

Corporate Social Responsibility

Socially responsible, environmentally conscious and resource-friendly behavior, commitment to our employees and our society, and the advancement of sustainable product solutions are integral parts of SGL Group's corporate culture and objectives. They are key requirements to the long-term success of our business. The information in this chapter relates to continuing operations, including proportionately consolidated entities. Information that involves discontinued operations is marked in the text accordingly.

Integrity and values

Acting responsibly and in line with the law is anchored in SGL Group's corporate philosophy. Our SGL Group Code of Business Conduct and Ethics reflects our common values and sets binding standards for how we behave in our day-to-day business. The Code defines how SGL Group meets its legal and ethical responsibilities as a company while taking the respective social and cultural standards into account. Management serves as an important role model when fulfilling personnel and leadership responsibilities. Furthermore, each employee is personally responsible for ensuring that their actions are in line with the Code of Business Conduct and Ethics. The Code, which is available in nine languages, is part of the information package given to new hires and it is made available to all SGL employees worldwide.

In addition to senior managers, local compliance officers at our sites as well as Group Compliance are also available when employees have questions about the Code of Business Conduct and Ethics or compliance in general. To report potential compliance violations, employees can contact the above-mentioned colleagues or use a confidential internal compliance reporting system to report if desired anonymously by phone, fax, mail or email. More information on points of contact and procedures are available to all employees in the SGL Group Whistleblowing Guideline, which also extends mandatory protection to whistleblowers.

Our compliance program includes a comprehensive training concept for the following subjects: Code of Business Conduct and Ethics, antitrust law, anti-corruption and export control. Participation in the training sessions either in person or via e-learning is mandatory for the respective target groups. In the year under review, we focused particularly on the subject of anti-corruption. To coincide with the update of the gifts and entertainment policy, we held extensive on-site training at all

sites. This policy, which has been in force group-wide since 2010, stipulates binding rules for giving and accepting gifts and invitations as well as rules for business partners and public officials. In addition, we held special sessions on anti-corruption for specific departments, such as Sales. To complement our training program, we developed an e-learning program on the topic of anti-corruption in 2016, which will be rolled out worldwide in the first quarter of 2017. Our Compliance Risk Assessment included the risk category anti-corruption. Business unit managers were interviewed and business unit compliance officers completed surveys. Furthermore, potential weaknesses in the area of anti-corruption were discussed in detail and risk scenarios were analyzed together with local compliance officers from all sites at regional compliance conferences. For many years we have also conducted a multi-step Business Partner Compliance Risk Assessment to review all intermediaries used. All contracts include binding compliance clauses.

As in 2015, political donations were prohibited in 2016.

As part of routine compliance reporting to all SGL sites worldwide, local compliance officers annually review compliance with the human rights and labor standards entrenched in the UN Global Compact and the ILO conventions.

With the introduction of a Supplier Code of Conduct in 2015, we have established binding principles to ensure that the conduct of our business partners meets SGL Group compliance standards. This Code also addresses the principles of the UN Global Compact and requires suppliers and subcontractors to comply with internationally recognized human rights and labor standards.

Employees

At the end of 2016, SGL Group had a total of 5,384 employees – a decline of 274 employees or just below 5% year on year. This reflects a number of developments, in particular personnel consolidations in our corporate functions and in the Asia region as well as in the discontinued business unit PP.

Employees by region

Headcount ¹⁾	Dec. 31, 16	%	Dec. 31, 15	%	Change
Germany	1,789	45.4%	1,796	44.0%	-0.4%
Europe excluding Germany	1,014	25.7%	1,061	26.0%	-4.4%
North America	711	18.0%	747	18.3%	-4.8%
Asia	428	10.9%	481	11.7%	-11.0%
Total continuing operations	3,942	100.0%	4,085	100.0%	-3.5%
Discontinued operations (PP)	1,442		1,573		-8.3%
Total	5,384		5,658		-4.8%

¹⁾ Prior year figures adjusted to reflect PP as discontinued operations

Employees by business unit

Headcount ¹⁾	Dec. 31, 16	%	Dec. 31, 15	%	Change
CFM	1,183	30.0%	1,148	28.1%	3.0%
GMS	2,496	63.3%	2,504	61.3%	-0.3%
T&I and Corporate	263	6.7%	433	10.6%	-39.3%
Total continuing operations	3,942	100.0%	4,085	100.0%	-3.5%
Discontinued operations (PP)	1,442		1,573		-8.3%
Total	5,384		5,658		-4.8%

¹⁾ Prior year figures adjusted to reflect PP as discontinued operations

The strategic advantage of diversity

The Group's workforce in continued operations remains very international. Europe has the greatest share with 71% (2015: 70%), followed by North America with 18% (unchanged) and Asia with 11% (2015: 12%). The diversity of nationalities, cultures and languages is an important strategic advantage.

One of the ways we support interaction and knowledge exchange among employees is by actively sending them on foreign assignments to our sites in other countries. In 2016, a total of 14 executives were on international expatriate assignments in the USA, Malaysia, Portugal and China (2015: 18).

Equal opportunity, family friendliness and health management

The share of women in our workforce as of the end of 2016 was 16% and therefore slightly above the previous year (15%). This figure fluctuates slightly from region to region: 16% in Europe

(incl. PP: 15%), 18% in North America (incl. PP: 16%) 19% in Asia (incl. PP: 17%). In 2015, the share was as follows: 15% in Europe, 17% in North America, and 17% in Asia. The share of women in executive positions, which comprise the three management levels below the Board of Management, remained unchanged at 14%. Including discontinued operations (PP), the share of women in executive positions was 13%.

The Group's workforce has a balanced overall age structure: 11% of all employees are under the age of 30 (incl. PP: 9%); 58% are between 30 and 50 (same incl. PP); 31% are over 50 (incl. PP 33%). In 2015, the age structure was as follows: 10% of all employees were under the age of 30; 58% were between 30 and 50; 32% were over 50.

In order to support the work-life balance and health of our employees, SGL Group offers special programs at some of our sites in addition to flexible working hours, for example, childcare options during the summer break as well as medical checkups and health workshops.

Training and education

Consistent HR development is an essential component of our company philosophy. It is both vital to our growth strategy and reflects our commitment to our employees.

Training has always played an important role at SGL Group. In the year under review, we had 108 apprentices in Germany, which is exactly the same number as in the previous year. Likewise unchanged, the majority worked at our sites in Meitingen (66 apprentices) and Bonn (36 apprentices). In total, SGL Group offered 15 apprenticeship programs (technical, commercial and IT) and four dual degree programs in the year under review. The increasing role of digitalization (Industry 4.0) is reflected in our training courses. This is particularly apparent in our technical program, where since 2016 apprentices have been learning how to use a 3-D printer.

Our continuing education program includes a wide variety of individual options to advance professional qualifications and regular career development dialogues that are part of the performance review process. Our Corporate Training Framework – a training program for specialists and senior managers – was expanded in 2016 and now includes four focal points: communication, leadership, project management and sales skills. In addition, our "Leadership@Work" training program and regular potential assessments of selected talents

are aimed specifically at preparing employees for leadership positions.

Competing for talent – grants, internships and theses

We are an innovative company that competes for the best talent, which is why we want to instill our passion for carbon on students and skilled professionals and give them the opportunity to get to know our Company at an early stage. Therefore, we regularly visit universities, and in 2016 we participated in more than half dozen job fairs, including Bonding Aachen, ChemCon Chemnitz, and Pyramid Augsburg. We also offer tangible support in the form of university grants and internships, and we provide opportunities for students to cooperate with us in writing dissertations and theses. In the year under review, our central Technology & Innovation department (T&I) supported 20 bachelor and master theses. Our extensive alliances with various universities around the world form part of the framework for this (see page 49).

Sustainable product solutions

SGL Group's products also contribute to increased sustainability, which allows customers to develop more environmentally friendly production processes and manufacture more environmentally friendly products. The extraordinary properties of carbon fibers and specialty graphites are essential for this. Depending on its form and processing, the material demonstrates excellent electrical and thermal conductivity, high resistance to heat and corrosion, and is characterized by its unique combination of light weight and high strength.

The best known example for use in sustainable solutions is lightweight construction, which plays an ever greater role in both the aerospace and automotive sectors and is being used increasingly in serial production of cars. For example, SGL Group carbon fiber composites are standard components in the BMW i3 and i8, the new BMW 7-series as well as the Audi R8. In the solar industry, graphite is irreplaceable in the production of ultra-pure silicon, which makes it possible to use this renewable energy. Graphite is also the first choice for many applications in which energy storage and efficiency are critical factors, for example, as anode material in lithium ion batteries or as system components in the LED and semiconductor production processes.

In the year under review, approximately 36% of SGL Group's sales revenue was linked to products for sustainable solutions

that foster developments surrounding the mobility, energy and digitalization megatrends (2015: 34%).

Resources and environmental protection

Sustainable business practices, environmental protection and upholding high standards in health and safety at work are essential prerequisites for SGL Group's sustainable growth.

Corporate EHSA (Environment, Health & Safety Affairs) forms the central organizational foundation for managing all production processes and continuously improving all environmental protection and health and safety activities. This unit coordinates all group-wide activities, sets global standards and continuously performs audits worldwide in cooperation with local EHSA representatives. Furthermore, the established group-wide SGL Excellence initiative uses optimization projects to contribute to, among others, conserving raw materials as well as continuing to minimize production scrap.

SGL Group has invested a total of approximately €6 million over the past four years in environmental protection optimization and production facility safety. The investments related mainly to systems for exhaust gas purification and to further increase process safety, for example, at our site in Lavradio, Portugal.

Increasing energy efficiency

The manufacture of carbon fibers and specialty graphites requires large amount of energy, primarily due to the use of high-temperature technologies, which are necessary to generate the specific material properties for the various products. This is why the majority of SGL Group's energy consumption is needed as heat – temperatures up to 3,000° Celsius are required in certain steps in the process.

Consequently, it is important to continuously improve energy efficiency in our production processes. Since 2016, all of SGL Group's European sites have introduced and certified an energy management system based on ISO 50001. Furthermore, our sites in Meitingen and Bonn take part in energy efficiency networks in association with other companies.

With these and other measures, SGL Group was able to further improve efficiency in 2016. Compared with the adjusted sales revenue, SGL Group's relative energy consumption declined by 2% year on year, from 1.15 to 1.13 megawatt hours (MWh) per €1,000 in

sales revenue. At approximately 46%, the share of primary energy consumption remained nearly unchanged compared to last year.

Reducing carbon emissions

Limiting climate change is one of the most significant environmental protection challenges. Limiting greenhouse gases, especially carbon dioxide (CO₂), plays an important role in this.

SGL Group's carbon dioxide emissions from primary and secondary energy consumption fell further in 2016 in relation to adjusted sales revenue, from 0.37 tons per €1,000 in 2015 to 0.36. We also reduced absolute carbon dioxide emissions in the reporting period by 1%, from 281 thousand tons in 2015 to 279 thousand tons.

Acting responsibly with cooling water

The manufacture of carbon and graphite products does not require water for the product itself, but instead is needed primarily for cooling the systems used in the production process. The use of secondary cooling circuits prevents direct contact with the products, which ensures that the water is not contaminated during production.

The water requirement at SGL Group declined from to 8.67 million cubic meters in 2016, 1% below the previous year (8.73 million cubic meters). In relation to adjusted sales revenue, the water requirement decreased from 11.4 cubic meters per €1,000 in 2015 to 11.2 cubic meters in 2016. More than 80% of this water requirement was used to cool production facilities. The remaining volume was used for cleaning or sanitary purposes. 57% of SGL Group's 2016 water requirement was taken from its own well, and after being used as a coolant, was fed into rivers or public canal systems in its natural state. 25% of the water requirement was taken from rivers and 18% from the public water supply.

Waste: Avoidance and Recycling take priority before Disposal

When it comes to waste, SGL Group's guideline is: avoidance is better than recycling and recycling is better than disposal. The advantage is that our material – carbon – and most of the residual materials incurred in the production process are highly recyclable. Waste that cannot be prevented can often be reused in other products. Examples include recycling discarded graphite chips in a variety of products or using recycled carbon

fibers as fleece textiles or as raw materials for secondary components in automotive production.

The smaller share of our waste must be declared as hazardous waste and appropriately disposed of in accordance with legal requirements (2016: 22%). These include, for example, materials that can no longer be processed, such as specific filter dust and substances from cleaning or manufacturing processes. All waste is meticulously recorded, precisely analyzed and properly disposed of and documented in accordance with regulations.

Environmental data - continuing operations ¹⁾	2016	2015	Change
Energy consumption			
in gigawatt hours (GWh)	873	887	-2%
thereof oil and gas	406	406	0%
thereof electricity	467	482	-3%
in relation to economic output (MWh per €1,000 in sales revenue) ²⁾	1.13	1.15	-2%
CO₂-emissions³⁾			
in thousands of tons (kt)	279	281	-1%
thereof direct	75	75	0%
thereof indirect	204	207	-1%
in relation to economic output (t per €1,000 in sales revenue) ²⁾	0.36	0.37	-3%
Water requirement			
in millions of cubic meters (Mio. m ³)	8.67	8.73	-1%
thereof from Company wells	57%	50%	14%
thereof from rivers	25%	32%	-22%
thereof from public water supply	18%	18%	0%
in relation to economic output (m ³ per €1,000 in sales revenue) ²⁾	11.2	11.4	-2%
Waste volume			
in thousands of tons (kt)	19.2	20.6	-7%
thereof hazardous waste	4.2	2.3	83%
in relation to economic output (kg per €1,000 in sales revenue) ²⁾	24.8	26.8	-7%

¹⁾ Prior year figures are reported on a comparable basis

²⁾ Adjusted sales revenue (excluding price and currency effects); base year 2015

³⁾ From primary and secondary energy consumption. The calculation of CO₂-emissions is based on "Greenhouse gas reporting conversion factors 2016" of the Department for Business, Energy & Industrial Strategy, Gov. UK for direct emissions (Scope 1) and on "2016 CO₂ Emissions from Fuel Combustion online data service" of the International Energy Agency (IEA) for indirect emissions (Scope 2). In previous years, DEFRA's conversion factors were used for the calculation of indirect emissions (Scope 2). Since 2016, the factors of the International Energy Agency have been used retroactively to improve the timeliness and regionality. However, fundamental changes in trends do not arise

In 2016, the total volume of waste at SGL Group was 19.2 thousand tons (2015: 20.6 thousand tons). Of this amount, 4.2 thousand tons were categorized as hazardous waste in 1016 (2015: 2.3 thousand tons). The amount of waste related to adjusted sales revenue in 2016 was 24.8 kilograms per €1,000 in sales revenue (2015: 26.8 kilograms).

The increase in the volume of hazardous waste compared with the previous year was mainly due to additional volumes of waste, which resulted from maintenance and the increase in production volumes at various sites. By contrast, waste avoidance initiatives, for example, at our facility in Muir of Ord, resulted in an 18% reduction in residual waste from 18.3 thousand tons in 2015 to 15.0 thousand tons in 2016, which reduced the overall volume of waste by 7% compared to the previous year.

Environmental data - discontinued operations ¹⁾	2016	2015	Change
Energy consumption			
in gigawatt hours (GWh)	1,277	1,328	-4%
CO₂-emissions²⁾			
in thousands of tons (kt)	431	446	-3%
Water requirement			
in millions of cubic meters (Mio. m ³)	2.30	2.65	-13%
Waste volume			
in thousands of tons (kt)	15.0	15.5	-3%

¹⁾ Prior year figures are reported on a comparable basis

²⁾ From primary and secondary energy consumption. The calculation of CO₂-emissions is based on "Greenhouse gas reporting conversion factors 2016" of the Department for Business, Energy & Industrial Strategy, Gov. UK for direct emissions (Scope 1) and on "2016 CO₂ Emissions from Fuel Combustion online data service" of the International Energy Agency (IEA) for indirect emissions (Scope 2). In previous years, DEFRA's conversion factors were used for the calculation of indirect emissions (Scope 2). Since 2016, the factors of the International Energy Agency have been used retroactively to improve the timeliness and regionality. However, fundamental changes in trends do not arise

Safety

The safety of our employees and the security of our work flows as well as active, long-term risk management are top priorities at SGL Group. We use our high standards, continuous safety precaution improvements and a large number of target-oriented training sessions and activities to prevent workplace accidents. SGL Group's preventive measures are complemented by emergency management systems specific to each site.

Occupational and Process safety

The workplace accident frequency rate which reflects the number of workplace accidents in relation to the hours worked remains stable at a low level compared to the industry. This is supported by a group-wide Incident Management System, which is used to record all workplace accidents as well as to define and implement improvement measures based on best practices.

	2016	2015
Frequency rate of accident-related work absences per 1 million working hours - continuing operations	2.9	2.3
Frequency rate of accident-related work absences per 1 million working hours - discontinued operations	3.2	1.0

Prior-year figures have been made comparable

Product responsibility and risk management

When handling chemicals, SGL Group provides support and assistance in the step-by-step introduction of protection targets in European chemicals policy and the fulfillment of the requirements of the European regulation on chemicals (REACH). Exchanging information on the use of substances is an integral part of SGL Group's collaboration with suppliers and customers. This includes exchanging detailed risk and exposure assessments in accordance with the legal requirements. In addition, we provide our customers with relevant product information such as safety data sheets for all substances and products produced by SGL Group in a standardized global web-based system.

In order to minimize risk with regard to SGL Group's production and processes, since 2002 the Company has relied on, among other things, a uniform group-wide system to record, analyze and evaluate risk, which is being expanded regularly. This not only covers potential work accidents, but also the consequences of fire or natural catastrophes. It also analyzes the degree, potential danger and financial effects of crises such as cleanup and repairs resulting from environmental damages or losses resulting from production downtime. SGL Group performs annual audits in cooperation with the insurance company FM Global, which include a safety analysis of all processes and systems. The audit results are discussed with plant management and, if necessary, an action plan is created to further minimize risk.

Corporate citizenship

Corporate citizenship is also a fundamental facet of our corporate social responsibility. This is reflected both in our traditionally close ties with the communities in which we operate as well as diverse alliances and initiatives in science, research and industry.

Local community involvement

The circumstances and challenges of communities vary greatly between the regions in which we operate facilities. The community activities we are involved in are equally diverse and often characterized by a strong personal commitment from our local employees. The activities range from community involvement, such as in the area of education, to supporting the local economy to fostering sports and cultural institutions.

Even if they are small and often voluntary activities, this commitment is an important part of our local activities. SGL Group remains true to these commitments even in a difficult economic climate – a fact that is demonstrated by a low six-digit Euro amount in financial support in 2016, which was in line with the previous year. The approximately 140 activities in the reporting year were on par with the previous year.

Local community involvement by type

(based on number of activities) - continuing operations ^{1) 2)}	2016	2015
Social	48%	52%
Art/Music	6%	5%
Sport	19%	15%
Education	23%	26%
Other	4%	3%

¹⁾ Prior-year figures have been made comparable

²⁾ The joint sites Meitingen, Shanghai as well as Nowy Sącz and Racibórz are classified as a continuing activity for the item "Local commitment" and are not separated

Local community involvement by type

(based on number of activities) - discontinued operations ^{1) 2)}	2016	2015
Social	61%	45%
Art/Music	6%	10%
Sport	6%	15%
Education	28%	15%
Other	0%	15%

¹⁾ Prior-year figures have been made comparable

²⁾ The joint sites Meitingen, Shanghai as well as Nowy Sącz and Racibórz are classified as a continuing activity for the item "Local commitment" and are not separated

In Spain, for example, SGL Group organized and financed a visit to the Madrid Zoo for over 50 children and chaperones from the organization "Save the Children" as well as 45 employees and their families. In addition, employees supported "Save the Children" by organizing a gift collection at Christmas for needy families and children with a mental or physical disability. At our site in Wiesbaden and in addition to financial support from the Company, SGL Group employees once again helped cook and serve food to children in need and in a joint campaign fulfill their Christmas wishes. For many years, several of our sites in North America have supported a variety of activities of the American Cancer Society's "Relay for Life" initiative, including both financial support as well as volunteer work by employees, such as the SGL Warriors at St. Mary's.

Promoting science

Promoting science continues to be particularly important to a technology-based company like SGL Group. Our long-term alliances are closely linked to our own development activities and are supported and driven primarily by our global group research department, Technology and Innovation (T&I). Examples include our support of the Chair of Carbon Composites (LCC) at the Technical University of Munich (TUM), our collaboration with the Technical University Nanyang (NTU) in Singapore and the AGH Krakow Technical University as well as many active memberships in industry associations (see also page 49).

We award a number of prizes to provide scientists with incentives and to promote the discovery of new applications for carbon. Every year we give out the SGL Group Award for the best dissertation in the engineering department at the Technical University of Munich as well as the Swabian Prize for Science (Schwäbische Wissenschaftspreis) to foster young scientists in Augsburg. Furthermore, every two years the Utz-Hellmuth Felcht Award, which was initiated by SGL Group, is granted at the International Carbon Conference. In 2015, Professor Hui-Ming Cheng received the award for his work in the area of three-dimensional graphene networks for energy saving. We also sponsor the SGL Carbon Skakel Award of the American Carbon Society. Professor Rodney S. Ruoff received the award in the reporting year.

As a co-founder of the "Initiative Junge Forscherinnen und Forscher e.V." (IJF – Initiative for young researchers), SGL Group also offers comprehensive support for scientific education – from nursery schools through to universities. In 2016, SGL Group employees again supported the initiative with donations and active participation in the form of excursions.