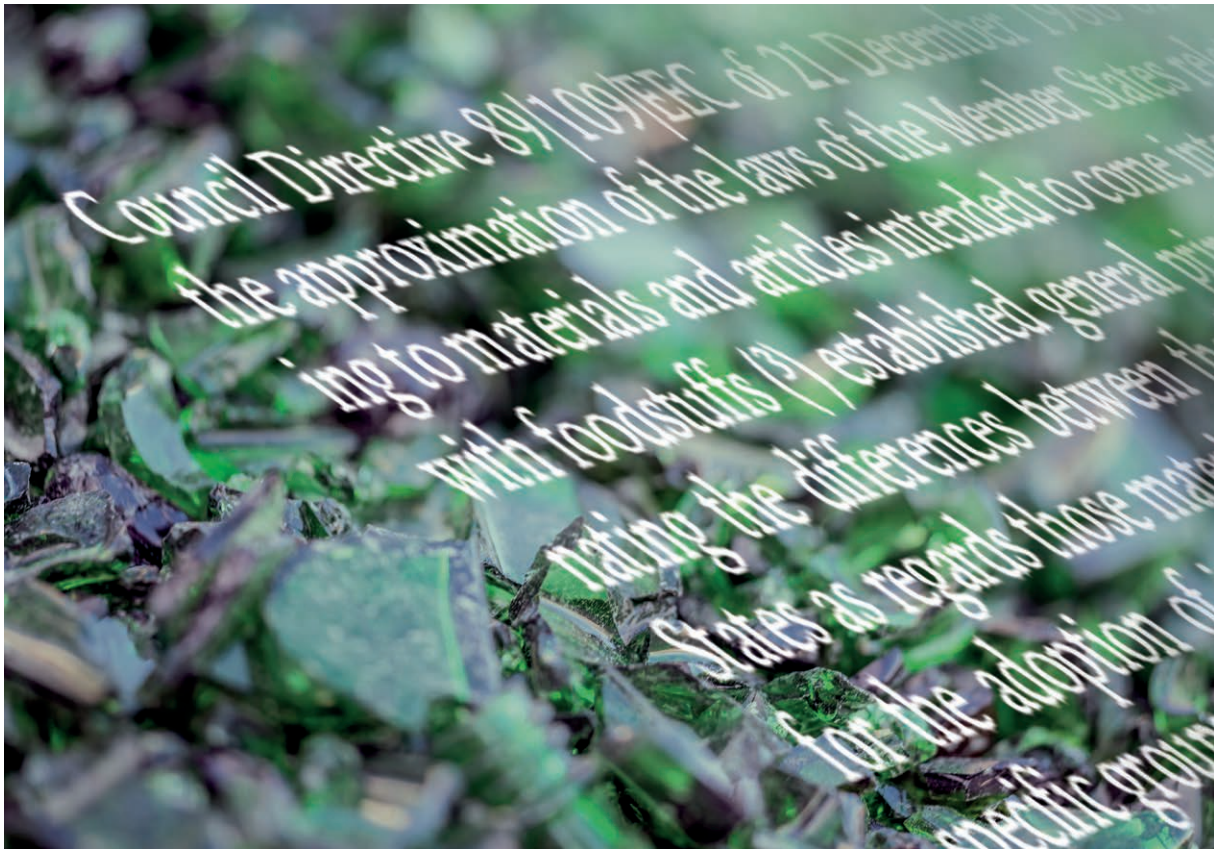
PRODUCT LIABILITY AND COMPLIANCE

The Stölzle Management System is directed towards the avoidance of 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, Stölzle works in close cooperation with the customer and provides support with its complete system of traceability.

Furthermore, Stölzle focuses on compliance with all applicable legal requirements within the framework of its activities. These principles are an integral part of our Quality, Environment, Energy and Occupational Safety Policy. This actively involves all employees. We keep ourselves continuously up-to-date and proactively informed about new requirements with the help of nominated representatives and the use of Internet platforms. Glass containers for pharmaceutical use must in addition comply with the specifications established in pharmacopoeia monographs for pharma glass containers. The Stölzle sites in Austria and the Czech Republic, where processes and product ranges are specifically geared towards pharma products, are equipped with special facilities and equipment. These enable every batch to be tested according to pharmacopoeial requirements (as a standard:



Product Information: *Share of products with information requirements from the customer (food, pharma, spirits) – based on sales value/turnover in EUR.*



European Pharmacopoeia and United States Pharmacopoeia). This allows us to guarantee the pharmaceutical quality of the products. Assuring the conformity of food and spirits bottles with EU regulations and directives is a must; this includes in particular the EU Regulation EC 1935:2004 on materials and articles intended to come into contact with food, as well as the Regulation EC 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food. Stölzle confirms this conformity in its corresponding declarations of conformity. We provide evidence of compliance by testing in independent accredited institutes or laboratories.

In the period under review, Stölzle did not receive fines or sanctions with respect to non-compliance with legal requirements. During a product recall of a food product, introduced by a customer, Stölzle was able to work out a mutual solution and therefore prevent a possible risk to the health of consumers.

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 in particular in accordance with customer requirements. These requirements are integrated into the internal documents, which guarantees the correct labelling. In the reporting year, there were no instances of non-compliance with product labelling.

BUSINESS ETHICS AND PREVENTION OF CORRUPTION

The Stölzle Glass Group operates with customers and suppliers on a global basis. We view the Stölzle Code of Conduct as a basic principle in business relations.

This emphasizes its importance to all partners. The Stölzle Code of Conduct summarizes our guidelines and forms the basis of our behaviour towards stakeholders.

The Code of Conduct encompasses the following principles

- Compliance with regulations
- Respect for human rights
- General business practices and integrity
- Internal collaboration
- Social responsibility

www.stoelzle.com/qm

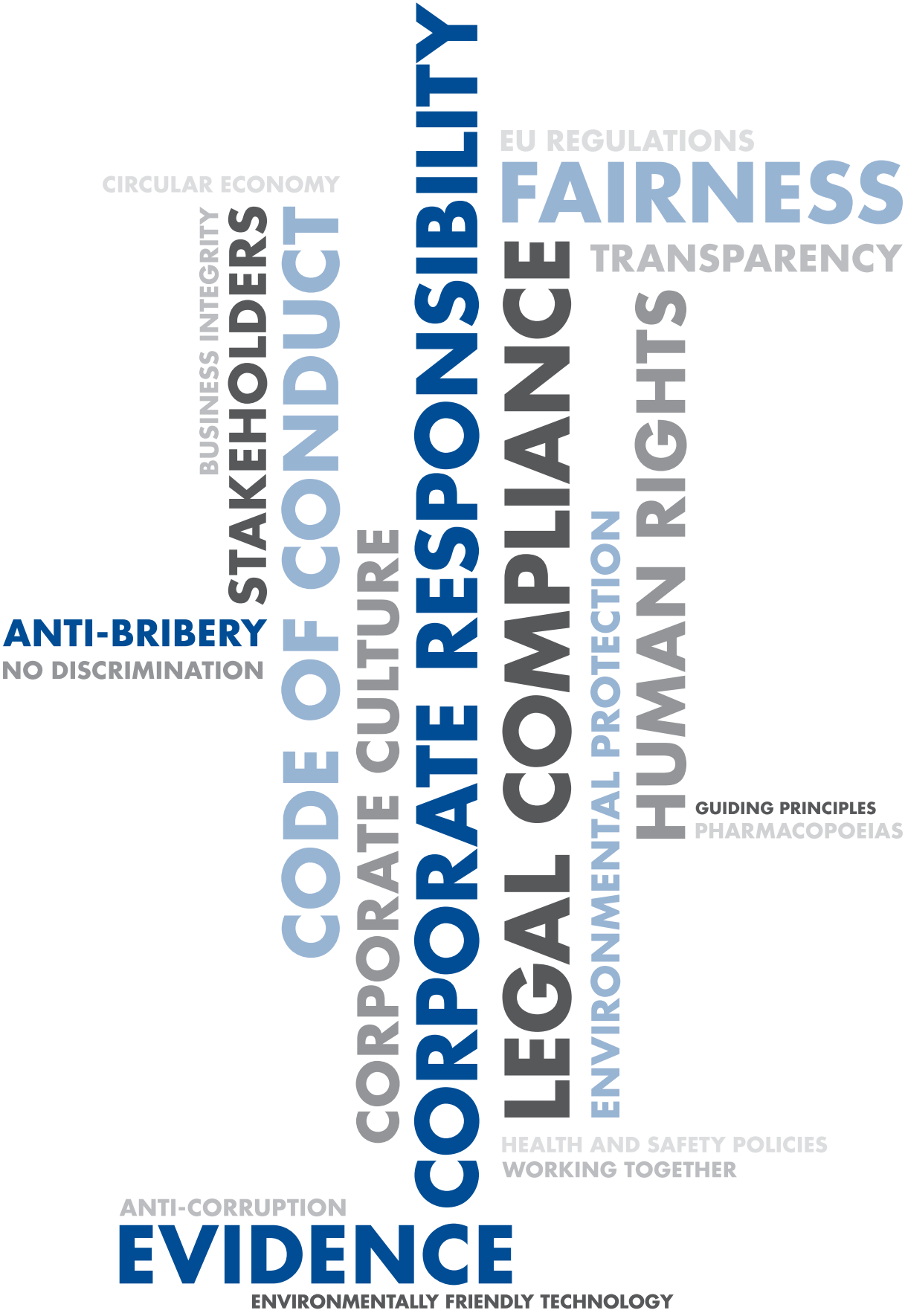
Despite the broad scope of Stölzle activities, we can report that no cases of corruption, discrimination, unfair competition or related issues emerged. However, we would like to deepen our principles further and put our Code of Conduct on a wider footing. Stölzle Management supports these goals by providing the necessary personnel and financial resources to enable us to implement a Group-wide Legal Compliance structure. We wish to quantify our performance in the fields of ethics, environmental issues and occupational safety aspects. We are therefore registered as a supplier on the platforms ECOVADIS (Sustainable Supply Management) and SEDEX (Supplier Ethical Data Exchange). These aim to promote CSR performance within the supply chain and to help enterprises improve their sustainability. This allows our customers to be provided with independent evaluations. Stölzle makes no monetary or non-monetary contributions to political groups either directly or indirectly. As a member of FEVE, Stölzle supports its projects and endeavours through active participation.

In 2016, FEVE focused on:

- the "Circular Economy package" with the aim of increasing the amount of good-quality glass collected, and
- the European Commission's Product Environmental Footprint (PEF) life cycle assessment initiative.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
LEGAL COMPLIANCE				
TARGET 2020: KEEPING THE HIGH LEVEL OF LEGAL COMPLIANCE				
MEASURES TO SUPPORT THE TARGET				
Implementation of Group Legal Compliance Manager	Group			x
Creation of a Group Legal Compliance structure	Group			x
Installation of Group legal data base	Group			x
Installation of pro-active system to screen upcoming legislation and regulations	Group			x
FURTHER MEASURES				
"Employee Code of Conduct" reprocessed	Group		x	
Awareness for prevention of corruption in various countries/regions	Group			x


CIRCULAR ECONOMY
BUSINESS INTEGRITY
STAKEHOLDERS
ANTI-BRIBERY
NO DISCRIMINATION
CODE OF CONDUCT
CORPORATE CULTURE
CORPORATE RESPONSIBILITY
LEGAL COMPLIANCE
ENVIRONMENTAL PROTECTION
HUMAN RIGHTS
EU REGULATIONS
FAIRNESS
TRANSPARENCY
GUIDING PRINCIPLES
PHARMACOPOEIAS
HEALTH AND SAFETY POLICIES
WORKING TOGETHER
ANTI-CORRUPTION
EVIDENCE
ENVIRONMENTALLY FRIENDLY TECHNOLOGY

03

EMPLOYEES

Sustainable human resources development

EMPLOYEES

Sustainable human resources development

A fascination for the material of glass unites employees from all plants and offices of the Stölzle 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.

2,365
Total Headcount 2016

2,150
Total Headcount 2015

2,037
Total Headcount 2014

In line with our mission statement, we aim to be the preferred partner for our customers and employees on a permanent basis, based on a business culture of mutual trust and a demand for high motivation, flexibility and reliability. This demonstrates the strengths of Stölzle and ensures a leading position in the strategic areas of PHARMA, PERFUMERY & COSMETICS and SPIRITS. 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 difficult world market.

3.1. EMPLOYEE DEVELOPMENT AT STÖLZLE GLASS GROUP

KEY MESSAGES/TARGETS

1. Growing number of employees in the Group.
2. Group-wide employee satisfaction survey.
3. Intensive professional education and promotion of competences.
4. Increase the share of female employees from 31% in 2014 to 38% in 2016.

HUMAN RESOURCES MANAGEMENT AT STÖLZLE GROUP

The utmost aim of the Stölzle Glass Group is to retain employees at the company long-term. In order to achieve this, we offer an employee-friendly organisational structure, performance-oriented pay and excellent development opportunities in the international field, as well as a business division characterised by the 5 T's:

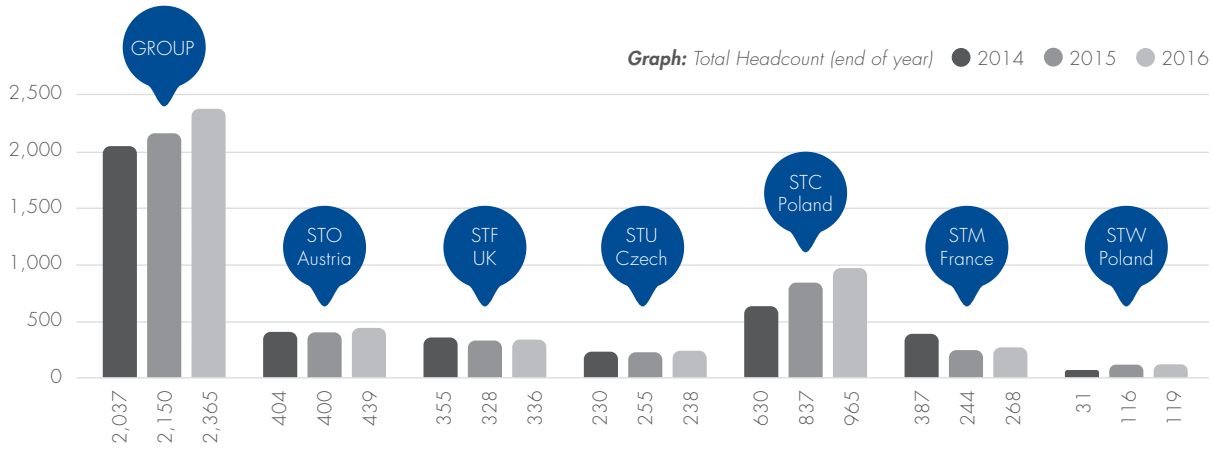
T – Trust
T – Transparency
T – Target Driven
T – Teamwork
T – Talent Research

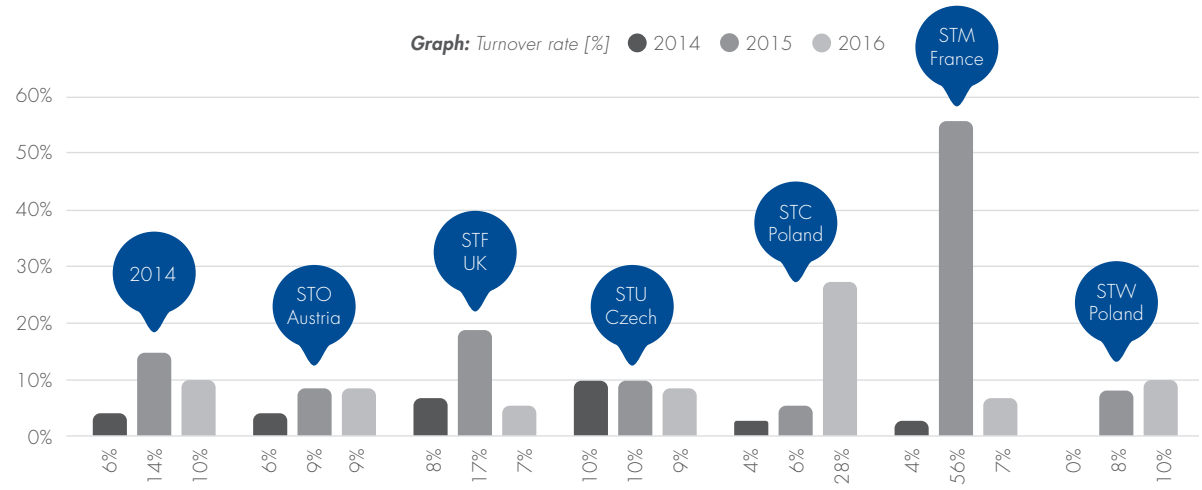
In total, five Human Resources managers and their teams are responsible for staff-related issues at the six sites. At the headquarter in Köflach, the Group's HR is responsible for the role of Head of Human Resources, which reports directly to the CEO of the Glass Group. All HR processes are coordinated from there.

Shared key points across all plants are: intensifying the technical training of the production staff, the continuous further development of marketing staff, the reinforcement of managers as well as the internal and external search for young talent and succession planning. Furthermore, the topics of health and occupational safety as well as internal communication rank very highly and are accordingly pressed.

DEVELOPMENT HEADCOUNTS

Due to our successful market position, we are able to ensure that our employee figures follow a positive trend. At the Austrian plant, the staff level has remained steady for years. A slight increase was recorded in 2016. The continual growth of the Stölzle Glass Group over the last few years has necessitated the establishment of headquarters in the areas of technology, occupational safety, sales and quality management among others.





The development of the workforce in Austria and Poland is established through:

- A focus on training production workers in order to be able to replace naturally departing staff members (retirement) and supply sufficient numbers of experienced personnel in this area
- The expansion of the Polish plant in Częstochowa and the acquisition of another plant in Wymiarki

In England and the Czech Republic, the headcount remains stable. Recent focus has been placed on apprenticeship recruitment as part of the Company's succession planning at the plant in Knottingley, UK.

The most recent acquisition of the Stölzle Glass Group is a renowned French Glassworks, formerly known as Verreries de Masnières. In December 2013, the glassworks – as well as the Decoration Company allocated nearby – joined Stölzle Glass Group and became Stoelzle Masnières SAS and Stoelzle Masnières Décoration SAS. In May 2015, the corporate names of the two French sites were changed to Stoelzle Masnières Parfumerie SAS and Stoelzle Masnières Parfumerie Décoration SAS. Due to the reorganisation, and as a result of the restructuring process, the headcount had been reduced to 244 employees by the end of 2015.

In 2016, 2,361 people (99.8%) were covered by collective agreements. Most of the employees at the Stölzle Glass Group have an indefinite employment contract (92%) and are employed full-time. Only two per cent of women were employed on a part-time basis in 2016 at the Stölzle Glass Group.

TURNOVER RATE

The turnover rate in Austria remained steady at 9% in 2015 and 2016. Most departures are due to retirement and terminations during the trial month, as the standard of work in the introduction phase did not meet expectations. At the English and Czech plants, the trend is similarly stable.

Stölzle Częstochowa has had to face increased job resignations in the last two years. This is a general development in Poland where employees change their jobs more regularly. The Polish job market has become very dynamic; the wages have ceased to be attractive. A lot of companies in the region of Częstochowa have a problem finding workers, because many people work abroad.

The high turnover rate at the French plant in 2015 is due to the company's name change from Stölzle Masnières SAS to Stölzle Masnières

Parfumerie SAS and the simultaneous closure of a melting furnace. The redundancies associated with this were settled with a redundancy plan agreed with the trade union. The turnover rate is similar between men and women; 2015 was an exception in that the rate was considerably higher among the male contingent as a result of developments at the French site.

SHARE OF FEMALE EMPLOYEES

The proportion of female employees in the glass industry is generally low (for example, it is 24% at Köflach). The low proportion – above all for manual work – is due to the physically difficult work conditions such as night work, heat and noise in production. Very few women apply for these roles. In order to counteract this, Stölzle is redoubling its efforts to recruit female apprentices in apprenticeships such as machining, engineering and mechatronics. The aim is to retain trained female workers at the company and offer them further development prospects. This commitment is bearing fruit: across the Group, the proportion of female workers has risen from 31% (2014) to 38% (2016). The proportion of women in departments such as sorting and packaging or decoration is higher at all sites, as these jobs do not encompass such a high degree of physical exertion.

In Austria, the proportion of women is highest in the administrative field, at 64%. In management, the proportion of women is 27% and has grown steadily compared to previous years. In recruiting and succession planning, the target is on female replacements in order to increase the share further.

3.2. HEALTH AND SAFETY

KEY MESSAGES/TARGETS

1. Caring for the health of our employees: Close to 700 Health Checks in 2016.
2. Positive trend: Reduction in the absentee rate within Stölzle Glass Group.
3. Various safety issues in the past, now safety is a focus.
4. Implementation of BS OHSAS 18001 – Health and Safety Management system in the Stölzle Glass Group at all production sites until 2020.

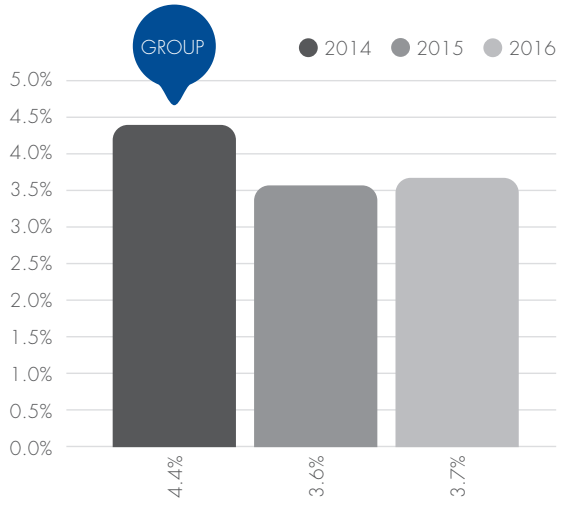
HEALTH

Due to the continually ongoing operations – 365/24/7 – 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 Stölzle employees. For this reason, there are numerous measures in the individual plants. Of the 2,400 employees at the Stölzle Glass Group, over 1,000 work in areas of particular stress (heat, noise and night work), from which our efforts in the field of health are focussed particularly on these workers.

In Austria, weekly visits by an occupational physician who carries out workplace evaluations and consultations ensure that neither are harmful activities performed, nor that the 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 to have been able to offer a collaboration with a local health centre 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 counselling.

In England, employee health is monitored through Occupational Health, whereby an initial medical screening is conducted as part of their 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. We also offer wellbeing initiatives in order to foster and promote a healthy workforce.



Graph: *Absentee rate of employees (Data without Stolzle Wymiarki)*

In the Czech Republic, in addition to mandatory checks within the framework of preventative programmes we provide our employees with "Flexipass vouchers". This means that when there has been no accident at work within a particular quarter, the employees receive a voucher for the swimming pool, massages and other health-promoting activities. In Poland, we have a contract with a Medical Company which organizes medical checks for our employees before they start work. The employees are also obliged to undergo a medical check-up after 30 days of illness and timely medical checks specified by the occupational doctor.

The target for 2020 is to provide employees with more information about health. The planned implementation of a Health and Safety Management System (according BS OHSAS 18001 or similar standard) at the Stölzle Glass Group, starting in 2017 with a planned certification scheme over all sites by 2020, will help to increase employee awareness about these important topics.

The absentee rate due to sick leave at the Group level improved from 4.4% (2014), 3.6% (2015) to 3.7% (2016) of target working time.

Regular health checks are carried out within the Stölzle Glass Group. These are established at different plants for employees who work under special conditions such as heat. However, some of them are offered to all employees on a voluntary basis. The health checks are well-received: in 2014 a total of 491 health checks were carried out at the Group level; this figure had risen to 682 checks in 2016. In the review year, the health checks revealed that all employees working under challenging conditions – such as heat – had the necessary physical aptitudes. Likewise, there were no cases of occupational diseases in the Group in the same period.

STO RUNS AROUND THE WORLD YES, WE CAN!

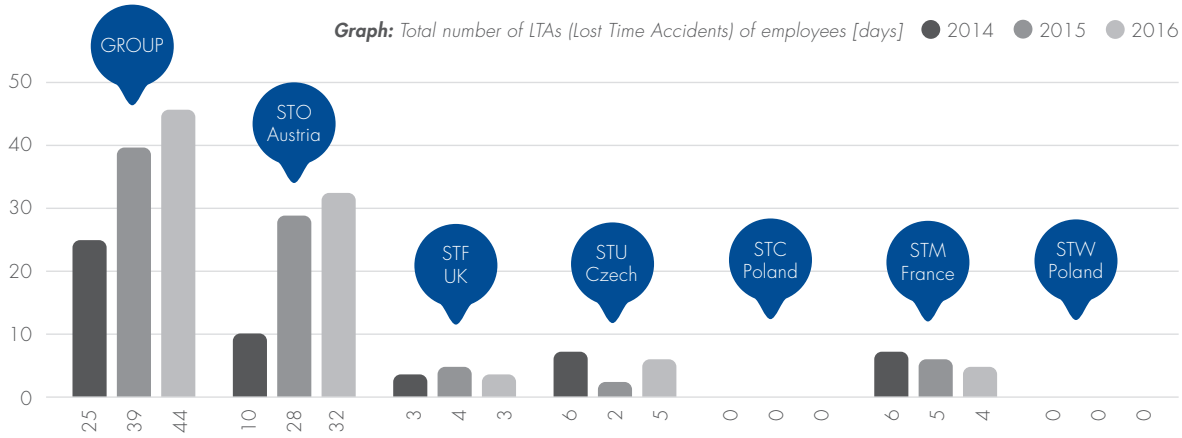
In 2014 and 2015, the Group-wide health project "STO runs around the world" was carried out. The aim was to strengthen Stölzle team spirit and the physical fitness of the employees. The task of each plant was to run around the world together once, i.e. a total of 40.075 km. Each participant received a discounted fitness tracker and a Stölzle running shirt. The distances ran could be viewed on the Stölzle website online. The winner was the first plant to run around the globe together.

SAFETY

Safety is a basic principle at Stölzle. Therefore, the company strives to become an accident-free establishment, and supports itself within the Stölzle Glass Group by means of regular exchanges of experience. Quarterly SHE Group meetings, monthly reports, internal audits and mutual visits serve to reinforce communication in this working area. Furthermore, in addition to the accidents all near-accidents are to be reported and evaluated and suitable measures undertaken to prevent a repetition.

Due to the unsatisfactory development in the number of accidents at work over the last few years, above all in the Köflach plant, improvements in the Health and Safety System are being worked on more intensively. In 2016, the position of internal safety officer, which deals exclusively with the topics of occupational safety, order and cleanliness at the site, was implemented in Köflach. 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. Through mandatory regular safety training, attention is drawn to safety hazards and the safety awareness of every single employee is increased thereby. In addition, global EHS standards and goals are integrated into the Stölzle EHS Management System.

Through a strengthened range of training courses, the use of lubricating robots as well as the offer of special state-of-the-art protective equipment, employee safety is continually being improved. Working with Individual Section (IS) machines is linked to a high risk potential for people in the glass industry. Specific training



L'ANNÉE DE LA SÉCURITÉ (OR THE YEAR OF SAFETY)

Example of safety at Stoelzle Masnières, France

At the Stölzle site in Masnières, an emphasis was placed on improving employee safety in 2016. Through weekly meetings of the team leaders, past (near) accidents were discussed intensively and suitable measures to minimise risk and avoid accidents were worked on. Training on potential hazard identification in middle management, as well as training to improve all employees' risk awareness marked the Year of Safety at Masnières. "Safety Day" was also set up in cooperation with health and social insurance schemes. Here, Stölzle employees experience how they can avoid back injuries, for example by lifting and carrying loads correctly. Further steps are already planned for 2017, such as the introduction of 5A programmes at the workplace.

FIRE PROTECTION

Example of fire protection at Stölzle-Oberglas, Austria

Since 1950, this Stölzle site has run a company fire brigade with currently 56 members. Annual employee training, weekly fire protection checks and planned extinguishing exercises are part of the preventative fire protection measures. A fire triggered by hot work (2014) was thoroughly extinguished by the rapid response of the company fire brigade.

of new employees at the workplace, training through IS machine manufacturers as well as planned deployment of lubricating robots, the aim is to improve occupational safety for Stölzle employees.

Stölzle employees are equipped with special protective equipment, so for example the necessary ear protection at the "hot end" is adapted to each respective employee and hearing is medically checked at regular intervals. To minimise cutting injuries, the additional use of special cut-proof gloves is also planned for employees at the cold end of glass production.

Number of accidents at work

The definition of an accident at work is currently stipulated as follows: Taking into account the respective country-specific statutory requirements with respect to reporting obligations, all accidents which lead to work incapacity for the person concerned are recorded as accidents at work within the framework of the HSE reporting.

For the recording and detailed evaluation of accidents at work, a uniform system will be created in all Stölzle plants in 2017. The Lost Time Accidents (accidents at work resulting in more than one day of absence, LTAs for short) among employees in 2014 on a Group level was 11.3 accidents per 1,000 employees. In 2015, this was 14.4 accidents and in 2016 17.3 accidents per 1,000 employees. Among apprentices, there were 1.0 accidents in 2014, 3.7 in 2015 and 1.3 per 1,000 employees in 2016. In the period 2014–2016, there were no work-related fatalities in the Group.

At the Köflach plant, the absentee quota remains stable at 3.5%. A proportion of 0.6% suffered accidents at work in 2016. This predominantly relates to minor injuries such as lacerations. In 2016, numerous initiatives were set up to reduce the number of occupational accidents. By appointing an internal safety officer and by training an additional 16 safety representatives,

we are striving towards a dramatic improvement in this field.

At the plant in Heřmanova Huť, absenteeism is also stable at 1.9% in 2016. In this year, it was possible to further reduce the number of accidents at work. The reviewing of all occupational injuries and implementation of corresponding measures, as well as the detailed documentation of safety and health protection, have led to this success. At all Stölzle Glass Group production sites, improving fire prevention and safety is a key topic, as there is a constant risk of fire as a result of the high temperatures at the hot end of glass production.

In addition, Stölzle takes all measures to minimise further environmental risks. Thus, there are crisis plans for emergencies which are regularly tested in evacuation and fire protection exercises. For Stölzle, sustainable production is not only an obligation to the environment but also an obligation to the health and safety of its employees.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
EMPLOYEE HEALTH AND SAFETY				
TARGET 2020: REDUCTION OF ACCIDENT RATE				
MEASURES TO SUPPORT THE TARGET				
Safety manager, redesign of safety management	Austria	x		
"Year of Safety": Trainings, new audits …	France		x	
Common definition of work accidents and lost time	Group		x	
Occupational Health and Safety Management System BS OHSAS 18001	Group			x
Group health & safety manager, group health & safety audits (cooperation between Operational Excellence Group Representative and CR Manager)	Group		x	x
Programme to increase health & safety awareness among employees	Group		x	x
TARGET 2020: REDUCING SICK LEAVES PER EMPLOYEE				
MEASURES TO SUPPORT THE TARGET				
Initiative to foster health and wellbeing (e.g. health offers such as massage, physiotherapy …)	Austria	x		
Positive incentives for reduction of sick leaves	Czech	x		
Improve the effectiveness of the interview after a sickness leave with training of 1st line Supervisor	France		x	
Standardized sickness leave interviews	Group		x	

3.3. TRAINING AND DEVELOPMENT

KEY MESSAGES/TARGETS

1. Long-established leadership programmes.
2. Talent research programme started in reaction to demographic changes and in order to provide the best-educated staff wherever needed.
3. Facing the challenge of Industry 4.0.

TRAINING

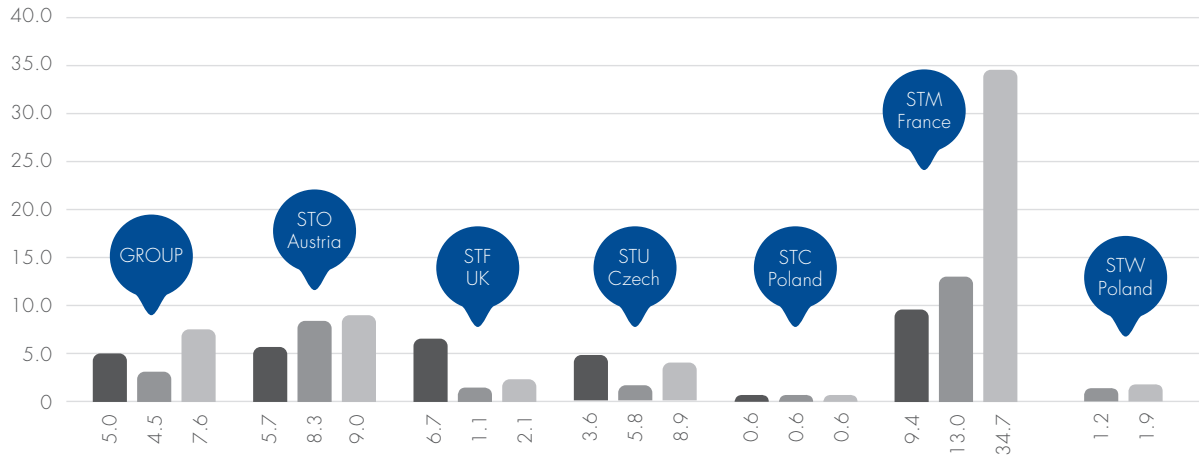
Technological change, automation, Industry 4.0, capacity for innovation, flexibility, dealing with change, a shortage of skilled staff, demographic development and knowledge transfer are just a few of the examples for the challenges facing Stölzle in international competition. Quick and successful product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

Training and development has always ranked highly at Stölzle. In the future, it will be more necessary than ever to invest even further in employee qualifications. Advancing automation and digitalisation will increase 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 his/her 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.

The number of training hours per employee has grown considerably in the year under review. The reason for this was the development at the site in France, where safety training and particularly

Graph: *Average training hours per employee* 2014 2015 2016



Closing ceremony of the Leadership Curriculum 2016

expert training were intensified (see also the chapter "Health & Safety"). Over the past few years, there have been only moderate differences relating to the average number of training hours for men and women (2015: average four further training hours per woman and 4.7 further training hours per man). In 2016, a male employee of the Stölzle Group received around twice as many training hours – due to the special measures at the French site.

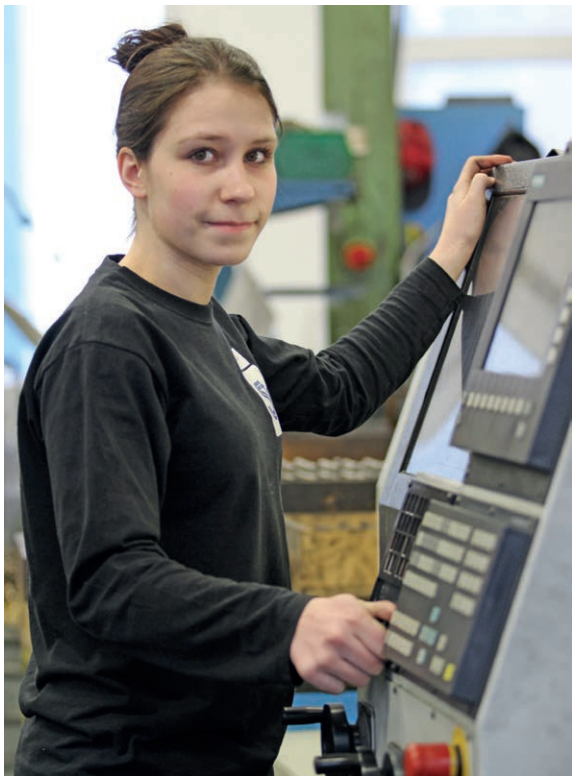
The individual training requirements per plant are recorded annually via employee performance appraisals i.e. via a needs assessment with the executives. After an evaluation of the training requirements by the local HRM, the necessary training is put together into a training plan and approved by the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

LEADERSHIP PROGRAMME

In order to continue improving leadership competence among shift managers, foremen and members of middle management, the Stölzle Leadership Curriculum was launched in 2008 at the Austrian plant. This comprehensive programme lasting six months comprises four modules on the topics of project management, communication and conflict management, leading teams and the essence of leadership. Furthermore, all participants receive individual coaching and implement their own improvement project. In Austria, 54 managers have already passed this programme. To date, it has been successfully rolled out at the plants in England with 50 participants, the Czech Republic with 35 participants and in France with 22 participants. The aim is for every Stölzle manager to undertake this programme in order to build a standardised understanding of leadership across the Group.

There has been a private development programme for members of senior management since 2014. The mixed international composition with 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 Module Leadership, Strategy, Organisations and Process Management, Financial Data and Change Management.

Since 2016, there has been the option of regular individual coaching for selected teams or



Apprentice in the third year of her machining apprenticeship

individual managers. Here, the aim is to further develop the participants in the areas of leadership and personality and to support them in their daily challenges.

Talent Research

The search for young talent within the entire Stölzle Glass Group is of strategic importance. Highly motivated employees, with great commitment and a high level of dedication as well as the desire for further development should be recognised as early as possible and further developed in a targeted fashion. Together with the management, HR identifies possible candidates and thus creates a Group-wide talent pool.

Apprenticeship

Apprentices are trained at the plants in Austria, England and France. These training sessions vary from country to country. From 2014 to 2016, the number of apprentices at the Stölzle Glass Group rose from 26 to 29.

Apprentices	Headcounts	26	22	29
Female apprentices	Headcounts	7	7	9
Male apprentices	Headcounts	19	15	20

Training qualified, skilled staff is of great importance at the austrian headquarter of the Glass Group. Every year, around five young people start their training in Köflach. As one of the leading manufacturers of packaging glass, Stölzle knows very well the significance of qualified, specialised staff. In order to offer apprentices the best possible training, in 2006 Stölzle was one of the founding members of the "ABV Metall" – a local Training Association. From this network, trainees benefit from the broad expertise and training opportunities of numerous metalworking companies in the region. In the field of apprentice marketing too, a number of activities have been set in motion in collaboration with the association. One of the key points of the last few years was to encourage girls into technical apprenticeships. These efforts are already showing initial success.

As a particular incentive for outstanding apprentice performance, the best apprentices are picked to work at the English or Austrian plant on site for one or two weeks every year within the framework of an exchange programme and to get to know the plant, the employees and the culture better.

EMPLOYEE COMMUNICATION

Communication with and to the employees has been identified as a key element for the Stölzle Glass Group. All employees are to be informed about the business objectives of Stölzle. Based on these objectives, individual goals for the 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

- The Stölzle Intranet
- Screens in different areas of the sites used as information tools and work support
- Paper-based documents (information letters from the management, organisational information sheets)
- Personal meetings and interviews
- Regular group-wide or site related meetings (production, assortment, sales, plant manager, ORP, management)
- Regular workshops
- Regular works meetings with announcements from the management

With all these instruments, Stölzle continuously keeps employees informed about company news, changes in organisation and structure, new employees, performance with regard to production and quality, job offers, etc. A Stölzle magazine is issued twice a year, published in all company languages. It is also an information tool from the Board and Managers. The Magazine, first edited in 2008, has become a standard of communication within the Stölzle Group. Not only is written communication practiced, but personal meetings and talks also play an important role. The yearly appraisal interviews across the Group and different levels of the organisation give us the opportunity for personal feedback to and from the employee. The setting of goals and the personal development outlook is an essential part of the interview. The regular meetings and workshops vary in frequency and aims, but the main goals are mutual information, problem solving, review and preview, coordination, information of status of production, sales, projects and the setting of corrective actions and responsibilities.

In the forthcoming time period, Stölzle are to perform a Group-wide employee satisfaction survey – see Roadmap 2020. This will help us in the understanding and development of the best suitable and employee-friendly working environment.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
EMPLOYEE COMMUNICATION AND PARTICIPATION				
TARGET 2020: TRAINING				
MEASURES TO SUPPORT THE TARGET				
Ongoing training programme for employees who have already received initial trainings	Group			x
Follow up trainings for graduates of the leadership programme	Group			x
Inter-Plant-Visits on operators level (Trainings)	Group			x
TARGET 2020: EMPLOYEE COMMUNICATION				
Interface Workshops	Group			x
Employee satisfaction survey	Group			x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04

SUPPLIERS

Sustainable supplier selection

SUPPLIERS

Sustainable supplier selection

As part of the existing certified quality management system, 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; monitoring said suppliers in the annual supplier audits in accordance with an audit plan; and an annual performance evaluation. Purchasing and quality management work closely together in this process. Transparency in dealings with our suppliers is just as important to us as mutual appreciation and the maintenance of long-term connections.

KEY MESSAGES/TARGETS

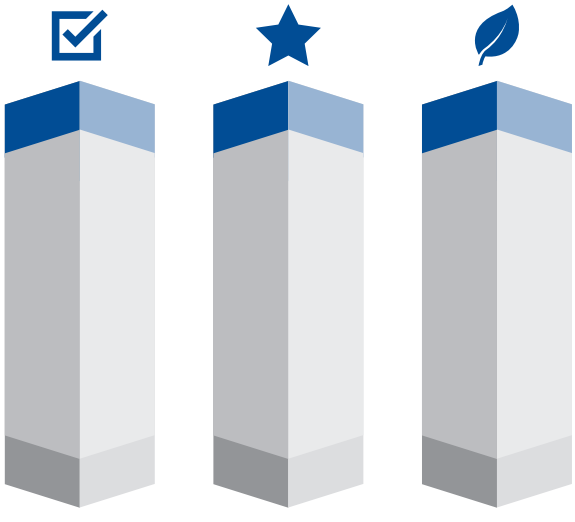
1. Over 3,000 suppliers in the Stölzle Glass Group.
2. Target: Group-wide purchasing standards with respect to sustainability – the process is already successfully underway among suppliers of the Austrian plant.
3. Target: Sustainability in all supplier audits. This has already been implemented at the sites in Austria and France.

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; this poses a big challenge for supplier management. Most of this affects the field of packaging material, in which Stölzle must meet a variety of customer requirements. With regard to selecting suppliers, the quality of suppliers' materials and their quality systems play a decisive role in addition to the commercial aspects. Aspects of sustainability have therefore been gaining increasing significance for some time now, and are therefore integrated into the supplier management strategy.

The incorporation of sustainability aspects is based on the following pillars:



Supplier evaluation with the aid of surveys and set criteria

Carrying out supplier audits

Sustainable procurement

Supplier evaluation with the aid of surveys and set criteria

in the surveys for the qualification of new suppliers, and therefore the evaluation of these aspects for the overall assessment and approval of the suppliers.

Carrying out supplier audits

Auditing sustainability aspects as part of the performance audit. As a component of the audit checklists, questions about standards in environmental protection and social responsibility will be asked by the auditors. Their compliance will also be scrutinised. The results ultimately form part of the audit evaluation. This process was introduced by the Group leader with the launch of the Integrated Management System and will gradually be rolled out to all sites. In order to increase the quality of the evaluation concerning sustainability aspects in the audits, CR officers are to be involved in the audits in cases in which these aspects have been rated particularly important in a risk assessment whilst compiling the annual audit programme.

Sustainable procurement as an essential component of the Stölzle business policy

The Stölzle policy on sustainable procurement is published on the Stölzle website. Stölzle thereby underscores the significance of this topic to its suppliers. Stölzle expects its suppliers to have an independent sustainability policy and actively implement the relevant processes in their own businesses. Recognition of Stölzle's sustainable procurement policy was first confirmed in writing after its publication in 2014 by the suppliers of the Köflach plant. Approximately 60% of the Köflach plant suppliers have taken note of our policy. By implementing the process across the Group, we aim to establish sustainable procurement as an essential factor in our purchasing policy and to raise suppliers' awareness as a prerequisite for future collaboration.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
SUSTAINABLE SUPPLIER MANAGEMENT				
TARGET 2020: 100% OF SUPPLIERS ARE COVERED BY OUR SUSTAINABLE MANAGEMENT SYSTEM				
MEASURES TO SUPPORT THE TARGET				
Integration of sustainability checks in all audits of suppliers of our French production site	France	x		
Integration of sustainability checks in all audits of suppliers of Stölzle Glass Group and participation of CSR Managers in supplier audits; suppliers which will be audited will also be chosen based on a sustainability risk analysis	Group		x	x
Sustainable procurement policy acknowledged by all suppliers of French site	France	x		
"Supplier Code of Conduct" acknowledged by all suppliers	Group			x
Development of a group culture on sustainable procurement (training, communication, internal audits)	Group			x

05

GLASS

Great Material – Great Products

GLASS

Great Material – Great Products

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 Stölzle Glass Group operates sustainably because we dedicate ourselves to being environmentally friendly whilst producing innovative and exciting products.

KEY MESSAGES/TARGETS

1. High level of transparency and focus on local suppliers helps to reduce the environmental impact of our raw materials.
2. New formulas to maximize material efficiency and quality.
3. Constant online monitoring and new technologies for water efficiency.

5.1. SELECTION OF RAW MATERIALS

The raw materials needed to produce glass are as follows: sand, soda ash, limestone, dolomite, feldspar, sodium sulphate, calumite and colourants. These materials are naturally occurring ingredients, weighed in batches to the correct proportions, mixed, and melted to form a homogenous mixture called glass, a solid material needing no barrier layers of material or chemicals to enable it to perform inertly as a packaging medium.

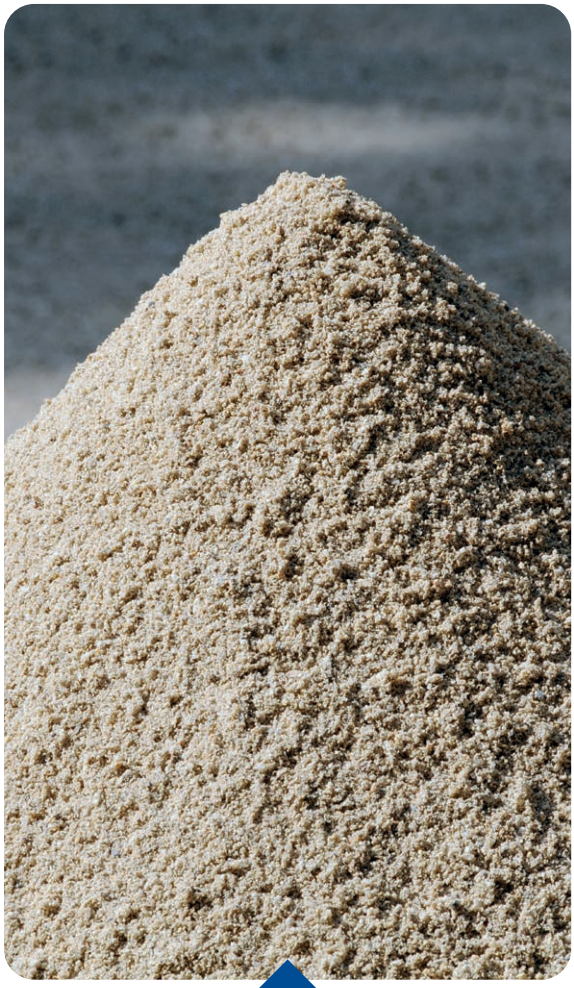
In addition to the above-mentioned materials we add cullet, which is a combination of internal glass waste from our process, plus where possible PCR (Post Consumer Recyclate). PCR is covered in its own chapter within this report (see chapter 5.2.). Calumite, which is used in flint and amber/green glasses is also a recycled waste material (from the steel industry); it is a melting and refining aid in the glass process, saving virgin raw materials as well as energy.

The Stölzle Glass Group uses the best-quality purest raw materials in terms of minimal contaminants, optimum particle size, and consistent chemical content, ensured by our ISO quality management procedures. This is key to the success of the glass-making process.

Raw materials are sourced as locally as possible, particularly the high-volume materials such as sand and cullet. The transport environmental impact makes this a high-priority sourcing and purchasing factor. The 'rare' small volume materials can come from other continents, however.

The special glass formulations for our flint glasses across the Group are designed to produce extra white flint glass, with no bubbles and general faults, but also to maximize our tonnage output. Our amber and green glass formulations have similar targets, but also contain high levels of PCR with no loss of quality.

The table on the next page shows our batch raw material and cullet used over recent years. The markets that we serve are a mix of pharmaceutical, perfumery, cosmetics, prestige



309,889
Total batch material 2016 (in tonnes)

19,385
Total cullet 2016 (in tonnes)

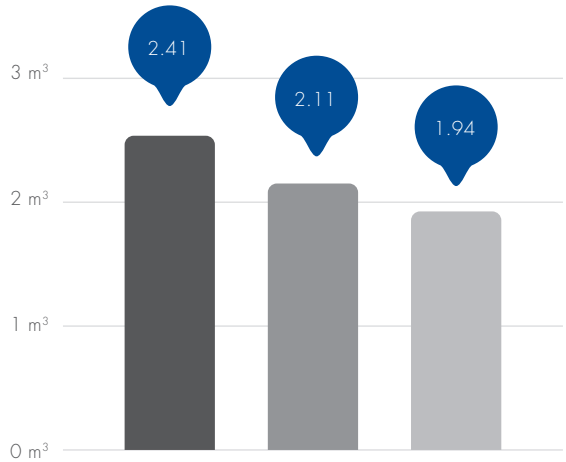
spirits, and mini spirits. Our usage of raw materials from year to year depends on the mix of these markets and the levels of business activity in each. Fluctuations in the trend are affected by these factors. In general, our business is in growth either through acquisition or internal facility enhancement, hence the trend of raw materials usage is increasing overall.

Material input in the Stölzle Glass Group (in tonnes)

	2014	2015	2016
Total batch material	306,719	285,772	309,889
Total cullet	23,007	22,995	19,385
Total material input	329,726	307,767	329,274

EFFICIENT USE OF RESOURCES

The process of making glass requires the handling and processing of predominantly dry granular/powder materials in a batch plant. The conveying/feeding/weighing equipment employed in this activity needs to be well designed, well operated and maintained to a high degree to enable the efficient use of these materials by minimizing waste. Local batch/furnace managers at every factory carry the responsibility for this, along with local engineering service staff. From a Group perspective, the Operational Excellence team also influence the selection of equipment and supplier choices. The making of glass bottles is inherently an efficient use of materials, due to



Graph: *Water consumption (m^3) per ton of melted glass*

2014 2015 2016

the recyclability of the production waste, given that the process still requires high production efficiency performance for good commercial and other environmental reasons. The monitoring of production efficiency performance is very well covered by intensive internal reporting and control measures at all Stölzle factories.

Measures

The design and age of the batch plants around the Group varies between two and 20 years, so each one faces different challenges. Work is planned for batch plant optimisation measures initially in Austria, then around the rest of the Group where needed.

Another potential area for improvement regarding the use of resources is in factories that produce feeder colour glass (UK, France, Poland). The coloured cullet produced from this cannot be returned to the process, because the source glass from the furnace for feeder colour is flint. This material is currently sold on via cullet merchants back into the local glass industry as PCR for remelting, so ultimately it is environmentally okay, but not ideal. The initiative at the R&D stage is to employ a separate melter to feed this cullet back into our own production stream, thereby saving energy, raw materials and the current inefficient re-use of this material.

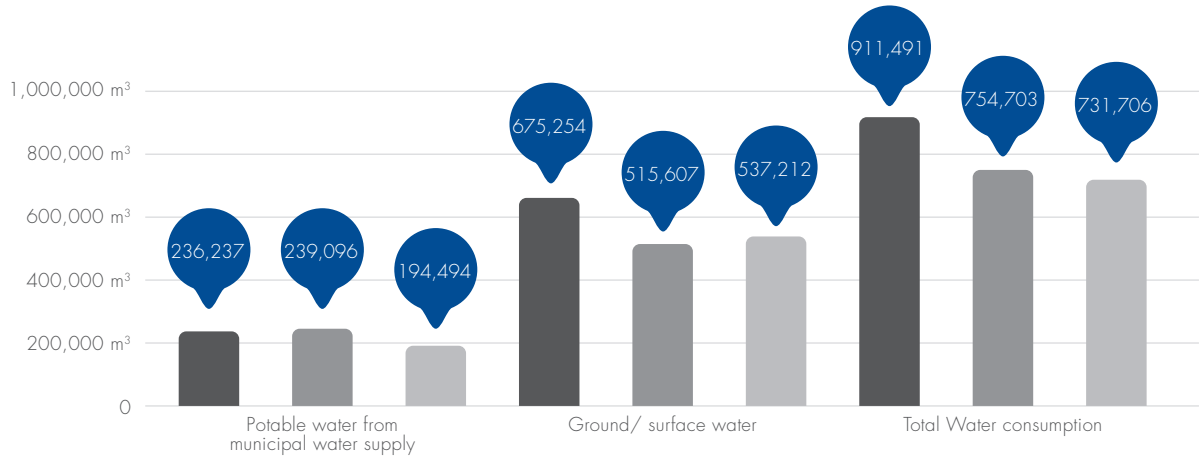
Water

Water plays an important role in glass manufacturing. It is used as:

- an additive to the batch mixture in order to keep the mixture homogeneous until melting
- process water in different stages of production, especially for cooling purposes

If water is not available in the demanded quantity, the plant could run into the disaster of burning down. In detail, the furnace electrodes cannot be cooled, the scissors to cut the gobs stop working, and the hot glass cullet cannot be transported or cooled. Water is important as a raw material and as fuel for the glass plant. That is the reason why we care so much. Not just because it is environmentally friendly – it is our responsibility and understanding for the resources supplied by nature.

Water comes either from our own sources (the Austrian plant has springs on its own premises, the French plant uses ground water) or from municipal water supplies (Polish, Czech and UK plants). If our own water source does not cover the demands, municipal water covers the additional amount. All sites are located in landscapes with sufficient provision of water from nature.



Graph: *Water consumption in the Stölzle Group (in m³/a)* 2014 2015 2016

Water management

Water consumption is continuously controlled and monitored online for safety reasons and to prevent technical difficulties. The consumption per ton of melted glass has decreased in the period of review, although the Stölzle Glass Group expanded its production capacities. This fact is related to innovations such as the installation of the water recycling system or the use of closed water loops (see also Chapter 6.2. – water emissions). The water supply is individually managed site by site by nominated persons.

Water consumption itself is controlled/monitored online to ensure its constant availability and on a preventive basis to check if there is any kind of technical problem.

Overview of water recycling plants

	Water recycling on site (yes/no)	Water recycling planned for the next few years
Austria	Yes	–
Czech	Yes	–
UK	Yes	–
Poland (Częstochowa)	Yes	–
France	No	Planned by 2020
Poland (Wymiarki)	No	Planned by 2020

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
RESOURCE EFFICIENCY				
INCREASED RESOURCE EFFICIENCY				
Batch house optimization (e.g. closed transport)	Austria	x	x	
Batch house optimization measures in further production sites	Group			x
INTERNAL RECYCLING				
Coloured cullet recycling initiative (internally)	UK			x
REDUCTION OF WATER CONSUMPTION				
Water recycling	UK, Austria	x		
Water recycling, re-use, closed loops in further production sites	Group			x
Collecting of rain water	Group			x
FURTHER MEASURES				
Automatic swabbing of moulds (testing)	Poland, Austria		x	

5.2. USE OF POST-CONSUMER RECYCLED CULLET

Glass is composed of basic raw materials (Sand, Soda, Lime, etc) and crushed glass. To reduce the usage of sand and other raw materials, cullet from two different sources can be added: **Internal cullet** (coming as waste from the glass production process) and **External cullet** (post-consumer recycled cullet). Glass containers are recycled into the production of new glass instead of being wasted to landfill. Using recycled materials within glass production helps to save energy and is an important aspect when it comes to a sustainable production. Increasing the percentage of recycled materials causes a decrease of energy within the melting process and a reduction of CO_2 throughout the whole process.

KEY MESSAGES/TARGETS

1. The use of recycling material for amber and green glass is between 12%–38% in the various sites.
2. For flint glass the use of recycling material is challenging due to quality issues – still it is our target to use Post Consumer Recyclate also in these processes.
3. Constant monitoring of the quality of PCR glass in respect of heavy metals and foreign glass colours.
4. Start of new projects to increase the use of recycled glass.

"ON OUR WAY TO A CIRCULAR ECONOMY"

From an environmental point of view a high share of recycling material is favorable, unfortunately we have to admit that it is hard within our sector to use recycled materials. Increasing the share of external cullet is challenging compared to other glass industries. When adding PCR (Post-Consumer Recyclate) glass to our melting we have to consider that recycled glass also has higher content of heavy metals than newly produced glass and therefore the PCR cullet input is also limited (also see Chapter 5.3.).

We are already trying to increase the share at our sites where amber or green glass is produced.

In Stölzle we face a special challenge when it comes to the production of flint glass, because the recycled glass contains coloured glass contamination and therefore the use would have a very negative impact on our colour management. Currently our PCR rate for amber and green glass is about 30%–60% compared to flint glass where it is 0%. However, limited use of cullets for flint glass is to be trialed for particular customers who specifically require some PCR to be used.

Besides the aspect of heavy metals and quality within the usage of PCR cullet, we do have another issue: availability. In some countries the availability of "good enough PCR" is an issue which limits usage. Furthermore the price for higher grade PCR is higher than the one for virgin raw materials, which leads to certain cost considerations and commercial aspects which have to be considered as well.

However, it is our intention to maximize PCR usage, given the limitations of global environmental legislation and supplying product to the required colour quality for the markets that we serve.

There is a responsible person "the Batch and Furnace manager" at each production site to control the process of PCR input. The approval of cullet suppliers, recycling companies and cullet rates in each production site is influenced and controlled by the Group Director for Glass Technology.

The data below shows our gradual increasing trend of Group PCR usage based on "% of net input materials" up to 2016, where a reduction was necessary for a period due to heavy metal contamination from one PCR cullet supplier. This has now been addressed and is back to an increasing trend. As already described, due to the limitations posed by glass colour and environmental aspects, PCR usage is limited to 2 of 8 furnaces in the Stölzle Glass Group. At the Czech site – the amber glass furnace operates at 38% PCR and the Austrian factory at 12% PCR, this is when one of the 2 furnaces is melting green or amber. The calculating principle of these figures is based on tonnes of PCR used as a share of total net material input.

	2014	2015	2016
Share of PCR cullets	7.68%	7.92%	5.89%

We are closely working with PCR cullet supplier to avoid recycling crystal or other glass containing high amount of Lead to improve possibility for further cullet rate increase and have introduced a new procedure, tested at one site in 2016, to monitor daily the heavy metal content in glass and cullet supplies.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
USE OF RECYCLED MATERIALS				
TARGET 2020: INCREASING THE SHARE OF RECYCLING MATERIALS				
MEASURES TO SUPPORT THE TARGET				
Group standard for monitoring and measuring of heavy metals (see also avoidance of hazardous substances)	Group		x	
Definition of a quantitative target for the share post-consumer recycling cullets among all input materials (Proposed Targets to be defined/agreed with Plant Managers)	Group		x	x
To increase both amber and green PCR usage by end of 2020 from current levels by 5%	Austria, Czech			x
To trial "PCR" flint in 2017, up to 25%, in a designated market – currently proposed in Cosmetics	France		x	
To trial low levels (up to 5%) in the other furnaces around the group making extra white flint	UK, Poland, Austria			x
Deep involvement of cullet suppliers in detection/removal of heavy metal sources (e.g. crystal, decoration)	Group			x
Increased usage of flat glass (window glass) as part of above initiatives	Group			x
FURTHER MEASURES				
Cooperation with suppliers of packaging material to raise recycling rate in foils, cardboards …	Group			x

5.3. AVOIDANCE OF HAZARDOUS SUBSTANCES

Glass is the preferred material for preventing impurities in products with hazardous substances. Glass production is known as a "clean industry". In the decoration field, as well as in the use of secondary materials (cullet), we must occasionally contend with tiny traces of heavy metals. In order to reduce this, in the decoration sector we have undertaken to prevent the use of heavy metals entirely, where feasible. In any case, we ensure that the legal thresholds are observed for all our products. These are already so deeply anchored in our process as to exclude any health or ecological repercussions. However, we do not wish merely to maintain these thresholds but also to continue decreasing them.

KEY MESSAGES/TARGETS

1. Glass is the preferred packaging for keeping products free of impurities.
2. Product safety: Full observance of the limits for heavy metal content in our products.
3. Preparation of more intensive, standardised monitoring and inspection methods across the Group in 2017.
4. Aim: Switch to heavy metal-free decoration, with the involvement of our customers.

"HOW TO AVOID HAZARDOUS SUBSTANCES"

Heavy metals are not added in the production of Stölzle products. Their presence in the glass is mainly due to the raw materials and the use of recycling glass. The main focus therefore lies on the quality of the materials used and on maintaining the threshold values.

According to EU Guideline 94/62/EG (Article 11), the concentration of lead, cadmium, mercury and hexavalent chromium in packaging and packaging waste must not exceed 100 ppm by weight. For glass packaging, the EU directive 2001/171/EG establishes an exception under certain conditions: the limit may be exceeded to a value of up to 200 ppm by weight if the heavy metals in question are not added deliberately during the manufacture process, but rather come from secondary raw materials, such as processed cullet. Through the international sale of glass packaging, however, we deliberately set ourselves the stricter goal of maintaining heavy metal presence at a constant 100 ppm by weight, and of ensuring that our processes are in line with this.

To ensure we meet the threshold limits, we must:

- clearly establish the heavy metal content in the raw material specifications (incl. processed cullet)
- include the essential component of these specifications in the supplier agreements
- monitor the quality of the materials supplied on a consistent and ongoing basis
- monitor the suppliers' quality system in the audits and annual supplier evaluations on a consistent basis
- undertake regular analyses of the raw materials
- regularly identify the heavy metal content of the glass products in externally accredited laboratories

These processes are regulated on a binding basis in internal processes for all sites. The sites are responsible for carrying out processes in accordance with the provisions. The effective nature of the process was verified in 2016 when it was detected that the 100 ppm limit had been exceeded at the plant in the Czech Republic before delivery. This resulted in the destruction of the affected containers, and ensured that the threshold values were strictly

Transparent lacquering via eletrostatic disck – significant reduction of used ink

observed in all products in the reporting year. Stölzle is intensifying its efforts to make sure that we adhere to the limit values, by implementing more intensive, standardised monitoring and inspection methods across the Group in 2017.

"ECO-FRIENDLY COLOURS"

Stölzle stands for high-quality and attractive glass packaging. This means fulfilling customer wishes with respect to the colour and design of the containers. In order to achieve radiant colours or intense shades, cadmium, lead or other heavy metals are used as part of the Stölzle decoration process. The concentration of these is tiny, but they add – albeit only negligibly – to the heavy metal content of the glass product and/or later to the content in the recycling glass. In order to prevent this over the long term, for many years Stölzle has actively offered heavy metal-free colours in its decoration. Only in exceptional cases, when a customer expressly requests it, does Stölzle use colours that already have a reduced heavy metal content. This takes place when the appearance of the decorated container is paramount and cannot be achieved with heavy metal-free colours, or when a product has been taken over from another supplier.

Transparency is important to us, and we pay attention to open communication. As a globally operating supplier of glass packaging, however, it is not always possible to know the final destination of the decorated products and thus all the legal requirements on a national level. In order to continue improving in this respect, we have decided to engage more intensively with the topic as part of our sustainability project: our range contains items that have remained unchanged for 20 years and whose heavy metal content has not been an issue to date. In the future, we wish to check all items and optimise them in order to ensure that our range strives for 100% heavy metal-free content.

Achieving this goal encompasses a big change, above all for our customers, as the end product too may change as a result of modifications to the decoration process. If any deviations should occur or new customer requests are submitted, we will discuss these openly, present our fundamental principles and resolve the matter in a manner befitting a good cooperative relationship.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
AVOIDANCE OF HAZARDOUS SUBSTANCES				
TARGET 2020: SUBSTITUTING HEAVY METALS IN GLASS DECORATION				
MEASURES TO SUPPORT THE TARGET				
All new decoration prospects are proposed with heavy metal-free colours	Group		x	
Strict refusal of new decoration developments needing colours with heavy metal content (except by explicit customer demand)	Group		x	x
Raise our customers' awareness on the topic of heavy metals	Group		x	
Increase UV-printing possibilities at Stölzle Group decoration sites (UV-printing is always free of heavy metals)	Group			x
Review existing portfolio regarding heavy metals used, inform customers accordingly and propose alternative colours	Group		x	x
TARGET 2020: KEEPING HIGH COMPLIANCE STANDARDS FOR AVOIDANCE OF HEAVY METALS				
MEASURES TO SUPPORT THE TARGET				
Group-wide standardisation for monitoring and measuring heavy metals	Group		x	

06

PRODUCTION LINE

Let's put it all together

PRODUCTION LINE

Let's put it all together

Historically, nothing has changed in glass production except the level of automation and new techniques to raise the production capacity. Raw materials are still melted at very high temperatures, and apart from melting using 100% electricity (produced from renewable sources), there is no other 'revolutionary' method of melting glass currently available. Until then, we continue our efforts to reduce energy consumption.

6.1. ENERGY MANAGEMENT AND CARBON FOOTPRINT

KEY MESSAGES/TARGETS

1. Reduce energy consumption and increase energy efficiency – a key factor in the Stölzle Glass Group.
2. Reduction of the carbon footprint through best possible techniques and control.
3. Implementation of an Energy Management and Environmental Management system throughout Stölzle to support the targets.

ENERGY

Energy management

Energy Management is an extremely important issue for an energy-intensive industry such as the glass industry. Energy is an important cost factor in the glass industry, accounting for one third of all expenditure. The energy sources are mainly natural gas and electricity. Most of this energy is consumed during the melting process using natural gas. Today, we can accurately monitor energy consumption in all parts of the site. We are therefore able to recognize technical failures or inefficient usage, and can address these issues with maintenance, repair, replacement/ new investments.

In 2015, we began to implement the ISO 50001 energy management system throughout our Group. At present, the Austrian and Czech sites are certified. We will implement the system in every plant of the Stölzle Glass Group (see Roadmap 2020). The Stölzle Glass Group is working constantly on improvements to reduce its energy consumption. We have established a policy within the ISO 50001 certification for the whole Group and are working on standardisation for all plants in the Group. With projects on innovation and research into new techniques, we are aiming to move in a positive direction for the future and to stay competitive. It is effective for the company to raise our employees' awareness; ultimately, everyone feels part of reaching a target – being efficient.

To follow up on reduction and energy management at all plants, we have appointed an officer at every plant, headed by a Group-wide manager. These officers meet quarterly to talk about current issues and long-term strategies to reduce and optimize energy consumption. As a member of FEVE (European Container Glass Federation), the Stölzle Glass Group remains up-to-date with European strategies, roadmaps and directives.

Energy consumption

Most of the natural gas consumption happens in the furnace, followed by the forehearth, feeder and the lehrs. All the rest are small devices, for example to preheat the moulds for the production machine.

Electricity is used to boost the furnace to raise the melting rate with electrodes, but the main consumer of electricity is the compressed air station. The main piece of equipment using this compressed air are the bottle-making (IS) machines, in which the air operates piston/cylinder mechanisms and process air for blowing bottles. There is a trend towards IS M/C mechanisms being servomotor-driven; many still remain air-driven. Another approach is to optimize the compressed air station, moving from screw compressors to turbo compressors. At present, the Stölzle Glass Group is equipped with both technologies to support different pressure levels. The large amount is generated by the turbo compressors and the high pressure level is generated by the screw compressors.

Electricity is used also for administration (offices) and lightning at the plants, the cold end inspection machines and the electrostatic filter for cleaning the exhaust gas from the dust. Electrical consumption varies depending on the technical equipment and the techniques used at the different sites.

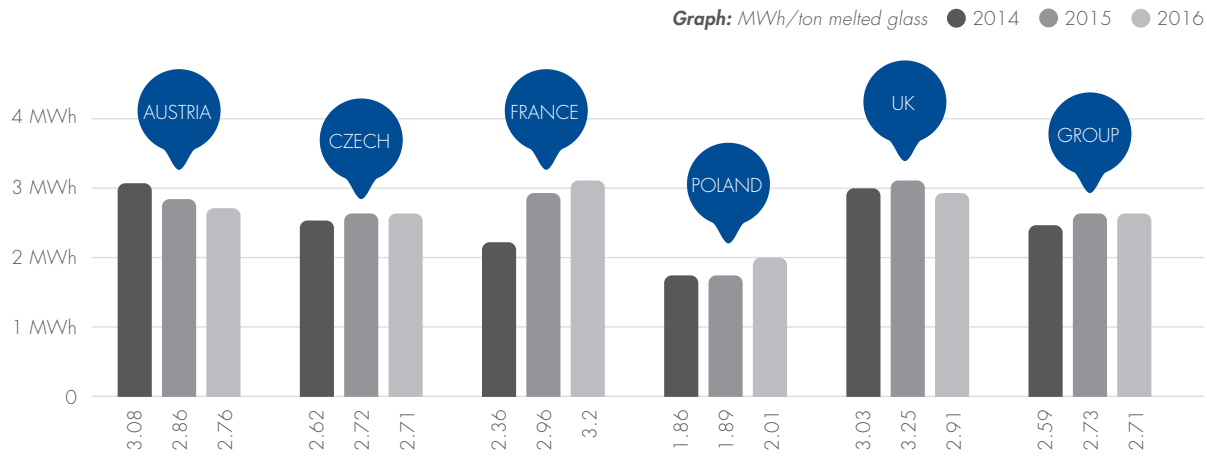
Energy consumption in the Stölzle Glass Group (in GWh)

		2014	2015	2016
Austria	Electricity	55.3	54.4	58.5
	Gas	199.0	203.8	209.4
Czech	Electricity	24,8	25.2	26.2
	Gas	98.9	103.1	105.3
France	Electricity	38.6	25.5	20.4
	Gas	192.1	110.3	70.6
Poland	Electricity	59.6	57.9	69.0
	Gas	213.6	238.4	251.1
UK	Electricity	34.9	33.3	28.7
	Gas	124.4	123.6	108.1
Group	Electricity	213.2	196.3	202.8
	Gas	828.0	779.2	744.5

The UK figures are for consumption in decoration, because there are no separate meters for this part. Decoration consumption will be presented in detail when there is a clear and comparable structure of the electric and gas meters in all three decoration plants of the Stölzle Glass Group.

Energy efficiency (MWh per ton of melted glass)

Energy consumption also varies due to the products manufactured at the sites. In the case of flaconnage, pharma and perfumery, the quality demand is very high, so the glass quality has special demands too. Our sites in the UK, Austria, the Czech Republic and France are therefore more energy-intensive compared to the others. Stölzle does not produce common glass; we produce for a small niche compared to more "commercial"



bottles and jars. The site in Poland produces glass on both its two furnaces at high tonnage pull rates; this is partly why its energy consumption per ton of melted glass is low. In addition, both furnaces and ancillary equipment run relatively cold process temperatures compared to the plants in Austria, the Czech Republic and France, because the job mix (type of bottles produced) and consequently downstream temperatures from the furnace are lower. However, even taking these factors into account, the Polish furnaces are still inherently the most energy-efficient in the Group.

Beginning with the ISO 50001 certification scheme in the Group, we have improved our energy consumption and have continuously reduced the specific energy consumption per ton melted.

One main issue for a glass site is to be state-of-the-art, otherwise you lose competitivity on the market and are not attractive as a producer for customers. For an energy-intensive industry, this

means you can't make giant strides in energy consumption until a new technique is released by suppliers. Joint venture is always an option, but it takes time to create a breakthrough with a new technique – and may not be successful at all. The main influences affecting furnace energy efficiency are: the technical specification of the furnace, how many years it has been in operation, how well it is operated, the type and product group of glass being melted, how heavily the furnace is pulled, and the proportion of cullet.

The Stölzle 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.

Measures

In general, every plant offers initiatives to improve processes and energy consumption. The application of best practice around the Group is driven by the Group Energy & Environmental Committee and overseen by the OEG (Operational Excellence Group) team. This team consists of professionals for the operational parts of glass manufacture and techniques, taking care of environment, innovation, technical development, projects and investment as well as occupational safety. The following project summaries highlight some of the initiatives already delivered, and some proposals for the future: We have already implemented a heat recovery system in the Austrian plant, which generated about 17 GWh from the exhaust gas volume flow in 2016. This has operated on a small scale since 1991, but has recently been extended to deliver energy to more than 1,000 households. Other potential projects from the Austrian plant continue to be evaluated. Due to the success of the Austrian project, evaluations are also ongoing to create close district heating networks for the Czech Republic and Poland. These involve electricity generation and batch pre-heating projects.

For the other sites in the Stölzle Glass Group, it is difficult to implement such energy recovery solutions given the structure of the local communities.

We are planning a solar power installation (PV panels) on the storage roof in Austria (2,200 Wp). As soon as data is available for photovoltaic production in Austria, we will start considering a Group-wide implementation, always taking into account the regulations set by the national or local authorities and the circumstances surrounding the Stölzle Glass Group sites. Another topic will be the decision on the future technique of the forklifts. At present, there is no clear regulation in the Glass Group. However, we tend to opt exclusively for electric forklifts at the Stölzle Glass Group.

Carbon emissions

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 (natural gas). Every raw material has its own emission factor released by the European Parliament in the EU-ETS Phase 3. Furthermore, the main energy necessary for melting – natural gas – has a specific emission factor, but the energy value (and therefore the emission factor) varies depending on its origin.

We are only able to reduce the carbon emission using the best techniques. With regard to the EU-ETS, we must pay for every ton of carbon emitted, so we are more than willing to reduce the carbon emission for reasons beside the environmental aspect. The price of a ton of CO_2 varies, but EU legislation sets the price at around € 30/ton. This is a very challenging cost situation for an industry facing international markets outside Europe.

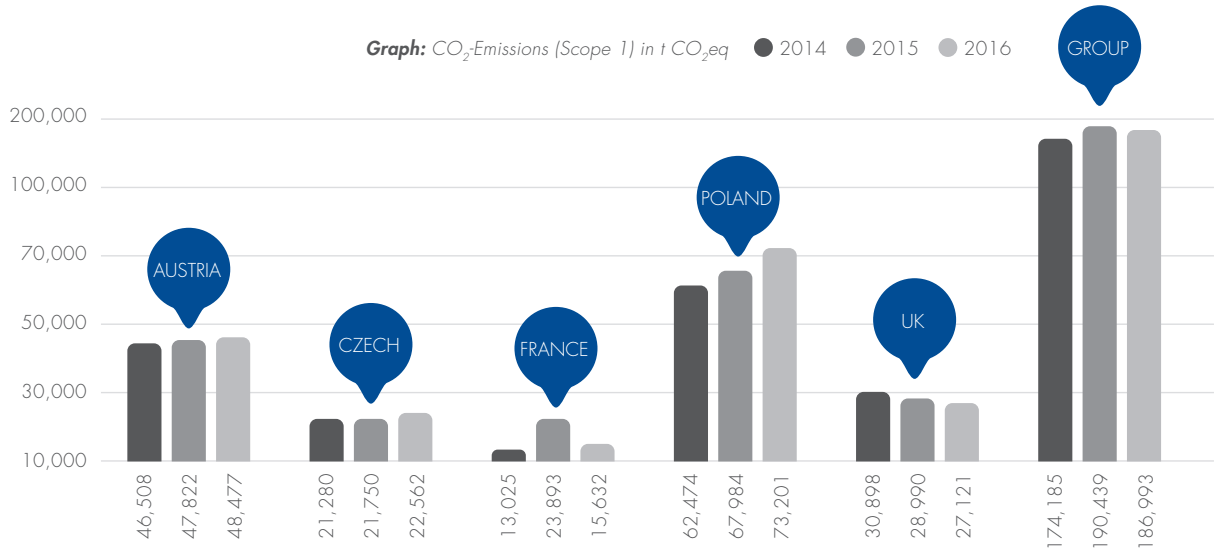
We have appointed responsible persons at every plant to monitor the issue and find ways to improve or reduce the carbon emission. This is documented on a monthly basis and its results are accumulated to identify how much will be used at every site per year. Every year, the Group official reports to the Board concerning the use of carbon certificates during an ETS period.

CO_2 emissions (Scope 1)

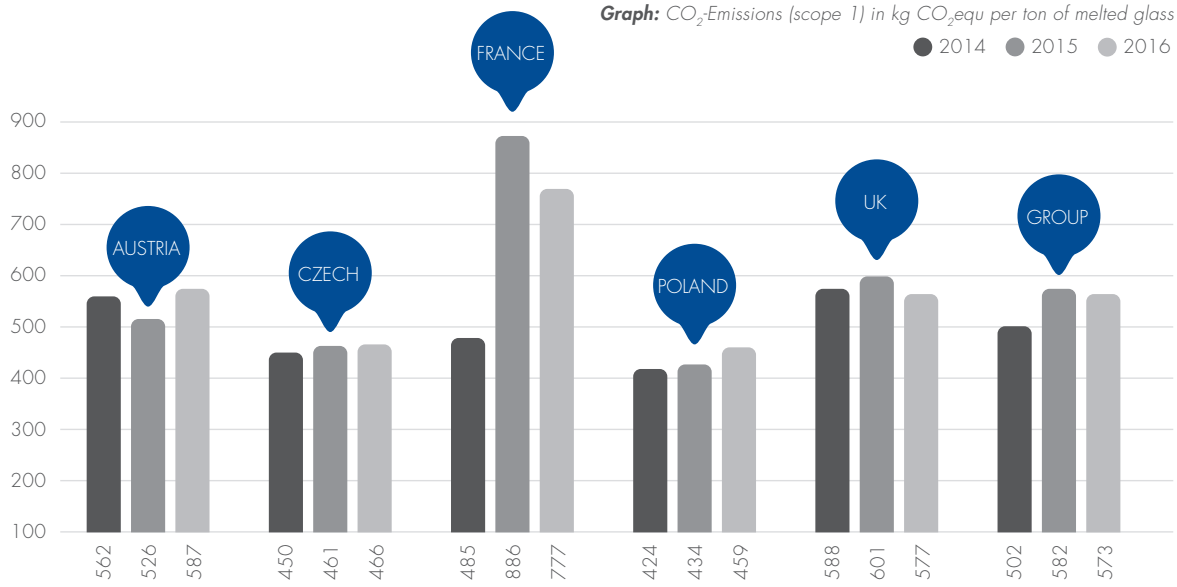
Linked to CO_2 emissions in the graphs below, it is clear which plant(s) have a large melting capacity or where we produce flaconnage/extra white flint glass.

The more effort you put into creating a special product, the more energy and emissions are generated. Secondly, the more you produce, the more will be emitted. However, it can be produced efficiently by new furnace investments, employing the best available techniques. Stölzle Glass Group furnaces have all been replaced in the last six years with this policy in mind. It also depends on the glass type/quality produced. Stölzle glass quality is limited with the use of cullet – which obliges us to melt raw materials, a process that requires more energy compared to melting cullet. The usage limit of cullet is a customer demand and we fully comply with these requirements. In consequence, we emit more than ordinary wine, beer or jars glass producers.

Our carbon footprint does not mirror our highly sophisticated products or our current efficiency to be competitive on a challenging market.



Graph: *CO_2-Emissions (scope 1) in kg CO_2equ per ton of melted glass*



By implementing ISO 50001 and ISO 14001 by 2020, we aim to prove our efforts to establish ongoing improvements that will raise efficiency within the realm of technical possibility.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
ENERGY AND CARBON FOOTPRINT				
TARGET 2020: INCREASE ENERGY EFFICIENCY				
MEASURES TO SUPPORT THE TARGET				
Energy metering (installation of sub-metering for all on-site gas usage and electricity) and Industry 4.0	Poland		x	x
Increased energy efficiency with new furnace/forehearths	UK	x	x	
Pressurized air: new air compressors, reduction of leakages	Austria	x		
Batch granulation and batch preheating	Poland		x	x
New efficient furnace	Poland Wymiarki			x
Furnace waste gas heat exchangers	Group			x
Coloured cullet re-melting	UK			x

6.2. CLEAN AIR AND WATER

Clean air and water is a strong focus of the Stölzle 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, Stölzle has invested significantly in recent years in the installation of 'state of the art' standard furnaces and filter systems at all plants. Every plant fulfils the regulatory IPPC standards.

KEY MESSAGES/TARGETS

1. All emission levels are within the limits of the applicable laws.
2. Continuous measurements, latest technologies and the started implementation of the ISO 14 0001 standard guarantee that Stölzle is always up-to-date with its environmental performance.
3. No fines or any kind of penalties concerning the Legal Compliance of emissions.
4. Further reduction of emissions is an ongoing target of the Stölzle Glass Group.
5. Water treatment plants are already installed at all plants.

AIR EMISSIONS

In general, emissions into the air from glass factories mainly come from the furnaces. The level of emissions depends on the age of the furnace, its design, the burners, the adjustment of the burners in the furnace and also the excess oxygen content of the combustion products. Finally, the type and quality requirements of the glass produced in the furnace also have an influence on air emissions.

The Stölzle Glass Group produces mainly "Flaconnage" Extra White Flint Glass, and this quality is not categorized within the bottles and jars sector of EU ETS 3, it has its own separate categorization. This fact reflects some of the

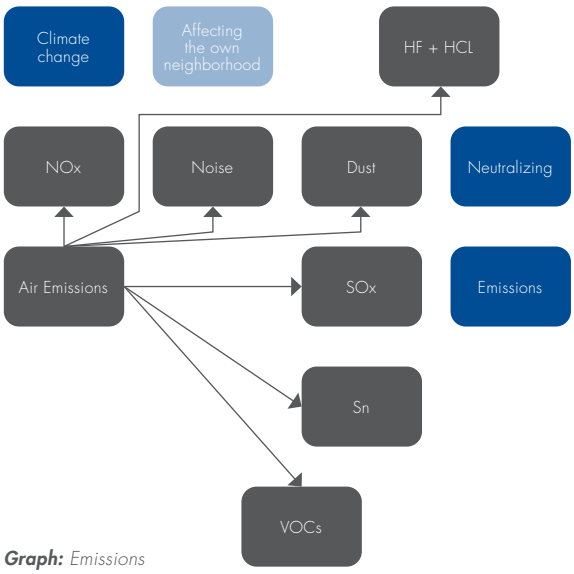
extra challenges Stölzle faces in delivering good emission credentials compared to the rest of the glass container industry.

Glass furnace exhaust gas emissions are regulated by the IED (Industrial Emission Directive from the EU) and also the IPPC and ETS Schemes. These limits are challenging and set new targets for the future of the environment. The early focus of these regulations was to dramatically reduce dust emissions from glass furnace chimneys. The Stölzle Glass Group is now equipped with filter systems at all plants to reduce dust emissions.

Over the last 6 years, Stölzle Glass Group has invested more than € 25,000,000 to rebuild all its furnaces to be state of the art. This gives us the opportunity to produce our glass very efficiently and with low emissions into the atmosphere.

Several special design features incorporated into the new furnaces specifically target NOx reductions. The emissions occur from fuel and raw material usage on site and are released into the atmosphere as direct emissions. In addition, indirect emissions from electricity usage occur at our suppliers facilities; these are hard to quantify because in every plant and every nation there are different circumstances for the local authorities to set the limits. The specific emissions that have to be documented are NOx, SOx, Dust, HF, HCl, As and Cd. To check that atmospheric emissions comply with the required legal limits, there are two possible required routine check scenarios that need to be done on all furnaces: Online (continuous) and/or discontinuous (several times a year) measurements.

Each factory has its own routine depending on its local government agreement. In the review year, all requirements have been met. The Stölzle Glass Group has had no fines or any kind of penalties concerning the Legal Compliance of emissions. Every plant has a responsible person to ensure that it is always up-to-date with emissions performance. The company's intention is to steer towards an environmentally friendly future.



Graph: *Emissions*

The plan for the near future is to establish the ISO 14001 standard at all plants by 2020. This demonstrates our sense of responsibility as an international company to improve and standardize our processes where necessary, and furthermore to satisfy increasing customer demands that we should operate as an environmentally friendly company.

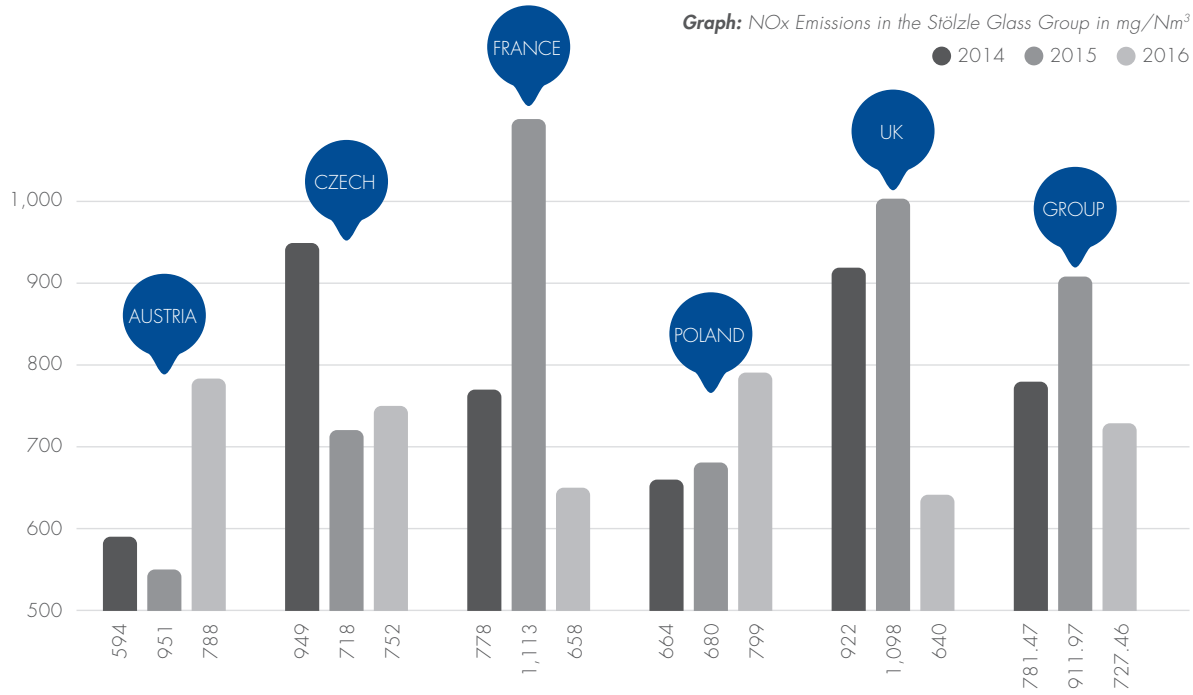
INDICATOR TRENDS

As already communicated, the Stölzle Glass Group has invested significantly in installing furnaces at all plants to a 'state of the art' standard. However, unforeseen increases in capacity are required on occasion which result in furnaces being operated at higher than their design tonnage capacity. Hence, our trends show – although the emission values are still within legal limits – that they have not improved compared to previous years. The Polish plant is a good example of this effect.

Another aspect affecting emission performance is the required glass colour quality. There is a correlation between the oxidising atmosphere in the furnace and the level of NOx emissions – higher oxygen levels causes higher NOx levels.

Overview of emissions in the Stölzle Glass Group (average of all sites)

	Unit	Limit per Law	2014	2015	2016
NOx	mg/Nm³	Different legal requirements per country and period of review	781.47	911.97	727.46
SOx	mg/Nm³	500	263.9	239.9	255.8
Dust (PM 10)	mg/Nm³	20	3.92	5.19	10.52
HF	mg/Nm³	5	1.015	2.101	3.063
HCL	mg/Nm³	30	8.73	12.78	9.26
As	mg/Nm³	0.1	0.047	0.034	0.031
Cd	mg/Nm³	0.1	0.0030	0.0027	0.0008



Graph: *NOx Emissions in the Stölzle Glass Group in mg/Nm³*

As an example, the French glass furnace needs to operate at higher excess oxygen levels to ensure an oxidising combustion condition, making its glass colour good and stable. Lower oxidising conditions threaten this stability. It still however operates within limits for NOx emissions. As a further point, the pressure in the furnace (which is needed and very important for the melting process), also has an influence on emissions of NOx. All furnaces are attended 24/7 with highly trained and educated employees, assisted by the newest generation of sensors to control the melting process. To improve the emissions significantly this now includes automatic control of furnace combustion conditions, ensuring continuous optimum performance.

The results of the NOx emissions in 2015 were dominated by two major factors:

- The age of furnace of the UK plant being at the end of its lifetime and already planned to be replaced in 2016. The furnace had been continuing to work via a legal concession for its last operating years. The results in 2016 after the rebuilding of the UK furnace show the improvement to be well within the limit.
- The shutdown of 1 of the 2 furnaces in the French plant with the consequence that the emissions of the remaining regenerative furnace initially exceeded the limit, but immediate actions with technical and technological improvements led to good results in 2016.

Measures

Within the last 8 years, all Stölzle furnaces have been fitted with filters to remove dust emissions from the furnace exhaust gases. We achieve within between a quarter and half of the legal limit.

As mentioned earlier, through the replacement of old furnace designs, "primary" measures have succeeded that allow all our furnaces to comply with NOx limits. Further significant reductions however are difficult to achieve, with "secondary" DeNOx installations being the only technological option, involving a chemical process attached to the end of the glass furnace which would also require additional energy. Nevertheless, we are working continuously on different innovations and actions to reduce our emissions where it is necessary and technically possible to do so.

In order to reduce dust emissions, we also intend further batch house maintenance initiatives to reduce raw material losses in transport systems, returning the material to the process.

At the end, every plant fulfils the regulatory of IPPC standards, which are quite challenging but reachable. The company does not hesitate to invest in techniques to improve the output of emissions. Every new kind of technique is tested and, if applicable and useful, there is nothing against a step forward to a better future.

WATER EMISSIONS

Water plays an important role in glass manufacturing. It is mainly used for cooling different processes and parts of machines. It can be used several times because it is not contaminated, but is loaded with heat coming from the cooling. At the end, when the water is too hot, it is taken to the scrapers to cool the cullet down and then it goes to the water treatment at the inlet. It is a standard at the Stölzle Glass Group to close water cycles wherever possible and to treat the water before it is emitted.

The treatment of water is focused on the oil in the water, which has to be separated. For the separation, more than one technique exists; the selected procedure depends on the free space available at the plant and the given limits from the local authorities.

Stölzle already has good technical solutions in the Czech, French and UK plants, but in the Austrian and Polish plants there is still the potential to improve the closed water loop method.

	Own waste water treatment plant (yes/no)	Improvements of waste water treatment
Austria	Yes	Planned in 2017
Czech	Yes	–
UK	Yes	–
Poland (Częstochowa)	Yes	Planned in 2018
France	Yes	–
Poland (Wymiarki)	Yes	–

The Stölzle Glass Group has never paid any fines or penalties for not being compliant with water emissions standards. All plants are complying with the given limits of the local authorities.

Average water emissions of the Stölze production sites (except UK, as there are no legal requirements on measurements)

	Unit	Limit by Law	2014	2015	2016
Total hydrocarbon Index	mg/Nm³	10	3.88	8.80	4.79
Temperature	°C	30	21.7	21.3	21.9
pH	[ ]	6.5–8.5	8.02	7.95	7.60
COD (Chemical oxygen demand)	mg/lit. O_2	Different legal requirements per country	88.1	138.3	124.4
Sulphur (only Poland and Austria)	mg/lit.	Different legal requirements per country	118.3	117.5	221.5
Suspended solids	mg/lit.	Different legal requirements per country	24.0	30.4	40.3

It is required by the authorities to make waste water measurements according to the national law, which is stricter than European law. It varies between online measurement and offline, which is done at least two times per year by external companies. These external companies must have an accreditation or a certification.

Water consumption itself is controlled/monitored online to ensure its constant availability and to see preventively if there is any kind of technical affliction. The water treatment plant is also monitored online in the melting department (24h).

The glass industry uses oil to lubricate movable parts in the production machine. This releases sulphur and carbon to the water. With a water treatment plant of the correct dimensions, it can be separated easily.

An evaluation on all plants has already been done on:

- which technique is implemented
- what can be improved

In 2017 we started to re-evaluate the whole water use system at the plants. This at first means the optimization of water use and then the adoption/development of the treatment plant to its perfect purpose on site. We work on different innovations and actions to reduce our emissions. Further, there is a waste water separation planned in Poland and Austria for 2017, which allows a smaller volume of waste water to be treated, instead of the whole volume flow. The main body of water is to be cooled with technical equipment and then reused with just a small amount of additional fresh water.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
EMISSIONS				
TARGET: OPTIMISE PROCESSES AND TECHNOLOGIES TO REDUCE AIR EMISSIONS, WHERE POSSIBLE				
MEASURES TO SUPPORT THE TARGET				
Reduction of NOx emissions: Furnace overpressure increased and setting of the burners.	Austria, Poland, UK		x	
Reduction of NOx emissions: with new furnace	UK	x	x	
Batch granulation and preheating	Poland			x
TARGET: SEPARATE COOLING WATER FROM WASTE WATER				
MEASURES TO SUPPORT THE TARGET				
Waste water separation: Waste cooling water is collected separately from further waste water.	Austria, Poland, UK	x	x	x
FURTHER MEASURES				
Group standard for emissions in waste water – and thus reducing concentration of water emissions after waste water treatment	Group			x

6.3. WASTE MANAGEMENT

Waste Management is recognized as an important factor in the Stölzle 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/TARGETS

1. Target: Implementation of a Group-wide homogeneous waste management programme.
2. Improve waste collection through training and increasing awareness.

WHAT STÖLZLE WASTE LOOKS LIKE

Within Stölzle, 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.

The main fractions reported are:

- Recyclables (paper, cartons, plastics, metals – deriving mainly from packaging of materials and products, but also from administration and maintenance)
- Hazardous waste (water and oil, oils, light bulbs, etc. – deriving from production processes and lighting in all buildings)
- Municipal waste (deriving from all areas of the sites)
- Glass waste

Waste output (in tonnes)

	2014	2015	2016
Total hazardous waste	676.3	925.0	678.0
Municipal waste	825	658	795.8
Total recyclables	1,330.1	1,761.0	1,979.4
Total waste	2,831.4	3,344.0	3,453.2

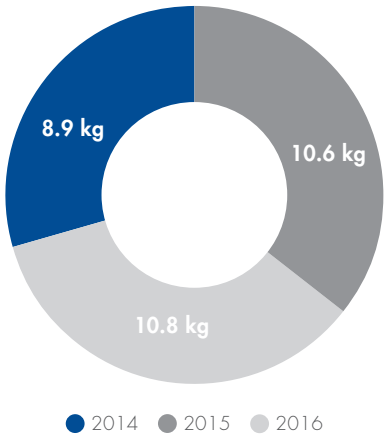
The variations in waste fractions are caused by:

- Expanding capacities, leading to an increased use of oils and packaging materials
- Disposal of old stock in warehouses, leading to more recyclables
- New investments such as the furnace rebuild at the UK plant, leading to an increase in metal and municipal waste

But also:

- As an example, a better oil–water separation, leading to a decrease in hazardous waste from 2015 to 2016

It was recognized that the Group-wide waste management should be standardized. An increased awareness of waste and how to handle and collect it properly will be achieved by training employees and providing sufficient waste containers at all times – see Roadmap 2020.



Graph: *Total waste (kg) per ton of produced glass*

WASTE MANAGEMENT BY STÖLZLE

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 emissions report, which is monitored and controlled by the Group Environmental Manager. The basic types of waste (plastics, paper and municipal waste) are collected in separate containers department by department. Waste from production and workshops is divided into hazardous waste, recyclables and other waste. As far as possible, the waste is forwarded to specialized companies for further utilization. Where further utilization is not possible, the waste is processed and destroyed by companies with the corresponding official approval.

Oil and water waste:

is separated from each other in the internal water treatment plant and in the granulator. The oil fraction can be sold to special companies for further utilization.

Hazardous waste:

is stored in a separate storage area, equipped with a ventilation system and drip pans to prevent ground contamination in case of leakages. Stölzle did not have any leakages to the ground or release hazardous substances into the environment during the review period.

Glass waste:

is treated differently. Glass waste consisting of one colour is returned to the furnace. Decorated glass waste as well as all coloured glass from feeder colour production are handled separately.

> In the UK, coloured glass waste is transported internally to a separate on-site ground bay storage, from where it is picked up by the cullet merchant. It is crushed, processed and finally sold back into the glass fibre industry.

All employees have received training on the handling, proper separation and reduction of waste. These training sessions are repeated on a regular basis and ensure that Stölzle waste management is continuously improving.

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
WASTE AND SAFE STORAGE				
TARGET: REDUCE WASTE PER TON OF MELTED GLASS				
MEASURES TO SUPPORT THE TARGET				
Further improvement of separate waste collection in production	Group			x
Reducing the volume of the waste and thus the required container size	Group		x	x
Standardisation of waste management	Group			x

07

CUSTOMERS

Excellent glass for excellent customers

CUSTOMERS AND CONSUMERS

Excellent glass for excellent customers

In our strategic business segments "Pharma, Spirits and Perfumery and Cosmetics", Stölzle supplies premium quality packaging glass 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 Stölzle Glass Group.

KEY MESSAGES/TARGETS

1. Customer satisfaction is of the highest priority – customer survey 2017 planned.
2. Product development and supervision of key figures with the help of software solutions.
3. Glass as a packaging material brings many advantages – we are actively working to ensure that everyone knows this.

CUSTOMER SATISFACTION

Over the past few years, the aspect 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 by customers and in audits. These issues also have an impact on the decision to place orders.

As a result, Stölzle has integrated these aspects into its Management System as an essential part of business processes, and has declared and communicated this in writing in the corresponding policies. In this way, all employees are involved in the implementation of, and compliance with, the principles therein.

During the gradual implementation of the Integrated Management System, upper management representatives ensure that these processes are introduced at all sites. We measure and assess customer satisfaction in regular customer visits carried out by the Sales staff, by analyzing our customers' supplier evaluations und through our own surveys. The last survey, which took place across the Stölzle Glass Group in 2013, revealed a high rate of satisfaction. It covered all business areas and ranged from order acquisition, order processing, product development, quality assurance, complaint handling to delivery. Despite the good results, a few starting points for improvement were identified in the following areas: product development, adherence to delivery dates in the perfumery and cosmetics division, and response time to complaints.

Resulting measures were introduced and are still ongoing (see Roadmap 2020)

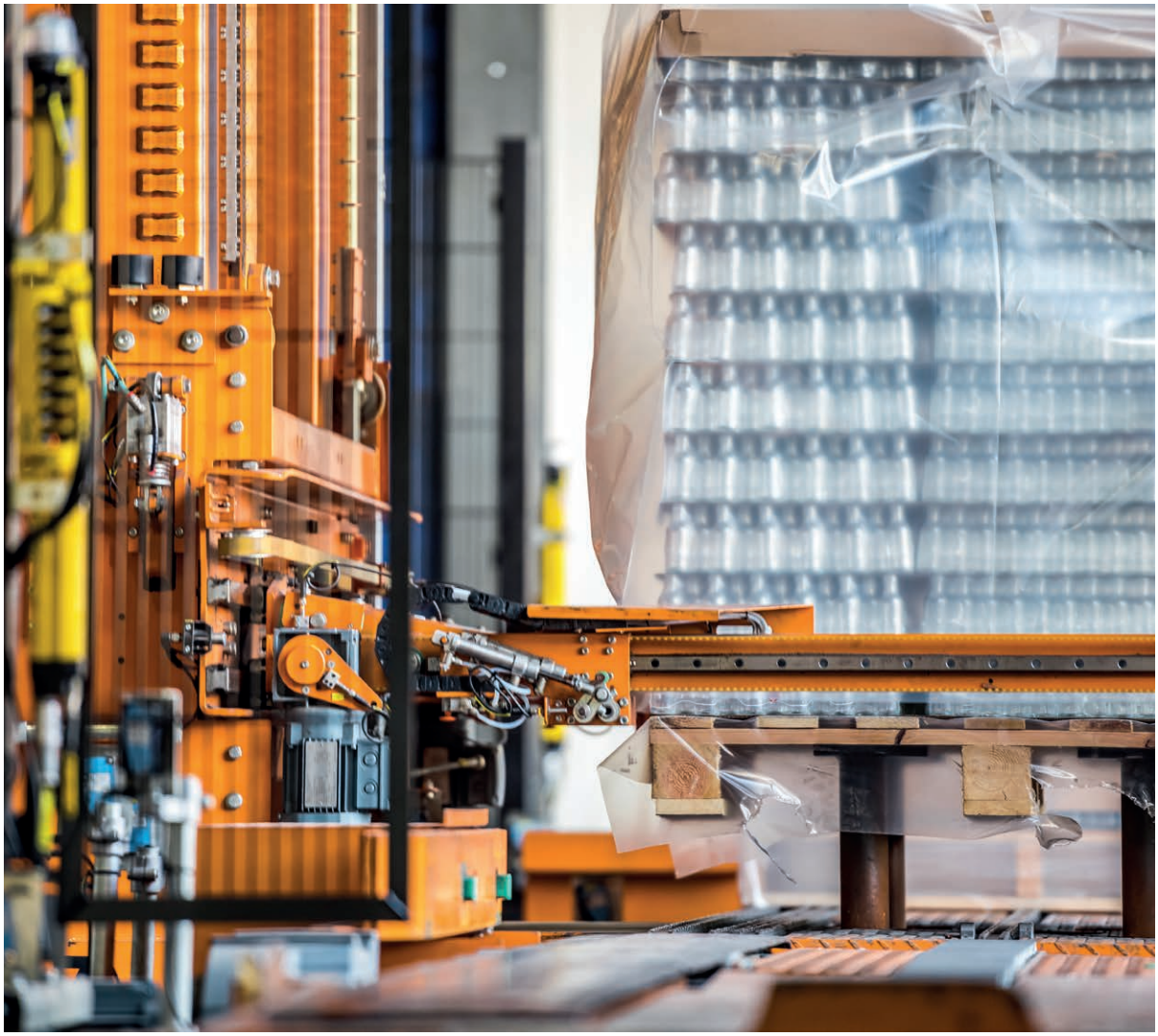
- An IT-supported monitoring of the OTIF figure (On-Time In-Full) at the French site, which specializes in the manufacture of cosmetic glass packaging; this figure will be implemented at all sites
- Increased personnel resources in Technical Customer Service to improve response times in complaint handling
- Standardisation of the product development process with corresponding software support, starting at the Polish plant and gradually rolled out to all plants

Perfumery & Cosmetics

Spirits

Pharma

Consumer



We will perform a new customer satisfaction survey in 2017. The survey process will be carried out close to the time of the event, so as to link the performance evaluation directly with the process.

RAISING AWARENESS AMONG CONSUMERS

"Glass the ultimate packaging material"

Glass is a very environmentally-friendly and sustainable material. It can be recycled 100%, is inert, does not change the taste or odour of the product it contains, and forms a barrier against external influences that could lead to deterioration of the goods. It is free from problematic or hazardous additives such as Bisphenol A, Phthalates, chlorated carbohydrates, etc. Migration is not an issue when using glass, with respect to the product contained. Containers made from glass are therefore a particularly attractive type of packaging material for a wide range of products. Glass packaging not only guarantees the safety of the products, but is also a preferred material with regard to its impact on the environment. 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. The use of recycled glass in the melting process reduces

CO_2 emissions, decreases energy consumption and saves on raw materials (see also Chapter 5.2. – use of post-consumer recycled cullet).

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

The Stölzle 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 "Friends of Glass". Stölzle promotes Glass in its public presence on the Internet (Stölzle website, email signatures), in newsletters and journals (Glass International Magazine), in product advertising as well as in other media such as television with local reports.

Graph: *Closed loop production*

ROADMAP 2020

TARGETS AND MEASURES	SITE/GROUP	2016	2017	UNTIL 2020
CONSUMER AWARENESS				
TARGET: TO INCREASE THE COMPETITIVE EDGE OF THE STÖLZLE GROUP THROUGH CUSTOMER SATISFACTION				
MEASURES TO SUPPORT THE TARGET				
Customer Satisfaction Survey (Group and all business units)	Group		x	
OTIF (On-Time In-Full) monitoring (automatic calculation programme in IT system implemented)	France	x		
OTIF at all production sites (automatic calculation programme in IT system implemented)	Group			x
New product development project "NPD" with support of new software introduced at STC and then rolled out to all sites	Group		x	x
TO RAISE CONSUMER AWARENESS OF SUSTAINABLE PACKAGING				
Promote sustainability aspects in the company presentation and on the website	Group		x	
Show customers Stölzle's commitment towards sustainability by certifications relating to ISO 14001 and OHSAS 18001 standards			x	x

08

GRI-INDEX

Global Reporting Initiative Index

GRI-INDEX

Global Reporting Initiative Index

According to the criteria of the Global Reporting Initiative ("Core"), 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 G4 indicators. The following GRI Content Index contains the relevant references, indicating the chapters and page numbers.

GRI G4 GENERAL STANDARD INFORMATION

GENERAL STANDARD INFORMATION	ABBREVIATED DESIGNATED FOR EACH INDICATION	PAGE	COMMENTS
STRATEGY AND ANALYSIS			
G4-1	Declaration from the most senior decision maker	9	
ORGANISATIONAL PROFILE			
G4-3	Organisational profile: brands, products and services	4	
G4-4	Overview of products	4; 73	
G4-5	Organisational profile: headquarters of the organisation	4	
G4-6	Overview most important locations	5	
G4-7	Nature of ownership and legal form	4	
G4-8	Markets	4; 5	
G4-9	Organisational profile: size of the organisation	4; 5	
G4-10	Employment profile	26-28; 83	
G4-11	Number of employees covered by bargaining agreements	28	
G4-12	Description of supply chain	16; 40	
G4-13	Changes in shareholder structure, supply chain and organisation	–	none
COMMITMENTS TO EXTERNAL INITIATIVES			
G4-14	Precautionary principle	63	Part of our commitment to ISO 14001
G4-15	Self-commitment for voluntary initiatives	22	
G4-16	Active memberships	22	

GENERAL STANDARD INFORMATION	ABBREVIATED DESIGNATED FOR EACH INDICATION	PAGE	COMMENTS
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES			
G4-17	The organisation in the consolidated financial statements	–	All consolidated organisations taken into account
G4-18	Defining the report content	12	
G4-19	Material aspects	14	
G4-20	Boundary of the key aspects within the organisation	16-17	
G4-21	Boundary of the key aspects outside the organisation	16-17	
G4-22	Restatement in reporting	–	none; first report
G4-23	Changes in the scope and the boundaries of the aspects	–	none; first report
STAKEHOLDER ENGAGEMENT			
G4-24	List of stakeholders	15	
G4-25	Selection of stakeholders	12; 15	
G4-26	Engagement of stakeholders	12; 15; 36 f.; 41; 72 ff.	
G4-27	Results of the engagement	12; 15; 36 f.; 41; 72 ff.	
REPORT PROFILE			
G4-28	Report period	–	2016
G4-29	Previous report	–	none; first report
G4-30	Reporting cycle	–	biennial
G4-31	Contact to sustainability management	84	
GRI CONTENT INDEX			
G4-32	GRI Content Index	78-82	
EXTERNAL ASSURANCE			
G4-33	Practice with regard to seeking external assurance	–	none
STRUCTURE AND COMPOSITION OF GOVERNANCE			
G4-34	Governance structure and control bodies, committees for sustainability	9; 84	
STRUCTURE AND COMPOSITION OF GOVERNANCE			
G4-56	Code of Conduct	21 f.	

GRI G4 SPECIFIC STANDARD DISCLOSURES

SPECIFIC STANDARD DISCLOSURES	LIST OF SPECIFIC STANDARD DISCLOSURE REGARDING EACH IDENTIFIED ESSENTIAL ASPECT AND DMA	PAGE	COMMENTS
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G4-DMA	Disclosure of Management Approach	60	
G4-EC 2	Risks and opportunities due to climate change	60	Regulatory risks due to ETS
CATEGORY: ENVIRONMENTAL			
MATERIAL			
G4-DMA	Disclosure of Management Approach	44-50	
G4-EN 1	Materials used by weight or volume	45	
G4-EN 2	Recycled input materials	45; 50	
ENERGY			
G4-DMA	Disclosure of Management Approach	56-61	
G4-EN 3	Energy consumption within the organisation	58	
G4-EN 5	Energy intensity	58	
WATER			
G4-DMA	Disclosure of Management Approach	47-48	
G4-EN 8	Total water withdrawal by source	47	
G4-EN 9	Water sources significantly affected by withdrawal of water	47	
EMISSIONS			
G4-DMA	Disclosure of Management Approach	56-61; 62-67	
G4-EN 15	Direct greenhouse gas (GHG) emissions (Scope 1)	60	
G4-EN 18	Greenhouse gas (GHG) emissions intensity	61	
G4-EN 21	NOx, SOx and other significant air emissions	64	
EFFLUENTS AND WASTE			
G4-DMA	Disclosure of Management Approach	62-69	
G4-EN 22	Total water discharge by quality and destination	66	
G4-EN 23	Total weight of waste by type and disposal method	68-69	
G4-EN 24	Total number and volume of significant spills	69	
PRODUCTS AND SERVICES			
G4-DMA	Disclosure of Management Approach	49-51	
G4-EN 27	Mitigation of environmental impacts of products	49-51	

SPECIFIC STANDARD DISCLOSURES	LIST OF SPECIFIC STANDARD DISCLOSURE REGARDING EACH IDENTIFIED ESSENTIAL ASPECT AND DMA	PAGE	COMMENTS
COMPLIANCE			
G4-DMA	Disclosure of Management Approach	63	
G4-EN 29	Significant fines for non-compliance with environmental laws and regulations	63	
SUPPLIER ENVIRONMENTAL ASSESSMENT			
G4-DMA	Disclosure of Management Approach	40-41	
G4-EN 32	New suppliers that were screened using environmental criteria	41	
G4-EN 33	Negative environmental impacts in the supply chain and actions taken	41	
CATEGORY: SOCIAL			
LABOUR PRACTICES AND DECENT WORK			
EMPLOYMENT			
G4-DMA	Disclosure of Management Approach	27	
G4-LA 1	New employee hires and employee turnover by age group, gender & region	27-29; 83	
OCCUPATIONAL HEALTH AND SAFETY			
G4-DMA	Disclosure of Management Approach	29-33	
G4-LA 5	Workforce represented in formal joint management-worker health and safety committees	–	All Employees
G4-LA 6	Type of injury and rates of injury, occupational diseases, lost days and absenteeism and total number of work-related fatalities	30-33	
G4-LA 7	Workers with high incidence of high risk of diseases related to their occupation	30	
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G4-DMA	Disclosure of Management Approach	34-37	
G4-LA 9	Hours of training per year per employee	34-36	
G4-LA 10	Programmes for skills management and lifelong learning	34-36	
SUPPLIER ASSESSMENT FOR LABOUR PRACTICES			
G4-DMA	Disclosure of Management Approach	40-41	
G4-LA 14	New suppliers that were screened using labour practices criteria	41	
G4-LA 15	Negative impacts for labour practices in the supply chain and actions taken	41	
SOCIETY			
ANTI-CORRUPTION			
G4-DMA	Disclosure of Management Approach	21-22	
G4-SO 5	Confirmed incidents of corruption and actions taken	22	

SPECIFIC STANDARD DISCLOSURES	LIST OF SPECIFIC STANDARD DISCLOSURE REGARDING EACH IDENTIFIED ESSENTIAL ASPECT AND DMA	PAGE	COMMENTS
PUBLIC POLICY			
G4-DMA	Disclosure of Management Approach	21-22	
G4-SO 6	Political contributions	22	
ANTI-COMPETITIVE BEHAVIOUR			
G4-DMA	Disclosure of Management Approach	21-22	
G4-SO 7	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	22	none
COMPLIANCE			
G4-DMA	Disclosure of Management Approach	21-22	
G4-SO 8	Significant fines	–	none
SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY			
G4-DMA	Disclosure of Management Approach	40-41	
G4-SO 9	New suppliers that were screened using criteria for impacts on society	41	
G4-SO 10	Negative impacts on society in the supply chain and actions taken	41	
PRODUCT RESPONSIBILITY			
CUSTOMER HEALTH AND SAFETY			
G4-DMA	Disclosure of Management Approach	20-21	
G4-PR 2	Incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products	21	
PRODUCT AND SERVICE LABELLING			
G4-DMA	Disclosure of Management Approach	20-21	
G4-PR 3	Product information required by the organisation's procedures for product and service information and labelling	21	
G4-PR 4	Incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling	21	
G4-PR 5	Results of surveys measuring customer satisfaction	72	
MARKETING COMMUNICATIONS			
G4-DMA	Disclosure of Management Approach		
G4-PR 7	Incidents of non-compliance with regulations and voluntary codes concerning marketing communications		none
COMPLIANCE			
G4-DMA	Disclosure of Management Approach	20-21	
G4-PR 9	Significant fines for non-compliance with laws and regulations concerning the provision and use of products	21	

ADDITIONAL EMPLOYEE DATA

EMPLOYMENT CONTRACT AND EMPLOYMENT TYPES		2014	2015	2016
HEADCOUNTS BY EMPLOYMENT CONTRACT				
Headcounts female employees with indefinite or permanent contract	Headcounts	574	736	830
Headcounts male employees with indefinite or permanent contract	Headcounts	1.323	1.308	1.354
Headcounts all employees with indefinite or permanent contract	Headcounts	1.897	2.044	2.184
Headcounts female employees with fixed term or temporary contract	Headcounts	60	39	72
Headcounts male employees with fixed term or temporary contract	Headcounts	80	67	91
Headcounts all employees with fixed term or temporary contract	Headcounts	140	106	163
HEADCOUNTS BY EMPLOYMENT TYPES				
Headcounts female employees with full-time employment	Headcounts	616	755	883
Headcounts male employees with full-time employment	Headcounts	1.397	1.374	1.462
Headcounts all employees with full-time employment	Headcounts	2.013	2.129	2.345
Headcounts female employees with part-time employment	Headcounts	20	20	18
Headcounts male employees with part-time employment	Headcounts	4	1	2
Headcounts all employees with part-time employment	Headcounts	24	21	20
PERSONS LEAVING AND ENTERING THE COMPANY		**2014**	**2015**	**2016**
PERSONS LEAVING THE COMPANY	**HEADCOUNTS**	**113**	**305**	**228**
TURNOVER RATE	%	6%	14%	10%
Women leaving the company	headcounts	32	75	90
Turnover rate among women	%	5,0%	10%	10%
Men leaving the company	headcounts	81	230	138
Turnover rate among men	%	5,8%	17%	9%
Persons < 45years of age leaving the company	headcounts	65	190	189
Persons > 45 years of age leaving the company	headcounts	48	115	39
PERSONS ENTERING THE COMPANY	**HEADCOUNTS**	**327**	**419**	**472**
RATE OF NEW EMPLOYEES	%	16%	19%	20,0%
Women entering the company	headcounts	110	157	210
Rate of new employees among women	%	17,3%	20,2%	23,4%
Men entering the company	headcounts	217	262	262
Rate of new employees among men	%	15,5%	19,1%	17,8%
Persons < 45 years of age entering the company	headcounts	253	330	392
Persons > 45 years of age entering the company	headcounts	74	89	77
TRAINING HOURS PER EMPLOYEE		**2014**	**2015**	**2016**
Average training hours per female employee	hours	3.9	4.0	4.7
Average training hours per male employee	hours	5.5	4.7	9.4
Average training hours per employee	hours	5.0	4.5	7.6

IMPRINT

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SUPPORT OF CONTENT, CONCEPTION AND EDITORIAL SUPPORT

denkstatt GmbH, www.denkstatt.at

YEAR OF PUBLICATION 2017

PICTURES COURTESY OF

Dieter Sajovic, Mathias Kniepeiss, Toni Muhr, Teresa Rothwangl, Adobe Stock, Stölzle Archiv

TYPESETTING AND PAGE LAYOUT

Bramauer Branding, www.bramauer.com

PRINT

Medienfabrik Graz, www.mfg.at

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.

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