



**SGL GROUP**  
THE CARBON COMPANY

ANNUAL REPORT

# TWENTY SIXTEEN

## THE DUCT TAPE OF LIFE

Six protons, six neutrons, six electrons. That's carbon. Pulitzer Prize winner Natalie Angier called it the duct tape of life. Carbon, present in more chemical compounds than any other element, is the material from which we develop solutions for our key business activities: mobility, energy supply, and digitization. As a company, we also enter into close and multi-faceted relationships, just like carbon. Let's list a few examples. On behalf of and in collaboration with our customers in the automotive, aerospace, and wind energy sectors, we design and implement commercial lightweight solutions at our new lightweight center. Together with renowned research institutions and other partners, we are working on optimizing the lithium-ion battery and on further developments in the field of fuel cell technology. And, so that our daily lives are bathed in beautiful, colorful, and, above all, energy-friendly light, we are supporting the LED industry with our know-how, our many years of experience, and our innovative technology.

# TABLE OF CONTENTS

## MAGAZINE

- 04 SGL at a Glance
- 06 Serial Production of Lightweight Design
- 12 Interview: Lithium-Ion Batteries Represent a Key Technology
- 15 25 Years of SGL
- 16 Digitization in the Spotlight

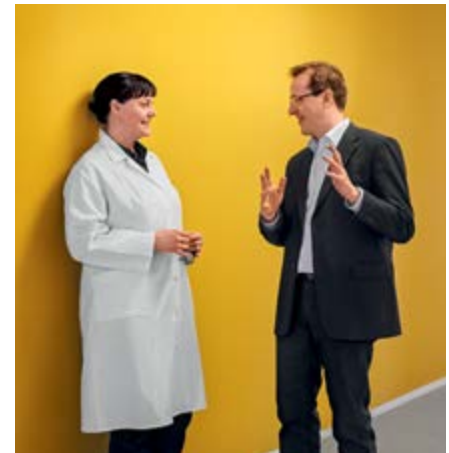
## MANAGEMENT

- 21 Key Figures 2016
- 22 Letter from the Board of Management
- 24 Report of the Supervisory Board
- 28 Corporate Governance and Compliance Report
- 35 SGL Group in the Capital Markets



## GROUP MANAGEMENT REPORT

- 42 SGL Group
- 50 Economic Report
- 74 Corporate Social Responsibility
- 80 Opportunity and Risk Report
- 89 Outlook
- 94 Remuneration Report
- 102 Disclosures pursuant to Sections 289 (4), 315 (4), as well as Sections 289a and 315 (5) of the German Commercial Code (HGB)



## CONSOLIDATED FINANCIAL STATEMENTS

- 106 Consolidated Income Statement
- 107 Consolidated Statement of Comprehensive Income
- 108 Consolidated Balance Sheet
- 110 Consolidated Cash Flow Statement
- 112 Consolidated Statement of Changes in Equity
- 114 Notes to the Consolidated Financial Statements



## ADDITIONAL INFORMATION

- 172 Independent Auditors' Report
- 173 Responsibility Statement
- 174 Corporate Bodies
- 177 Glossary
- 181 List of Acronyms
- 182 Financial Calendar, Contact/Publication Credits
- 183 Five Year Financial Summary

**34**  
SITES

9

# SGL AT A GLANCE

SGL was established 25 years ago.  
In 2016, we laid the foundations for the **new SGL**.\*



Mobility

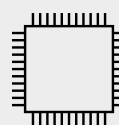
**20%**

SALES REVENUE BY  
CUSTOMER INDUSTRY



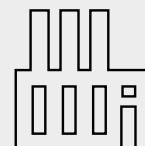
Energy

**22%**



Digitization

**4%**

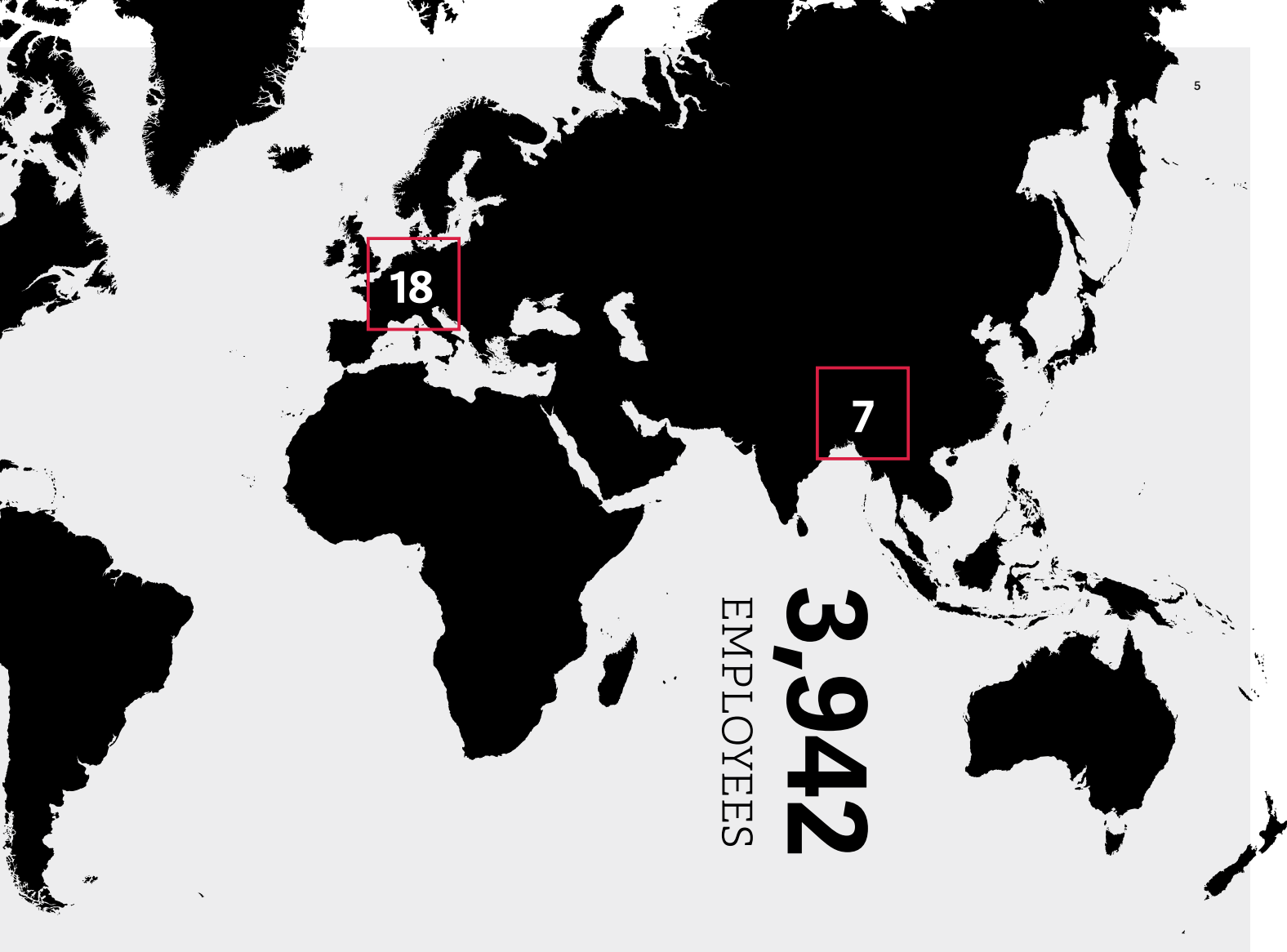


Industrial  
applications

**27%**

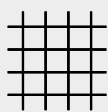
**100+**  
COUNTRIES

\* All figures based on continuing operations.



Chemicals

**15%**



Textile fibers

**12%**

**€769.8**

MILLION IN SALES  
REVENUE

**€20.7**

MILLION EBIT\*\*

**50%**

REVENUE GROWTH  
BY 2020

\*\* Before non-recurring charges.



# SERIAL PRODUCTION OF LIGHTWEIGHT DESIGN

Whether it's a question of components or of **manufacturing technologies**, the Lightweight and Application Center (LAC) in Meitingen develops tailor-made solutions for the automotive sector and other industries.









1

**E**ntering the Lightweight and Application Center (LAC), the first thing you hear is just a constant background hum. It comes from the 80-meter-long carbon fiber pilot plant. Standing near it, you can marvel at how carbon fibers, which are roughly one tenth as thick as a human hair, are processed and converted into production-ready components. The expansive ultra-modern facilities at the heart of the LAC are where robots are turning thousands of semi-finished fiber products into prototypes.

In every corner of the LAC, it is clear that lightweight design is closely linked to the future of mobility. Away from the production line, there is much to admire in what can be achieved using carbon fibers and other composites –

from demonstrators to body shells, from load-bearing elements (such as B-pillars and two roof frames of carbon fiber-aluminum composite design), and pure carbon fiber components (car roofs, engine hoods, and fenders), to special material designs, including for trunk shelves.

The advantages of fiber-reinforced plastics are obvious. Not only are they considerably lighter than traditional materials, but they also allow complex geometries and help components meet the most stringent safety requirements. However, the challenge is to introduce what is still a relatively new material into serial production to a greater extent and to help establish it more widely. This process won't happen overnight, but will be the result of years of hard work on development projects together with major manufacturers and involve our joint venture companies. "Working together with BMW, we have made a very good start. Now, with the LAC, we want to help components produced from composite materials make the breakthrough into large-scale production," explains Andreas Wüllner, Chairman of the business unit Composites – Fibers & Materials at SGL. Our immediate focus is on the automotive sector. However, solutions for industries such as aerospace and wind energy are also being developed at the LAC.

But, to take one thing at a time, we start by exchanging ideas and discussing trends. The SGL team is constantly talking to existing and potential customers, to members of the scientific community, and to the sector as a whole. Customers who show an interest in a component, a material mix, or a particular manufacturing technology are invited to visit the LAC in Meitingen. The first phase is to draw up a design concept. Customers state their design requirements and con-





2

straints, e.g. design room, loads, and possible production numbers. Then, a wide range of experts at the LAC – design engineers, production technologists, and specialists in manufacturing processes and automation technology – come together to consider how a component is to be designed, the materials that could be used, and which manufacturing processes are most suited to solving the task at hand. Everything is covered, from the short feasibility study to producing a prototype.

“We are more than just a material supplier; we’re an integrated solution provider,” is how Andreas Erber, Head of the LAC, summarizes it. “Bit by bit, we’re helping our customers to change to using fiber-reinforced plastics in the most effective way for future applications in serial production. Our aim is large-scale production,” adds Erber.

It was precisely for this reason that SGL decided in mid-2015 to establish the LAC. Much has happened since then. Not only has the team grown, the technical capabilities have too. Today, one

**1**  
Loading fiber spools  
onto the machine

**2**  
Andreas Steinle  
(left) and a  
colleague at the wet  
press

has the chance to look at a heterogeneous technologically advanced set up in just two halls. Right from a single continuous production step of cutting, pressing and soaking in synthetic resin, to a sophisticated pultrusion unit for producing longitudinally oriented components and semi-finished products as well as wrapping robots and a stacking unit, where pre-impregnated fiber bundles are cut to size and immediately pressed to form components, all can be appreciated at one location. The fact that this process is quick, fully automated and uses the latest computer-assisted tools, only adds to its exuberance. Rapid developments in recent years have moved things on a lot,” says Andreas Steinle, LAC process engineer, while checking a robot’s settings.

The LAC is already running several development projects together with manufacturers from various industrial sectors worldwide. There is a wide variety of tasks. Meeting customer requests and supplying the component or the ►

► material mix involves extensive design work, mathematical formulae, simulation, and, of course, testing. Employees move back and forth between the production halls, the open-plan work areas, and PC workstations, just as the development process demands. Team work, above all, is the decisive factor in achieving success. People like to tinker here and they work in an agile way in an environment that is receptive to new ideas and uses the very latest technology. It's no wonder then that, as Erber confesses: "I get the most fun out of working together with an interdisciplinary team to solve a really exciting task." It's also clear that from every project you learn something for the next one, whether it's in the automotive, aerospace, wind energy, or mechanical engineering field.

The need for efficient lightweight design is increasing. By establishing the Lightweight and Application Center, SGL aims to make a significant contribution to the world of tomorrow. The objective is clear: fiber-reinforced plastics are to become the norm. ■

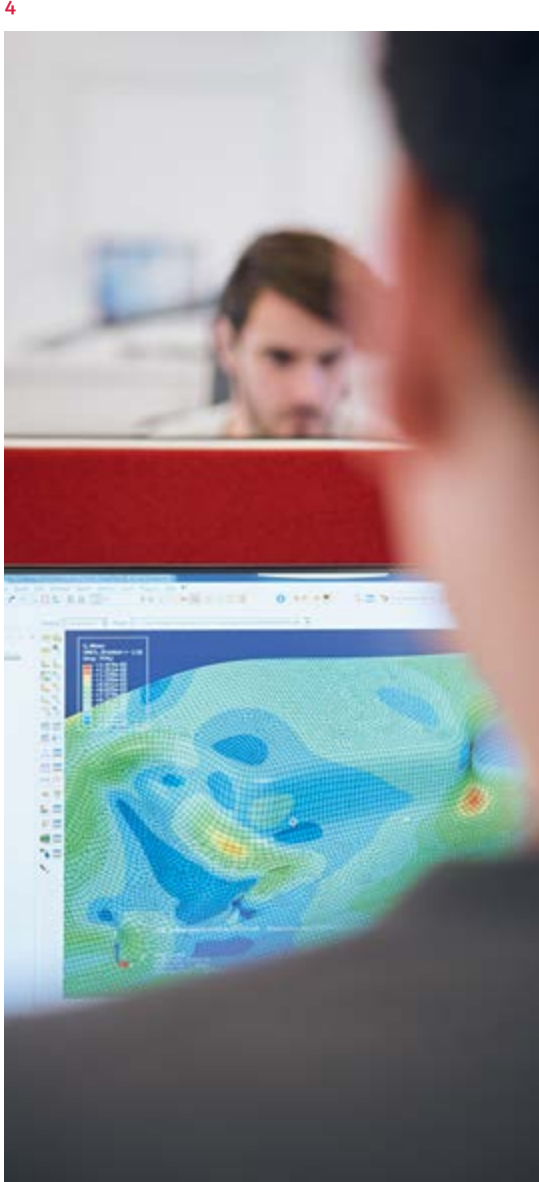
Photos Rüdiger Nehmzow

3



“We want to support the breakthrough of composite components in **large-scale production**.”

— **Andreas Wüllner**, Chairman of the business unit



3  
Andreas Erber with his colleagues in the LAC conference room

4  
FE analysis is used to develop a prototype.

5  
Automated production





“LITHIUM-ION  
BATTERIES  
REPRESENT A KEY  
TECHNOLOGY”



Collaborative research is of fundamental importance when developing new drive systems. This applies to batteries just as much as it does to fuel cells. Interviewed together, Christian Schreiner from SGL and Michaela Memm from ZSW explain how **advances in battery technology** can support the transition from combustion engines to electric drives.

**Mobility concepts suitable for the future require ever better storage systems. As part of the LIB.DE project, SGL is conducting research into the further development of lithium-ion batteries in collaboration with the battery technology laboratory at the Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) and other industry partners. Christian Schreiner (CS), SGL corporate research project manager, and Michaela Memm (MM), responsible for projects at ZSW, talk about electromobility, the options for even more powerful batteries, and the contribution made by carbon in the form of graphite anode material in batteries.**

**Mr. Schreiner, Ms. Memm, will we all soon be driving electric cars?**

**MM** There will certainly be a huge increase in electric drive systems. Despite this, I think combustion engines will still be around. It's likely we'll then be using more hybrid drives, including fuel cells.

**CS** Car sharing with electric cars will definitely grow too. And more public transport will also be electrified.

**Why is it so important to develop new mobility concepts and new storage technologies?**

**MM** We are facing huge challenges,

particularly when you consider the trend toward megacities. More and more people need more and more energy. So reducing CO<sub>2</sub> emissions, i.e. from exhausts, is more important than ever before. High-performance batteries will be a fundamental factor in achieving this.

**How can we promote electric vehicles? What are the challenges for battery development?**

**CS** This topic is already picking up speed in many countries around the world. The price of electric cars remains a challenge, as does expanding the charging infrastructure. As far as the battery is concerned, it's mainly a question of range, rapid-charging capability, and service life. Everyone involved in battery construction is working on these aspects.

**MM** And that precisely is the decisive factor. We're all working flat out at developing still further all the components in a lithium-ion battery, including cell production. Lithium-ion technology was and is the key technology. Not for nothing is it now being used in every area related to consumer goods – from computers and cameras to cell phones. In the automotive sector, it's now also the dominant technology for electric vehicles, including plug-in hybrids. And it still has a great deal of potential as regards energy density and cell design – there's still a lot we can optimize.

**How specifically are you pressing ahead with further battery developments?**

**CS** We are graphite specialists at SGL, and our internal research and development over recent years has contributed towards improving the anode material to the extent that lithium-ion batteries have become more powerful – by developing new formulations for our graphite, for example. We're also carrying out initial laboratory tests with potentially high-energy anode materials. But we want to do even more, which is why we are participating in the LIB.DE project and why we also helped establish the research pilot system for cell production at the ZSW in 2014/2015.

**MM** Putting it simply, the lithium-ion battery is made up of anode material – graphite mostly – and cathode material, a compound containing lithium. These materials are coated onto thin metal films which are then coiled up, for example. When the battery is being charged, the lithium-ions are transferred by means of a liquid electrolyte from the cathode material at the cell's positive terminal into the anode at the cell's negative terminal. When the battery is being discharged, this process simply takes place in reverse. As well as improving the materials, we are also working on the cell architecture itself. In other words, how to get as much material as possible into a particular casing. ►

### ► What are the benefits of a collaborative partnership?

**MM** Each partner contributes its respective expertise and pursues the common goal of improving the battery. At the same time, each allows the others a degree of insight into its own way of working. We complement each other and that drives the project forward more rapidly.

**CS** As a research institute, the ZSW has a holistic view of battery development; it also provides us with the opportunity of using well-established and detailed measuring methods on a large scale. That's a good combination. In the end, there is greater understanding on all sides, so we can then say that if we optimize or change something at certain places, the result will be even better.

### How much more storage capacity can electric cars possibly accommodate?

**MM** There is still room for increases in capacity; that's the main focus of our activity on the LIB.DE project. How much this will be in the end is not easy to predict – battery development is very complex. However, it's important to understand that we're working toward improvements at all levels, from the materials and cell manufacture to battery construction.

**CS** In addition to the ongoing development of the battery, it will be – to return to the start of our discussion – a question of promoting electromobility in parallel, with aspects such as making better use of the installation space in the vehicle and of optimizing automotive designs, such as greater use of lightweight material. Car manufacturers are definitely on to this. Because one thing is also clear: the cars of the future will probably need even more energy than today. Not least when autonomous driving becomes a reality. ■

More details on the LIB.DE project can be found at [www.libde.de](http://www.libde.de)



“**INSPIRE** has assembled an effective consortium with ambitious technological targets. We expect that this joint project will provide significant momentum for establishing a competitive European supply chain for fuel cell systems.”  
— **Rüdiger Schweiss**, fuel cells project manager

### THE FUEL CELL,

like the lithium-ion battery, is regarded as another highly promising technology for the future of the automotive sector. The EU-funded **Project INSPIRE**, aiming at the further development of fuel cell technology, started in 2016. Hydrogen, the energy source in the fuel cell, is converted into electrical energy without any emissions being released. The major advantage of this technology is that hydrogen tanks can be very quickly re-fueled and, because of hydrogen's high energy density, vehicles can achieve ranges comparable with those of vehicles powered by conventional combustion engines. However, in addition to establishing fueling infrastructure capable of meeting the demand, there is still a need to develop materials and manufacturing technologies that are suitable for volume

production. As a highly respected and experienced manufacturer of gas diffusion layers based on carbon fibers, SGL is making an important contribution to the development of lower-cost yet better-performing fuel cell systems for the automotive sector.

In collaboration with other component suppliers (Johnson & Matthey Fuel Cells, DANA Power Technologies Group), research institutions, and the BMW Group, representing vehicle manufacturers, the aim is to develop a fuel cell stack based on the latest generation of components, which will be a practical proposition in the medium-term with competitive series production costs. ■

More details on the INSPIRE project can be found at [www.inspire-fuelcell.eu](http://www.inspire-fuelcell.eu)



1

“For the future, I hope the SGL brand gets stronger as a symbol of joint tradition and modernity.” — **Mariola Mikoda**, Poland

“We enhanced a semi-finished plant in China in very short time.”  
— **Stefan Schulte**, Germany, celebrates his 25th work anniversary

# 25

## YEARS OF SGL

SGL turned 25 in early February. The history of our company is characterized by huge potential and our employees' **passion** for carbon.

“I’m eager to see SGL ignite its passion and imagination to utilize our materials to build a better world.”

— **Karl Schmidt**, USA



2

“I hope that our ‘Passion for Carbon’ will drive us forward for the next 25 years and let us grow.”

— **Kerstin Ahrend**, Germany

“Successful transformations have been a hallmark at SGL for 25 years.”

— **Fairy Liu**, China



3

1  
2011: Building the world's biggest isostatic press in Bonn.

2  
2009: The opening of the forum in Meitingen.

3  
2010: Ground-breaking ceremony for the carbon fiber plant in Moses Lake, USA

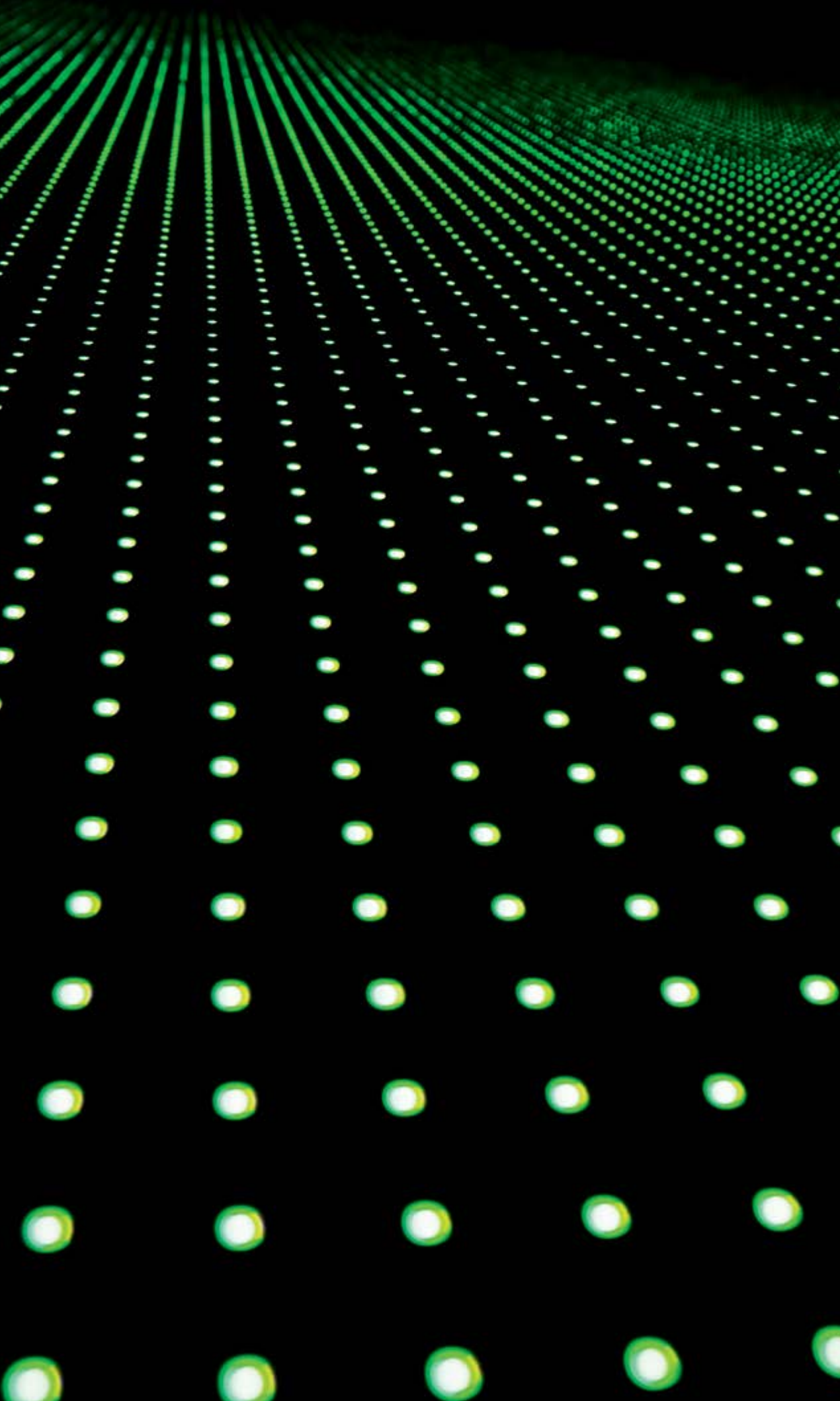
# DIGITIZATION IN THE SPOTLIGHT

They brighten up our daily lives in every color: light-emitting diodes, or **LEDs** for short. In the future they won't just light up smartphone screens or traffic lights but entire cities. Specially coated graphite substrates are essential components in the manufacture of these minute LED chips.



**Warsaw bathed in light** Since 2012, the National Stadium has been lighting up the sky over the Polish capital.





**Beneficial  
light**  
Light-  
emitting  
diodes have  
environ-  
mental and  
aesthetic  
benefits.

**Light from above**

The luminescence and color of ceiling lighting are easily controlled using light-emitting diodes.

Over the next twenty years, LEDs will replace traditional light sources. This view is unanimously held by the experts in the field. A digital era of intelligent lights has begun. "LEDs are revolutionizing lighting. They are making lighting systems not only environmentally friendlier and longer-lasting but also smarter and more individual," explains Yad Singh, Technical Marketing Manager of the SGL Group in North America.

As part of the digitization of every aspect of our lives – described in terms such as Smart City and Smart Living – light-emitting diodes are taking over in living rooms, offices, industrial plants, and public spaces. One area in which LEDs are widely employed is the automotive industry, where they are now indispensable. The brightness and color of the light they give off can be flexibly controlled as required. This is by no means their only advantage. Light-emitting diodes convert electricity into light up to ten times more efficiently than light bulbs, and they last 25 times as long. They even achieve considerably greater energy efficiency than energy-saving light bulbs, which are controversial because of the mercury they contain. Moreover, they don't break and don't contain any poisonous substances.

LEDs only used to appear as small red or green monitor lights in cars, or on phones and computers. For widespread use, they were too expensive to manufacture; their light was insufficiently intense and not variable in color. But now, thanks to technological progress, these hurdles have been overcome. Many local authorities are already converting their street lamps to this environmentally friendly form of lighting. The global market for LEDs is growing at a breathtaking

**In good taste** Using LEDs for illuminating outside terraces is now the norm.



pace. According to a study conducted by Technavio, the annual growth rate will be 17% by 2020.

The SGL Group is directly involved in this market activity in a variety of ways. The Group supplies graphite products globally to well-known LED producers such as Osram and also to leading manufacturers of LED production plant and equipment.

The small LED chips are based on sapphire or silicon carbide (SiC) monocrystals to which compound semiconductor materials are applied. Applying electricity to these films stimulates electrons, causing them to emit light. The SGL Group supplies carrier plates made of SiC-coated isostatically molded graphite for manufacturing the LEDs. The blanks for the LED chips, known as wafers, are deposited into pre-formed recesses on these circular rotating carrier plates and then coated with various semiconductor materials. The essential properties of the LEDs, such as their color and luminous

“LEDs are revolutionizing lighting. They are making **lighting systems** not only environmentally friendlier and longer-lasting but also smarter and more individual.” — **Yad Singh**, Technical Marketing Manager at the SGL Group

**Illuminated  
from afar**  
LEDs are an  
indispensable  
part of the  
automotive  
sector.



“There are developments every day in **LED technology**. Products and production processes are being constantly refined. We support this development by continuously improving our graphite components.”

— **Barry Hancox**, Global Product Manager at the SGL Group

► intensity, are also defined during this process. The process also uses isostatically pressed graphite because it is very pure and extremely resistant to heat and chemicals. As such, it makes a decisive contribution to the manufacture of high-quality LEDs. SGL also provides ongoing support to its customers, as their production processes are constantly affected by further technical developments. As part of this, SGL is investing €7.5 million in expanding its ultra-modern SiC coating plant in St. Marys in the USA. “There are developments every day in LED technology,” reports Barry Hancox, Global Product Manager. “We are constantly promoting these developments by offering more specific products and production processes,” he adds. Goldman Sachs recently described the conversion to LEDs as one of the most rapid shifts in technology in human history. ■



# Key Figures 2016

## 8.4% Return on capital employed (ROCE<sub>EBITDA</sub>)

€m	Footnote	2016	2015 <sup>1)</sup>	Change
<b>Financial performance</b>				
Sales revenue		769.8	789.5	–2.5%
<i>thereof outside Germany</i>		73%	71%	–
<i>thereof in Germany</i>		27%	29%	–
EBITDA before non-recurring charges	2)	69.9	63.9	9.4%
Operating profit/loss (EBIT) before non-recurring charges	2)	20.7	13.7	51.1%
Result from continuing operations before income taxes		–27.2	–45.4	40.1%
Consolidated net result (attributable to the shareholders of the parent company)		–111.7	–295.0	62.1%
Return on sales (EBIT-margin)	3)	2.7%	1.7%	1.0%-points
Return on capital employed (ROCE <sub>EBITDA</sub> )	4)	8.4%	7.9%	0.5%-points
Earnings per share, basic and diluted (in €)		–1.19	–3.22	63.0%
<b>Net assets</b>				
Equity attributable to the shareholders of the parent company		331.8	289.3	14.7%
Total assets		1,899.2	1,856.1	2.3%
Net financial debt		449.4	534.2	–15.9%
Equity ratio	5)	17.5%	15.6%	1.9%-points
Gearing	6)	1.35	1.85	–26.6%
Headcount	7)	5,384	5,658	–4.8%
<b>Financial position</b>				
Payments to purchase intangible assets and property, plant and equipment		34.6	44.4	22.1%
Depreciation/amortization expense		49.2	50.2	–2.0%
Working capital		254.2	255.1	–0.4%
Free cash flow	8)	–48.1	–99.3	51.6%

<sup>1)</sup> Adjusted to reflect PP as discontinued operations

<sup>2)</sup> Before non-recurring items of €3.0 million and minus €6.8 million in 2016 and 2015, respectively

<sup>3)</sup> EBIT before non-recurring charges to sales revenue

<sup>4)</sup> EBITDA before non-recurring charges to average capital employed - continuing operations (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

<sup>5)</sup> Equity attributable to the shareholders of the parent company to total assets

<sup>6)</sup> Net financial debt to equity attributable to the shareholders of the parent company

<sup>7)</sup> As of Dec. 31, including discontinued operations

<sup>8)</sup> Cash flow from operating activities (continued operations) minus cash flow from investing activities (continued operations)

# Letter from the Board of Management

---

## Dear Shareholders, dear Employees and Friends of SGL Group,

SGL Group is marking its 25th anniversary this year and is about to make a new start. Our former core business and the nucleus of our existence – the graphite electrodes business – is going to a new home this year. We are also seeking a new owner for the cathodes, furnace linings, and carbon electrodes (CFL/CE) businesses. Going forward, we will devote all our attention to the Composites – Fibers & Materials (CFM) and Graphite Materials & Systems (GMS) business units. These two business units, which are the future growth drivers of the new SGL, also face changes. As an innovative and technology-based company, we will collaborate even more closely with our customers to develop solutions in the key areas of mobility, energy supply, and digitization. It is becoming evident that the new SGL will be much more than simply the current SGL without the former Performance Products (PP) business unit.

We have laid the foundations for this new beginning and for profitable and sustainable growth in 2016. The capital increase and the expected proceeds from the sale of the former Performance Products business unit will enable us to repay a considerable portion of our debt and thus put our balance sheet on a solid footing. Moreover, the savings identified in project CORE (CORporate REstructuring) of €25 million up to the end of 2018 will additionally strengthen our profitability.

However, CORE is more than just a program for adjusting the administrative structures and costs to reflect the future, smaller SGL. One of its main aims is to align the organization even more closely with the strategic targets. In the new SGL, our two business units, CFM and GMS, will focus only on those activities that directly generate growth. These include application-related development, production, and sales. All other topics and processes will be handled by the Corporate Functions and the Service Centers.

From an operating perspective, 2016 was a mixed year. While, as forecasted, we achieved far better earnings in the CFM business unit thanks to volume increases, the related improvement in capacity utilization in our facilities, and cost savings, overall sales revenue declined due to lower sales prices in the acrylic fibers business resulting from lower raw material prices. In the GMS business, the low oil price led to weak demand from energy-related industries, especially in North America. This effect was reflected in sales revenue and, in particular, in a decline in earnings, overshadowing the positive

developments that the business unit was able to record. These positive trends included a further double-digit growth in the business with the lithium-ion battery industry. We also increased our sales revenue from customers in the solar and semiconductor sectors.

We are more optimistic about 2017. Sales revenue and earnings will rise again. Their growth will initially be modest when measured against our target of increasing sales revenue by 50% and achieving  $ROCE_{(EBITDA)}$  of at least 15% by 2020 (compared with the base year of 2014). This is because we are still paving the way for future growth in our activities with customers and in numerous projects. We expect the sale of the profitable CFL/CE business, which is planned to take place this year, to result in a significant book gain that will also have a positive influence on the net profit for the year. The targeted early repayment of the corporate bond and the planned redemption of the convertible bond in 2018 will substantially reduce our debt this year and next year. We will thus take another major step in our journey of strategic realignment.

As a consequence of this strategic realignment, the Board of Management was also reduced from three to two members. Dr. Gerd Wingefeld left at the end of 2016 after reaching mutual agreement with the Supervisory Board that his contract, which was due to expire at the end of September 2017, would not be extended and that he would step down from the Board of Management earlier than planned. We would like to thank Dr. Gerd Wingefeld for his excellent, collaborative, and inspiring work with us. He has driven many developments and innovations at SGL over the years.

Our special thanks go to our employees. Everyone involved has worked tirelessly and expended a huge amount of energy in order to create the opportunity for a new beginning at SGL. And we would also like to thank our loyal customers, suppliers, business partners, and shareholders. We will use our opportunity for a new beginning wisely and with foresight so that we can put the new SGL on a path of profitable and sustainable growth.

Sincerely,

The Board of Management of SGL Group



# Report of the Supervisory Board

---

## Dear Shareholders,

The year under review was dominated by the continuing optimization of SGL Group's business activities. In a notable development, the Company entered into an agreement to sell the graphite electrodes (GE) business to the Japanese company Showa Denko K.K. Due to the required anti-trust approvals, this deal is expected to be completed not before mid-2017. Nevertheless, the disposal of this former core activity represents a watershed for SGL Group.

The Performance Products (PP) business unit also includes the cathodes and furnace linings product group (CFL/CE) in addition to graphite electrodes. The planned disposal of the CFL/CE product group during the course of 2017 will complete the restructuring of the Group and enable the realignment of the Composites – Fibers & Materials (CFM) and Graphite Materials & Systems (GMS) business units. This also includes the resolution on administrative cost savings of €25 million (project CORE) to be achieved by the end of 2018. The successful completion of a rights issue in December of last year and the proceeds from the ongoing disposal of the PP activities mean that the Company will be in a position to significantly reduce financial liabilities and interest expenses in the coming twelve months. Our balance sheet will thereby be placed on a more stable footing. The lower interest and administrative expenses will be a major factor in helping us to restore the profitability of the Group.

## Cooperation Between the Board of Management and Supervisory Board

In 2016, the Supervisory Board fulfilled the obligations placed on it by law, the Articles of Incorporation, and its rules of procedure in accordance with its responsibilities. At four meetings in March, May, September, and December 2016, at an extraordinary meeting in September 2016, and at meetings of the various committees, the Supervisory Board provided the Board of Management with advice and closely monitored the management of the business on an ongoing basis. The Board of Management kept us informed in a regular, timely, and comprehensive manner. Where legislation and the Articles of Incorporation required the Supervisory Board to make decisions concerning individual transactions or actions by the Board of Management, we were consulted at an early stage and adopted the necessary resolutions.

Prior to these meetings of the Supervisory Board, the Board of Management held discussions with the shareholder representatives and employee representatives on the Supervisory Board. The chairpersons of the Supervisory Board committees

also talked with their Supervisory Board colleagues and with members of the Board of Management in preparation for the relevant committee meetings. When the Supervisory Board meetings were held, the Board of Management provided us with timely and comprehensive information – both verbally and in documented form – on the agenda items being discussed. Any cases where operating performance had deviated from budgets and targets were explained in detail, and the reasons for the variances were discussed, together with the appropriate action to take. In addition, the Board of Management provided regular reports on material transactions, the quarterly figures, and how SGL Group was perceived in the financial markets.

As Chairwoman of the Supervisory Board, I myself maintained a regular and close dialog with the CEO to discuss business performance, planning, and specific business-related issues. The Chairman of the Audit Committee also remained in regular, close contact with the Board of Management between committee meetings to share information and ideas.

## Topics Covered at Full Meetings of the Supervisory Board

The Company's financial situation and the outlook for both the following quarter and the rest of the year were discussed at all four ordinary meetings of the Supervisory Board. These deliberations covered, in particular, trends in the Company's operational and financial KPIs, the opportunities and risks facing the Company, and its risk management methods, including those relating to compliance risks. The tough market and competitive conditions, especially in the graphite electrodes business, the establishment of the PP business unit as a separate legal entity within the Group, cost saving measures (project CORE), and the growth plans for the CFM and GMS business units presented by the Board of Management were the subject of regular, in-depth Supervisory Board discussions. Other important issues addressed by the Supervisory Board included the short- and medium-term financial planning and, in the second half of the year, the negotiations with prospective buyers of the graphite electrodes business. The Board of Management targets were discussed at the meetings in both March and May. The agenda at every meeting included a discussion on capacity and pricing in the global graphite electrodes market and possible corrective actions.

At the meeting in March 2016, the Supervisory Board discussed the 2015 annual financial statements with the external auditors and approved them and the annual report. It issued the agenda for the Annual General Meeting and the new targets for the Board of Management in 2016. The Supervisory Board also agreed to extend the appointment of Dr. Köhler as CEO of SGL



Carbon SE, renewing his contract for a further three years (starting from January 1, 2017).

At its meeting in May, the Supervisory Board discussed the Company's financial situation in view of the earnings forecasts and the financing instruments. The Supervisory Board also received a progress report on the implementation of the carve-out of the PP activities within the Group. It also decided on the members of the Strategy and Technology Committee and of the Governance and Ethics Committee following Mr. Zorn's departure from the Supervisory Board.

The meeting of the Supervisory Board in September focused on strategic issues concerning the GMS and CFM business units and on the financial position of the Company. The corporate governance principles and the declaration of conformity were also approved. In addition, the Supervisory Board decided to extend the appointment of Dr. Majerus as Chief Financial Officer of SGL Carbon SE, renewing his contract for a further three years (starting from July 1, 2017) and to end the Board of Management service contract of Dr. Wingefeld on December 31, 2016.

At the end of September, the Supervisory Board held an extraordinary meeting at which it addressed in detail the situation surrounding the disposal of the graphite electrode activities and, in principle, approved the sale of these activities to the bidder Showa Denko K.K. The Supervisory Board set up a special committee to ensure that it was sufficiently informed and that the deal was subjected to careful final scrutiny. This committee subsequently discussed the terms of the sale at length on the basis of the final draft of the contract, which was explained to the committee in detail by the Board of Management, and then approved the deal on October 20, 2016. The Supervisory Board meeting at the end of September discussed the Company's capital structure and approaches for improving it. The Supervisory Board examined the option of implementing a capital increase and then supported this course of action in principle. The matter was referred to the Audit Committee for final review and decision.

The December meeting focused on the Company's operational planning and budget for 2017, together with its medium-term planning. At this meeting, the Supervisory Board was also given an overview of the status of individual strategic projects. A notable decision by the Supervisory Board at its December meeting was also to recommend to the Annual General Meeting that different independent auditors be appointed. Following the Company's analysis of the outcome of the public invitation to tender for the auditing of the annual financial statements, and following a great deal of detailed discussion in

the Audit Committee, the Supervisory Board decided to accept the committee's recommendation. As a result, the Supervisory Board intends to submit a proposal to the Annual General Meeting that the independent auditors for the 2017 fiscal year be changed from Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft to KPMG AG Wirtschaftsprüfungsgesellschaft. The Supervisory Board's December meeting also addressed the proportion of women on the Board of Management to be achieved by December 31, 2019.

In 2016, with the assistance of a notary, the Supervisory Board once again reviewed the efficiency of its activities from an organizational and a content perspective; the findings of the efficiency review were presented (by me) and were then discussed. It became clear that there is a very good level of efficiency and cooperation based on trust within the Supervisory Board and between the Supervisory Board and the Board of Management.

### Activities of the Committees

The Supervisory Board has set up a total of five permanent committees in order to ensure that its duties are discharged efficiently. The members of these committees are listed in the Corporate Governance and Compliance Report (see pages 28 to 34). The committee chairpersons reported in detail on the work of these committees at the meetings of the Supervisory Board.

At its meeting in July 2016, the **Strategy and Technology Committee** addressed the strategic projects in the PP, GMS, and CFM business units. In the first part of the meeting, the committee received reports on the PP carve-out and on the latest status of the ongoing project to sell this business. The procedure being used by the Board of Management to identify a suitable investor for the entire PP business unit or just for the graphite electrodes business was supported by the committee. In the second part of the meeting, the committee deliberated on some of the growth initiatives in the other business activities.

The **Audit Committee** met in March, September, and December of the year under review and was also kept regularly informed prior to publication of the quarterly reports. The Audit Committee was responsible for the final decision on implementing a rights issue in December 2016 following a decision in principle by the full Supervisory Board. When reviewing the quarterly financial statements, the Audit Committee also discussed ongoing issues relating to reporting and internal audit as well as any other special topics of current interest. All the meetings were also attended by the independent auditors to enable discussions on the Company's

audit procedures, key audit issues, and material findings arising from audits of the annual financial statements.

Key items covered at the March and December meetings included the annual financial statements and consolidated financial statements, the system for documenting and managing risk, the efficiency of the internal control system, and compliance reporting.

At the September meeting, the Audit Committee discussed the financing situation, progress reports on the sale of the graphite electrodes business, and, in particular, the invitation to tender for the auditing of the annual financial statements, which had to be carried out for SGL Carbon in 2016 on the basis of the relevant EU regulation. An additional conference call was held in October, in which the members of the Audit Committee discussed the progress on the invitation to tender and specified the selection criteria. At the December meeting, the tender process was completed and a recommendation regarding the independent auditors for 2017 submitted in writing to the Supervisory Board.

The **Personnel Committee** held a total of three meetings at which it discussed overarching personnel issues. The March meeting discussed the attainment of targets by the members of the Board of Management, target agreements with the Board of Management, and the appropriateness of Board of Management remuneration. The Committee also discussed extending the appointment and contract of Dr. Köhler. At the September meeting, the Committee addressed the issue of extending the appointment and contract of Dr. Majerus and terminating the Board of Management service contract of Dr. Wingefeld on December 31, 2016. Finally, the December meeting of the Personnel Committee addressed the current proportion of women on the Board of Management and how this proportion should change. The outcome from these deliberations was presented to the full Supervisory Board for further discussion and decision.

The **Governance and Ethics Committee** held a total of three meetings in 2016, in March, September, and December respectively. In addition to the ongoing analysis of potential conflicts of interest in the Supervisory Board, the committee addressed issues arising in relation to the joint ventures with the BMW Group as well as internal compliance procedures. The committee received regular reports from the Board of Management to enable it to assess whether there were any conflicts of interest among members of the Supervisory Board or whether any major shareholders were exercising undue influence over business decisions. In the reporting period, the committee did not identify any matters that would have necessitated further action.

No meetings of the **Nominating Committee** were held during the reporting period.



Susanne Klatten, Chairwoman of the Supervisory Board

Attendance at the five Supervisory Board meetings was 100%. Every committee meeting was attended by all the respective members, except in a single instance where one member was not able to attend. Every member of the Supervisory Board therefore participated in significantly more than half of the meetings of the Supervisory Board and of committees of which they were members. In the reporting period, there were no indications of conflicts of interest among the members of the Supervisory Board that would have required immediate disclosure to the Supervisory Board.

### Annual Financial Statements and Consolidated Financial Statements 2016

Both at the Audit Committee meeting and at the Supervisory Board meeting held in March 2017, the Supervisory Board verified that the books and records, the single-entity financial statements of the parent company SGL Carbon SE prepared in accordance with the German Commercial Code (HGB) and the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the

European Union, for the period ended December 31, 2016, and the management reports of SGL Carbon SE and of SGL Group had been audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, and had been issued with an unqualified auditors' opinion. The Supervisory Board satisfied itself as to the independence of the auditors as well as the persons acting on behalf of the auditors and issued the audit engagement in accordance with the resolution adopted by the Annual General Meeting on May 18, 2016. We received the audit reports for the consolidated and parent company financial statements promptly. The Audit Committee carefully scrutinized these documents, which were also examined by the entire Supervisory Board. The independent auditors attended both the Audit Committee meeting and the Supervisory Board meeting that discussed the annual financial statements, reported on their audit, and were available to answer any additional questions and provide further information. There were no objections raised either by the Audit Committee or by our own examination. The Supervisory Board has approved the financial statements prepared by the Board of Management, and the annual financial statements have thus been adopted. There was no recommendation by the Board of Management for the appropriation of profits because SGL Carbon SE reported an accumulated loss for 2016.

At its meeting in March 2017, the Supervisory Board also discussed the Report of the Supervisory Board, the Corporate Governance and Compliance Report, the Remuneration Report, and the disclosures pursuant to sections 289 (4) and 315 (4) HGB. Please refer to the corresponding disclosures in the management report (see pages 102 to 103). The Supervisory Board has examined these disclosures and determined their completeness.

### Corporate Governance and Declaration of Compliance

At its meeting on September 7, 2016, the Supervisory Board discussed the corporate governance principles of SGL Carbon SE and made minor adjustments to the rules of procedure for the Supervisory Board to clarify the particular importance of the Audit Committee following the introduction of EU auditing reforms. At this meeting, the Supervisory Board also approved a declaration of compliance without qualification in accordance with section 161 of the German Stock Corporation Act (AktG). The declaration of compliance was posted on the Company's website, where it is permanently available to shareholders. The latest declaration of compliance is also included in the Corporate Governance and Compliance Report within this annual report.

Further details regarding the principles of corporate governance applied in the Company can be found in the Corporate Governance and Compliance Report on pages 28 to 34 of this

annual report and in the corporate governance declaration on the Company's website at [www.sglgroup.com](http://www.sglgroup.com) under 'Investor Relations/Corporate Governance'.

### Personnel and Functional Changes on the Board of Management and Supervisory Board

The following changes to the Company's Board of Management took place in the reporting period: (1) The contracts of two members of the Board of Management, Dr. Köhler and Dr. Majerus, were extended; and (2) Dr. Wingefeld left the Board of Management on December 31, 2016. The Board of Management was reduced to two members with effect from January 1, 2017. Other changes included the transfer of responsibility for Technology and Innovation to Dr. Köhler.

Following the retirement of Hans-Werner Zorn as a member of the Supervisory Board on grounds of age, his elected substitute, Dieter Züllighofen, joined the Supervisory Board on April 1, 2016 for Mr. Zorn's remaining term of office.

### Thanks from the Supervisory Board

We would like to take this opportunity to say a special thank you to Dr. Wingefeld. The members of the Supervisory Board gave their farewell to Dr. Wingefeld at their December meeting, expressing their gratitude and recognition for his work in SGL Group over many years. Dr. Wingefeld has had a huge influence on the development of the SGL Group, which he has supported with commitment and dedication, especially during the period of realignment and transformation. Our particular thanks also go to Hans-Werner Zorn, who has worked tirelessly over many years for the benefit of the Company as a member of the Supervisory Board and its committees.

The Supervisory Board wishes to thank the Board of Management, the staff, and the employee representatives of all SGL Group companies for their work, without which it would not have been possible to meet the challenges once again facing SGL Group's business in 2016.

Wiesbaden, March 17, 2017

### The Supervisory Board



**Susanne Klatten**  
Chairwoman of the Supervisory Board

# Corporate Governance and Compliance Report

---

## Responsible Corporate Governance

Excellent corporate governance refers to a responsible and transparent corporate management and control focused on sustainably creating value. SGL Carbon SE's Board of Management and Supervisory Board uphold the principles of responsible and sustainable corporate governance. SGL Carbon SE follows recognized standards of good corporate governance and attaches great value to upholding the recommendations of the German Corporate Governance Code.

## Shareholders and Annual General Meeting

SGL Carbon SE's shareholders exercise their rights during the Company's Annual General Meeting. The Annual General Meeting is held once per year. Each share grants the holder one vote. The shareholders can either exercise their voting rights at the Annual General meeting themselves or have them exercised by a proxy of their choice or by one of the Company's proxies who is bound to follow their instructions. Instructions can be issued to the Company's proxies both before and during the Annual General Meeting through to the end of the general debate. In addition, the shareholders can issue their votes in writing via a postal vote without issuing a power of attorney to a representative.

## Close cooperation between the Board of Management and the Supervisory Board

The Board of Management and the Supervisory Board of SGL Carbon SE work closely together in the interest of the Company and pursue the common goal of sustainably increasing the Company's enterprise value. SGL Carbon SE and SGL Group are managed by the Board of Management. The Board of Management comprised three members in fiscal year 2016, this number was reduced to two at the start of fiscal year 2017. Its tasks include, in particular, defining the Company's objectives and its strategic orientation, managing and monitoring operating activities and setting up and monitoring an efficient risk management system. The Board of Management comprehensively informs the Supervisory Board in good time and on a regular basis on all of the relevant developments in the Company. Such developments primarily include current business trends, planning and strategy as well as risk and compliance management. In particular, it is the Supervisory Board's responsibility to monitor the fundamental business decisions made by the Board of Management and advise it on business matters. The Supervisory Board is directly involved in decisions of fundamental importance to the

Company. Such decisions may include, for example, the commencement of new operations, discontinuation of existing units, or issuance of bonds. The Supervisory Board of SGL Carbon SE consists of twelve members, including shareholder and employee representatives. All members of the Supervisory Board are appointed by the Annual General Meeting, which is required to vote for the employee representative candidates proposed by the employees. In accordance with the Articles of Incorporation of SGL Carbon SE, in the case of a split resolution, the Chairman of the Supervisory Board or, if the Chairman is unable to participate in a resolution vote, the Deputy Chairman representing the shareholders, has the casting vote. If necessary, the Supervisory Board can also meet without the Board of Management.

## Objectives for composition of the Supervisory Board

In accordance with the requirements of the German Corporate Governance Code, the Supervisory Board defined the objectives for its composition. In this spirit, the Supervisory Board is to be composed of members who, as a group, possess the required knowledge, skills and professional experience to duly perform the Supervisory Board's responsibilities. The age limit for Supervisory Board members is generally 72. As a rule, members of the Supervisory Board should no longer be proposed as candidates for the Supervisory Board after the end of their third period of office. Periods of office resulting from appointment by the courts to the Supervisory Board are not considered. If a member of the Supervisory Board holds a material equity interest in the company according to Item 5.4.1 of the German Corporate Governance Code, controls any such material shareholder of the company, or acts as a representative for a material shareholder, there is a fundamental exception to the above rule, and there is thus no time restriction on this member's candidacy. Each member shall ensure that he or she has sufficient time to fulfill his or her mandate. Supervisory Board members who also sit on the management board of a publicly traded company shall not accept more than three memberships in supervisory boards in publicly traded companies outside the group they manage and in supervisory bodies of companies with comparable requirements.

All members of the Supervisory Board have to be in a position to duly perform the duties of their office. At least one member shall be a financial expert with experience in the fields of financial accounting and/or financial auditing to ensure that all responsibilities associated with the Company's financial accounting are carried out properly. The Supervisory Board



shall include members from different countries to reflect the business structure of SGL Group. Members of the Supervisory Board shall have experience in the fields of business SGL Group is active in, such as in the steel industry or the technology sector. The number of members with experience in technical fields (in particular the fields of chemistry and engineering) and the number of members with commercial backgrounds shall be well balanced. Furthermore, the Supervisory Board shall always have a sufficient number of independent members. Consequently, at least half of the shareholder representatives in the Supervisory Board shall be independent; this requirement is met with at least Dr. Bortenlänger, Dr. Camus, Mr. Denoke and Mr. Eichler.

The Supervisory Board's objectives for its composition as set out above have been and will continue to be taken into account in the proposals for appointing new members to the Supervisory Board. The current composition of this body covers all necessary fields of expertise and is also in line with issues such as diversity and independence. With regard to a reasonable level of female participation in the Company's Supervisory Board, the "Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst" (Act on equal opportunities for women and men for executive positions in the private sector and the public service) dated April 24, 2015 even demands that the Company's Supervisory Board has at least 30% of both female and male members (subject to transitional rules for existing mandates).

### Rules for possible conflicts of interest

Members of the Supervisory Board shall disclose any conflicts of interest to the Chairman and/or Deputy Chairmen of the Supervisory Board. This includes both concrete conflicts of interest, as well as sufficiently probable potential conflicts of interest. Any significant conflicts of interest of a Supervisory Board member that are not only temporary in nature shall lead to that member's resignation from the Board. In order to be able to deal suitably with any issues concerning (potential) conflicts of interest and as suggested by shareholders, a new committee in the Supervisory Board was formed in September 2013: the Governance and Ethics Committee (see below in the section on Supervisory Board Committees). There were no indications of conflicts of interest among the members of the Board of Management or the Supervisory Board in the reporting period that had to be duly disclosed to the Supervisory Board. During the period under review there were also no contracts for advisory or other services between

Supervisory Board members and the Company. Relationships with related parties are presented in the notes to the consolidated financial statements **Note 27**.

### Deductible for D&O insurance

The Company has taken out liability insurance for the members of the Board of Management and the Supervisory Board (D&O insurance) with the deductible stated in Item 3.8 of the German Corporate Governance Code.

### Committees support the work of the Supervisory Board

The Supervisory Board has established a total of five permanent committees, all of which operate in compliance with the requirements of the German Corporate Governance Code and the German Stock Corporation Act (AktG). These committees are as follows:

#### Personnel Committee

The Personnel Committee, chaired by Ms. Klatten, advises the Supervisory Board principally on matters relating to the legal relationship between the Company and current and former members of the Board of Management. It reviews the remuneration of the members of the Board of Management and submits proposals to the plenary sessions of the Supervisory Board for their final decisions. In addition, the committee submits proposals for the appointment of new members and the dismissal of members of the Board of Management to help prepare the respective Supervisory Board decisions. The committee's other members are Dr. Lienhard and Mr. Jodl.

#### Nomination Committee

The task of the Nomination Committee is to draw up a list of proposed candidates for election to the Supervisory Board as shareholder representatives at the Annual General Meeting. All shareholder representatives on the Supervisory Board are members of this committee, which is chaired by Ms. Klatten.

#### Audit Committee

The Audit Committee consists of four members. The Audit Committee is chaired by Mr. Denoke. Its other members are Dr. Bortenlänger, Mr. Leppek and Mr. Stettberger. The responsibilities of the committee include monitoring the Company's financial accounting process, risk management, compliance, and consequently its internal control and auditing system. In addition, it is in charge of carrying out its own review of the consolidated

financial statements of SGL Group and the annual financial statements of SGL Carbon SE.

Furthermore, the committee is in charge of the relationship between the Company and its independent auditors. In this context, its main responsibility is to prepare the Supervisory Board's proposal to the Annual General Meeting for the appointment of the auditor. In doing so, it must ensure that the auditor is both qualified and independent. The committee also defines key audit issues, agrees on audit fees, and performs the preparatory work related to appointing the auditor and it performs an advance review of commissioning non-audit services by the auditor. In connection with the rights issue in 2016, the Supervisory Board also assigned to the audit committee the competence to take the Supervisory Board's final decision on executing this financing measure.

#### **Strategy/Technology Committee**

The Strategy/Technology Committee discusses fundamental corporate strategy and important technological issues such as the Company's research and development portfolio. Chaired by Dr. Camus, the Strategy/Technology Committee also includes Mr. Rzeminski and Mr. Zorn (up to March 31, 2016) and Mr. Stettberger (from May 18, 2016) along with all shareholder representatives.

#### **Governance and Ethics Committee**

The Governance and Ethics Committee reviews, in particular, if transactions between SGL Group companies and members of the Supervisory Board, their related parties and shareholders with an interest of more than 5% of voting rights in SGL Carbon SE are in line with industry standards, and that these transactions do not contradict SGL Group's interests. The committee's members are Dr. Camus (Chairman), Dr. Bortenlänger and Mr. Zorn (up to March 31, 2016) and Mr. Züllighofen (from May 18, 2016).

In addition to these permanent committees, the Supervisory Board can also form temporary, project-related committees as required.

#### **Systematic Risk Management**

Since a responsible approach to risk is an integral part of all good corporate governance practices, SGL Group developed an appropriate risk management system early on. The system ensures that the Company's risk management and control procedures are adequate and effective. The concept is to identify any business or financial risks as early as possible so

that appropriate countermeasures can be taken. The Company is working to enhance the system on an ongoing basis and adapt it to reflect changing circumstances. The Board of Management reports at regular intervals to the Supervisory Board and in particular to the Audit Committee on existing risks and their development. Further information on the risk management system (RMS) can be found in the report on opportunities and risks on pages 80 to 88.

#### **Updated Declaration of Compliance**

During the year under review, SGL Carbon SE's Board of Management and Supervisory Board dealt with constantly improving corporate governance in line with the recommendations in the German Corporate Governance Code. The Board of Management and Supervisory Board issued the current declaration of compliance according to Section 161 of the *Aktengesetz* (AktG - German Stock Corporation Act) on September 7, 2016. SGL Carbon SE meets the recommendations of the German Corporate Governance Code, as amended:

#### **Statement of the Board of Management and Supervisory Board of SGL Carbon SE pursuant to Section 161 of the German Stock Corporation Act on the German Corporate Governance Code**

"The Board of Management and Supervisory Board declare:

The last declaration of compliance was issued on September 17, 2015. Since then, SGL Carbon SE has fully complied with the recommendations of the "Government Commission on the German Corporate Governance Code" ("Regierungskommission Deutscher Corporate Governance Kodex") in the version dated May 5, 2015 (publication as of June 12, 2015). It will continue to fully comply with these in future.

The Corporate Governance Principles of SGL Carbon SE furthermore satisfy with few exceptions the non-obligatory suggestions of the German Corporate Governance Code."

#### **Active and transparent shareholder communication**

One of the primary objectives of the Board of Management is to report comprehensively to all target groups, in particular to our shareholders, and to communicate the same information at the same time. A diary of regular events (such as the Annual General Meeting and conferences – including conference calls – with analysts and investors) and reports or notices (for example the annual report, interim reports, presentations for

the General Meeting, press releases and ad hoc notifications) are published on the Company's website.

## Directors' Dealings

Pursuant to the relevant provisions of capital markets law, the members of the Board of Management and the Supervisory Board and persons closely related to them are obliged to disclose their dealings with equities or debt instruments of SGL Carbon SE or certain other financial instruments linked to these if the total value of these transactions exceeds €5,000 within a calendar year.

At year-end 2016, the members of the Company's Board of Management jointly held around 0.11% of shares, i. e., they neither directly nor indirectly held more than 1% of the outstanding shares in the Company. Supervisory Board members held approximately 28.55% of shares. Of this total, Susanne Klatten held around 28.55% through SKion GmbH.

The following table provides an overview of the transactions reported to us in the year under review:

### Directors' Dealings in 2016

Date of transaction	Name of person	Details of the transaction(s)	International Securities Identification Number (ISIN)	Nature of the transaction	Price/ currency (€)	Volume (€)	Aggregated volume (€)
<b>Executive Board</b>							
12.12.2016	Dr. Köhler	Share	DE0007235301	Acquisition	8.329	16,658.00	16,658.00
08.12.2016	Dr. Köhler	Subscription right	DE000A2DA687	Sale	0.6394	21.74	21.74
02.12.2016	Dr. Wingefeld	Subscription right	DE000A2DA687	Sale	0.74 0.74	6,685.16 1,670.18	8,355.34
01.12.2016	Dr. Köhler	Subscription right	DE000A2DA687	Sale	0.76	1.286	
01.12.2016	Dr. Wingefeld	Subscription right	DE000A2DA687	Sale	0.749		7,490.00
30.11.2016	Dr. Köhler	Share	DE0007235301	Exercise of subscription rights <sup>1</sup>	6.00 6.00	6,552.00 26,232.00	32,784.00
30.11.2016	Dr. Köhler	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	
30.11.2016	Dr. Majerus	Subscription right	DE000A2DA687	Acquisition	0.929	5.29	
30.11.2016	Dr. Majerus	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	
30.11.2016	Dr. Majerus	Share	DE0007235301	Exercise of subscription rights <sup>1</sup>	6.00	59,880.00	
30.11.2016	Dr. Wingefeld	Subscription right	DE000A2DA687	Sale	0.869 <sup>2</sup>		41,869.67
30.11.2016	Dr. Wingefeld	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	

<sup>1</sup> The acquisition of the shares was subject to the conditions of the subscription offer, which were fulfilled.

<sup>2</sup> Average price

**Directors' Dealings in 2016**

Date of transaction	Name of person	Details of the transaction(s)	International Securities Identification Number (ISIN)	Nature of the transaction	Price/ currency (€)	Volume (€)	Aggregated volume (€)
<b>Supervisory Board</b>							
20.12.2016	SKion GmbH	Share	DE0007235301	Acquisition	7.80	12,934,053.60	12,934,053.60
08.12.2016	H. Jodl	Share	DE0007235301	Exercise of subscription rights <sup>1</sup>	6.00	1,482.00	1,482.00
08.12.2016	H. Jodl	Subscription right	DE000A2DA687	Acquisition	0.647	11.00	11.00
08.12.2016	M. Stettberger	Share	DE0007235301	Exercise of subscription rights <sup>1</sup>	6.00	468.00	468.00
08.12.2016	M. Stettberger	Subscription right	DE000A2DA687	Sale	0.661	454.77	454.77
06.12.2016	SKion GmbH	Share	DE0007235301	Exercise of subscription rights <sup>1</sup>	6.00	48,962,004.00	
06.12.2016	SKion GmbH	Subscription right	DE000A2DA687	Sale	0.73	2.93	
30.11.2016	H. Jodl	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	
30.11.2016	M. Stettberger	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	
29.11.2016	SKion GmbH	Subscription right	DE000A2DA687	Booking subscription rights to account	0.00	0.00	

<sup>1</sup> The acquisition of the shares was subject to the conditions of the subscription offer, which were fulfilled.

## Remuneration of the Board of Management and the Supervisory Board

As part of the reorganization of the Company's Board of Management, the remuneration system for the members of the Board of Management was revised as of January 1, 2014. The following objectives were considered in particular when restructuring the system in order to fulfill the regulatory requirements:

- Harmonization of the remuneration systems for Board members and reduction in complexity
- Focus on sustained effectiveness of remuneration systems

The Annual General Meeting of SGL Carbon SE approved the new remuneration system for the Board of Management on April 30, 2014 with a majority of 99.64% of votes.

Remuneration for the Supervisory Board is regulated in Item 12 of the Articles of Incorporation and was also most recently adjusted in the Annual General Meeting on April 30, 2014.

The key elements of the remuneration system for the Board of Management and the individual remuneration for the members of the Board of Management and the Supervisory Board have been published in the remuneration report as part of the management report in this annual report (see pages 94 to 101).

## Share-based incentive systems for SGL Group employees

The share-based incentive systems which were in place at SGL Group during the period under review are presented in the notes to the consolidated financial statements (**Note 30**).



---

## **Compliance as part of our management and corporate culture**

SGL Group introduced its Code of Business Conduct and Ethics in 2005. The Code underscores the obligation of SGL Group and its employees to comply with the law and internal policies and sets standards for ethical and law-abiding conduct. The Code reflects the common values that define SGL Group's corporate culture and business conduct. At SGL Group, compliance represents a fundamental responsibility of the Board of Management. The Board of Management does not tolerate any violation of the Code of Conduct and promotes a corporate culture in which issues relating to integrity can be openly discussed with superiors, the compliance officers, and the Group Compliance department. All employees are personally responsible for ensuring that their actions and conduct are in line with the Code of Business Conduct and Ethics of SGL Group and in compliance with the regulations of their respective work areas. Compliance must be ever-present in the minds of our executives and employees, and they must live this in their day-to-day business. This allows compliance to sustainably support the success of our business.

SGL Group introduced and implemented specific compliance programs many years ago. The Board of Management has entrusted the Group Compliance department with the global management of these programs. Its task is to manage the required comprehensive organizational, communications, and control structures for SGL Group worldwide, to review these regularly and adjust them if required. This aims for effective compliance which goes beyond merely ensuring the adherence to legal and formal requirements and structures: Compliance must become an integral part of value-oriented corporate management.

Management serves as an important role model when it comes to personnel and leadership responsibility. As a result, compliance is now a fixed agenda item in the annual Group Communication Forum (GCF). This is used to sensitize top executives for compliance and to train them.

Part of SGL Group's compliance organization is a network of regional and local compliance representatives. In order to ensure transfer of knowledge between the Compliance network and Group Compliance, telephone conferences and regional compliance conferences were held regularly in 2016. These platforms allow us to constantly further develop our compliance program while considering site-specific requirements and also to regularly train our compliance representatives. The local compliance officers are the point of contact for employees at the respective sites for all

matters pertaining to compliance, and they also support the compliance department when introducing compliance initiatives at the various sites. The compliance network also supported, for example, the department Information Technology Services by increasing awareness of information security at the various sites, and constantly introducing new information security topics throughout the group.

The SGL Group code of conduct and the guidelines on the whistleblower system are available in a total of ten local languages, and are issued to all new employees as part of their introductory documents. A signed copy of the confirmation that they will uphold SGL Group's code of conduct is filed in their respective employee file. SGL Group's employees participate in mandatory training on the code of conduct. This is held as both face-to-face training and also eLearning. The SGL Group introduced a Supplier Code of Conduct in 2015. Under this code, all SGL suppliers and sub-contractors must also undertake to comply with legal, ethical and sustainable behavior. Since its introduction, the Global Purchasing department has handed out the Supplier Code of Conduct step by step to existing suppliers and sub-contractors, and this is to become a component of newly concluded or amended agreements.

As a result of changed local legislation and the increased requirements from international anti-corruption laws, SGL Group guideline for gifts and invitations was revised, and in 2016 it was issued to the corresponding target group at the global locations, and the relevant employees also received training. This guideline is also available in several local languages and is also part of new employees' introductory documents. A further key component of the SGL Group's anti-corruption program was the continuation of the on-site training sessions, in particular at internal global sales conferences, and a key addition was the development of an anti-corruption eLearning training session. As part of the SGL Group anti-corruption program, a Business Partner Compliance Process was introduced in 2013 to review all of the intermediaries used. This process includes having all of the intermediaries go through a multi-stage check prior to signing the agreement. In addition to all of the new intermediaries, existing intermediaries are also reviewed regularly according to their risk category.

All of the compliance-relevant group-wide policies and training documents and information on the Compliance Network are available for employees to download in several languages from the SGL Group intranet. It provides all of SGL Group's employees with extensive information on all aspects of compliance. If an employee or an external third party wants to issue a confidential notice of a potential compliance violation

(whistleblowing), both SGL Group's intranet and website include a link to the confidential internal mailbox (also refer to the CSR report page 74).

A comprehensive, global antitrust compliance program was introduced at SGL Group already in 2001. Regular mandatory training sessions form a material part of this program. These are offered as both face-to-face and eLearning training sessions. These mandatory training sessions are aimed at all of the executives in the top three levels of management in the group, as well as all purchasing, sales and marketing employees. All new employees in this target group receive the SGL Group Antitrust Compliance Guideline with their introductory documents, and have to sign this. This is followed by participation in the mandatory online training session. Employees undergo regular refresher training sessions, as both face-to-face and eLearning sessions.

Other measures relate to, for example, capital market regulations and compliance with the respective Group guidelines, which regulate trading in SGL Carbon SE securities for members of the Board of Management, the Supervisory Board and the Company's employees, the proper handling of potential insider information, to name a few. An Ad-hoc Committee has been in place for years now. The committee consists of representatives of a number of corporate functions who examine potential ad-hoc issues and ensure that potential insider information is handled in accordance with legal provisions. The guideline for upholding the provisions of capital markets law was brought into line with the new legislation last year, and was distributed to the corresponding target group.

Our compliance program for export control has been working with an IT-based compliance module since 2009. This supports the efficient monitoring of relevant export transactions. Furthermore, onsite training sessions and workshops on export control compliance are held regularly. In addition, Web-based online training is also offered. It is mandatory for the target group to participate in training.

During the year under review, Group Compliance performed an employee survey on compliance issues for the first time. The target group for the voluntary online survey was all employees worldwide who have a company e-mail address and corresponding online access. The high participation rate of 60% provided Group Compliance with valuable feedback on the different groups of questions, such as "knowledge and acceptance of the compliance program", "compliance culture" and "whistleblower system". Employees receive feedback on the

survey results together with the local compliance officers at the various sites during the first quarter of 2017, a series of activities to further develop the compliance program was defined and agreed with the Board of Management. The Group Internal Audit Department also reviewed anti-fraud management as part of their regular audits as requested by Group Compliance. The focus here was on obtaining audit security on actual compliance with the defined compliance rules, and to recognize and identify individual violations of the rules. If the compliance audits show that it is necessary to optimize work flows or reinforce control activities, these will be modified immediately.

Regular risk assessments form part of an effective compliance management system. The topics that Group Compliance defined as being core compliance risks (antitrust law, anti-corruption, export control and customs, protecting business secrets and anti-fraud) were reassessed in 2016 together with the divisions' management, and the suitability of the existing compliance program was reviewed. In addition, select corporate functions were added to the compliance risk assessment, and this was completed in the first quarter of 2017.

The Supervisory Board's Audit Committee addressed the Company's compliance report in detail at its meeting in December 2016. In addition, the Governance and Ethics Committee was also informed of the compliance activities.

### **Information on the auditors**

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, office Eschborn, has been the statutory auditor of SGL Carbon SE and the SGL Carbon SE Group since the 2004 financial year (January 1, 2004 - December 31, 2004). Mr. Bösner has signed as the responsible Public Auditor since the 2013 financial year (January 1, 2013 to December 31, 2013).

For details on the statutory auditor's fees, please refer to page 166 of the 2016 annual report.

At the 2017 General Meeting, the Supervisory Board will make a proposal, based on the recommendations of its Audit Committee and following a tender and selection process for the audit in line with Article 16 (3) of the Directive (EU) no. 537/2014 from the European Parliament and Council dated April 16, 2014 (Audit Directive), that KPMG AG Wirtschaftsprüfungsgesellschaft Berlin, should be appointed as the auditor for the company and group for fiscal year 2017 (and for any audit reviews of financial information during the year also for these audit services).

# SGL Group in the Capital Markets

*The shares of SGL Carbon SE were unable to keep pace with the overall positive stock market trend in 2016. At the end of the year, our stock was down nearly 29% compared to year-end 2015, closing at €8.36.*

The 2016 trading year got off to a slow start, triggered by the subdued Chinese economy and a drop in oil prices. Concerns about the health of the global economy caused the stock market indices to collapse, with the DAX having the worst start to the year in 25 years, dropping to 8,753 points. In order to counteract the slowdown in the economy and lower inflation in the eurozone, the European Central Bank (ECB) approved a bundle of measures in March, with which it lowered the base rate for the first time to 0% and the deposit rate to minus 0.4%, raised the bond purchase program to €80 billion, and included corporate bonds in the purchase program. In the summer, the Brexit vote led to unrest on the financial markets.

Throughout the year, Europe was also a target for terrorist attacks in Paris, Brussels, Istanbul, Nice and Berlin. As with the failed coup in Turkey, however, these developments left the financial markets largely unaffected. By June, the DAX dropped to 9,268 points, after which it rose steadily with slight fluctuations driven by the flood of money from the ECB. At the beginning of December, the ECB then extended its bond purchase program to the end of 2017 and announced that interest rates would remain low for a longer period, which spurred the DAX to rise to 11,481 points by the end of the year, corresponding to growth of 6.9%.

Due to an oversupply in the oil markets, the price of Brent crude dropped to a six-year low of USD 27.88 in January 2016. In order to counteract the drop in oil prices, the OPEC agreed to a reduction in production volumes in November. The price of crude oil then stabilized at the end of the year at USD 56.82.

The euro began 2016 at USD 1.0856, and then dropped for a short period in January to a six-month low of USD 1.0748, before reaching its highest point of USD 1.1534 on May 2, 2016. The positive economic data for the US, the decision of the ECB to extend its bond purchase program to the end of 2017, the election of Donald Trump as US president, and finally, the FED

interest-rate hike in December, all caused the exchange rate of the euro to temporarily slip below the USD 1.04 mark.

In the US, the economic upswing also continued in 2016. Driven by a robust labor market, private consumption remained an important pillar of the economy. Positive impetus was also provided by an increase in exports, particularly in the second half of the year, causing the US economy to record growth of 1.6% year-on-year.

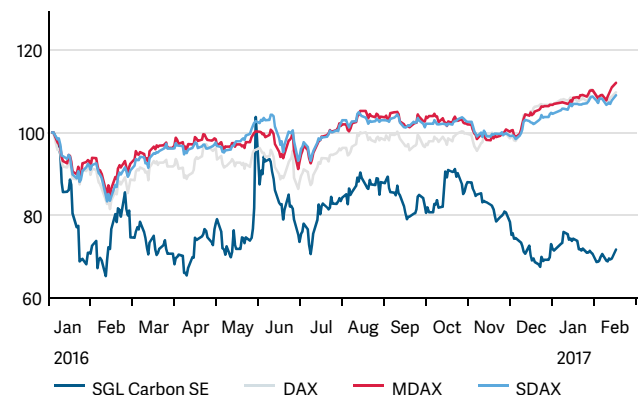
The MDAX mid-cap index saw a rise of 6.8% during the reporting year (equivalent to the rise in the DAX), while the SDAX small-cap index – which includes the shares of SGL Group – only showed a more modest increase of 4.6%.

## Key figures for SGL Carbon SE shares

	2016	2015
Number of shares at year-end	122,341,478	91,806,502
High (€) <sup>1)</sup>	12.14	15.84
Low (€) <sup>1)</sup>	7.64	11.38
Closing price at year-end (€)	8.36	11.71
Market capitalization at year-end (€m)	1,022.8	1,187.5
Average daily turnover in Xetra trading (number of shares)	208,306	217,817
Free float at year end (%)	approx. 42	approx. 37
Earnings per share (€) (basic and diluted)	-1.19	-3.22

<sup>1)</sup> Historical prices adjusted to reflect the capital increase

## Relative share price performance



## SGL Group shares affected by tough business conditions, takeover speculation, and capital increase in Q4

As a result of the sustained difficult business conditions in 2016, our shares – albeit with a few major fluctuation – did not manage to perform in line with the SDAX.

The shares of SGL Group more than proportionately participated in the slow start to the German equity market at the beginning of 2016.

Our shares responded positively to the announcement made on February 3, 2016, concerning the closure of our graphite electrode plant in Frankfurt-Griesheim. They reacted negatively, however, to our ad-hoc announcement of February 25, 2016, in which we published the details of the necessary impairment to our graphite electrode business which has since been sold. During March and April, the price of our shares moved within a narrow margin.

Due to the takeover speculation that resulted from a magazine article that appeared at the end of May 2016, our shares were temporarily boosted by over 30%. That increase dissipated in June 2016, however, when the takeover speculation failed to materialize. SGL Group shares nevertheless benefited from the positive capital market environment during the period from July to October 2016.

Despite positive comments from analysts, SGL Group shares were unable to benefit from the announcement made on October 20, 2016, concerning the sale of our graphite electrode business to our Japanese competitor Showa Denko, as we also announced at the same time that we were contemplating to strengthen our balance sheet by means of an increase to authorized capital. As part of the rights issue started on November 29, 2016, our shares continued to trend down. They recovered slightly, however, between the end of subscription rights trading on December 9, 2016, and the end of the year.

SGL Group shares reached an annual high of €12.14 on May 27, 2016. The annual low of €7.64 was recorded on February 8, 2016. As a result of the factors described above, the stock lost almost 29% in value over the course of 2016 and ended the year at €8.36.

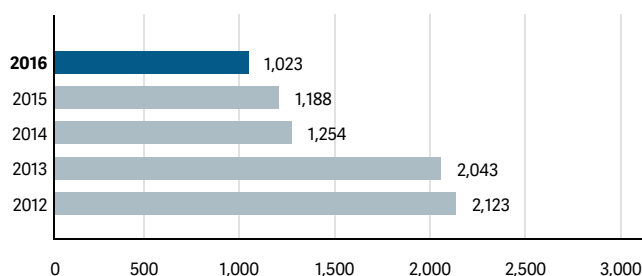
During the initial weeks of 2017, our shares have only managed to benefit to a limited extent from the stable development of the stock market. Since the beginning of the year, SGL Group

shares have fallen by just under 1%, while the DAX rose by about 3%.

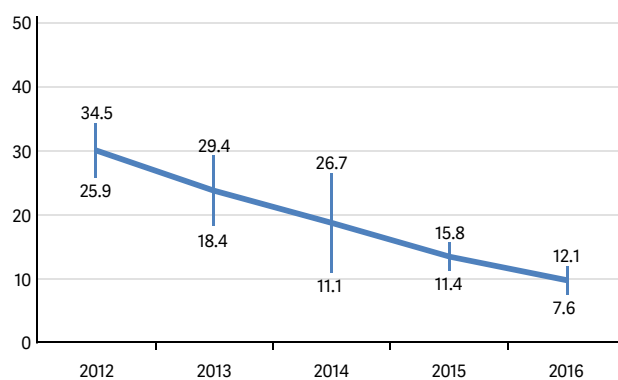
### Share price performance in €



### Market capitalization in €m



### Highest and lowest price of the share<sup>1)</sup> in €



<sup>1)</sup> Historical prices adjusted to reflect the capital increase



## Declining market capitalization due to low share price, trading volumes remain high

The decrease in the share prices of SGL Group resulted in a decline in market capitalization over the course of 2016. After reaching €1,254.3 million in 2015, market capitalization was down to €1,188.0 million at the end of 2016. As of December 30, 2016, the free float market capitalization of SGL Carbon SE was €452.09 million. This put the company in 81st place in the index rankings as calculated by Deutsche Börse AG, down from 68th place in the previous year (source: Deutsche Börse). Deutsche Börse calculates the index rankings using the average volume-weighted share price over the 20 days preceding the respective reference date. A total of 122,341,478 shares were in circulation as of December 31, 2016, approximately 30 million more than at year-end 2015. The rise in the number of shares was due above all to the capital increase carried out in December 2016.

## Stable shareholder base

SKion GmbH, the investment company held by Susanne Klatten, remains the largest shareholder in our company with a stake of approximately 28.5% (2015: approx. 27.5%), which increased slightly year on year as a result of purchasing a portion of the former shareholding in SGL Carbon SE that was sold by Voith in December 2016.

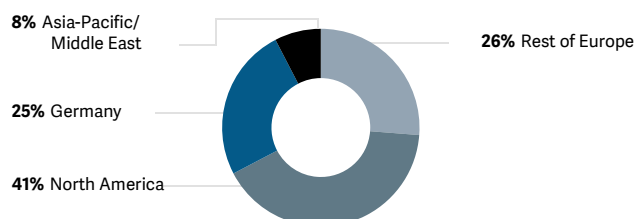
In addition, BMW AG and Volkswagen AG hold the following shareholdings subject to disclosure requirements based on the respective voting rights announcements:

BMW AG	October 15, 2014 <sup>1)</sup>	18.44%
Volkswagen AG	June 15, 2016 <sup>1)</sup>	9.82%

<sup>1)</sup> Date of the most recent voting announcement

Contrary to Skion GmbH and BMW AG, Volkswagen AG and Voith did not take part in the capital increase in December 2016, causing their shareholdings in our company to be diluted. In addition, Voith GmbH further reduced its shareholding to below 3% as of December 20, 2016.

## Geographical distribution of institutional investors



According to a shareholder identification exercise carried out in March 2016, the geographical distribution of institutional investors was as follows: approximately 25% of our shares are held by investors in Germany, 26% in the rest of Europe, and 41% in North America. Other regions, such as Asia, the Middle East, and South America, are also represented in the shareholder base at just below 8%.

## Business situation necessitates continued dividend suspension

Due to the accumulated loss reported by the parent company SGL Carbon SE in fiscal 2016, the Company had no capacity to distribute dividends. However, we are working with the utmost priority on making our Company sustainably profitable again. Only then will the payment of earnings-related dividends be possible.

## 2016 Annual General Meeting

A total of 67.62% of the voting capital was represented at the Annual General Meeting of SGL Carbon SE held on May 18, 2016 (2015: 69.46%). This equates to 62,443,780 shares and the same number of votes. A total of approximately interested 700 shareholders, shareholder representatives, and guests participated in our Annual General Meeting. All of the items on the agenda were approved by a large majority. The speech held by CEO Dr. Jürgen Köhler was again broadcast via the Internet. His speech and the results of all votes are available to our shareholders and other interested parties in the Investor Relations section of our website under the "Annual General Meeting" menu item. SGL Carbon SE's next Annual General Meeting will be held on May 17, 2017.

## Intensive communication with the capital markets

As of the middle of February 2017, SGL Group was being covered by a total of 11 German and international financial analysts (previous year: 11). Dialog with analysts focused on the Group's strategic realignment, the divestment process for the PP segment, the earnings situation in the current economic environment, and SGL Group's medium-term performance. In mid-February 2017, the analysts rated our shares as follows: five analysts issued a hold or neutral recommendation, three analysts issued a sell, underperform, or underweight recommendation and two analysts issued a buy recommendation. The analysts' investment recommendations reflected a broad spectrum of price targets. On February 15, 2017, our shares closed at €8.30; the analysts' price targets ranged from €6.80 to €10.50.

We have provided a summary of the analysts who regularly rate SGL Group on our investor relations website under the "Share" menu item.

### Analyst coverage<sup>1)</sup>

Baader Bank
Bank of America Merrill Lynch
Bankhaus Lampe
Commerzbank
Deutsche Bank
J.P. Morgan Cazenove
Kepler Cheuvreux
Landesbank Baden-Württemberg
MM Warburg
Oddo Seydler (Bond-Research)
Solventis

<sup>1)</sup> As of February 15, 2017

We aim to provide all capital market participants with transparent, timely, and comprehensive information on SGL Group's current business position and its future prospects. With this objective in mind, we continued to vigorously pursue our investor relations activities in 2016. In more than 260 one-on-one meetings with analysts and investors in Germany and abroad, we gave a general overview of SGL Group and provided information on our strategic realignment, the divestment process for the PP segment – including details on the currently challenging graphite electrodes market – and on our growth prospects for the medium- to long-term future.

Capital market conferences and roadshows were our main forums for intensive, face-to-face dialog with institutional investors. All in all, we participated in 15 investor conferences and seven roadshows in Germany and abroad in 2016. We continued to expand our activities aimed at bond investors during the reporting year, and participated in additional capital market conferences targeted specifically to that investor group.

One of the other primary ways in which we provide capital markets participants with timely and comprehensive information is by holding conference calls in which SGL Group's Board of Management presents the interim or annual reports that were published that morning. These conference calls are broadcast live through our investor relations website and are available as recordings afterwards.

The Investor Relations section of our website offers a wealth of information aimed above all at retail investors and interested third parties. In addition to the annual and interim reports, further materials such as presentations, press releases, and ad-hoc announcements can be found here. All notifications relating to directors' dealings and voting rights are also available online. Anyone who wishes to receive electronic versions of our financial reports and investor relations press releases may sign up for our e-mail distribution list.

### Key data for SGL Carbon SE shares

Trading venues	Xetra; Berlin, Dusseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart
Securities Identification Number (WKN)	723 530
International Securities Identification Number (ISIN)	DE 000 723 5301
Stock index	SDAX
Market segment	Prime Standard
Reuters symbol	
Xetra	SGCG.DE
Frankfurt	SGCG.F
Bloomberg-symbol	
Xetra	SGL GY
Germany	SGL GR

## Improved balance sheet following successful capital increase

In order to strengthen the Group's capital structure, improve its leverage ratio, and increase its financial flexibility, SGL Carbon SE resolved on November 29, 2016, to implement a capital increase against cash contribution with indirect subscription rights for shareholders of the Company. By utilizing existing authorized capital of €236,394,183.68, the Company's issued capital was increased by €76,800,000.00 to €313,194,183.68 against cash contribution, by issuing 30,000,000 new no-par-value bearer shares, each with a notional value of €2.56. The new shares carry full dividend rights retrospectively from January 1, 2016.

The new shares were offered to existing shareholders by way of indirect subscription rights, with a subscription ratio of 40:13 and a subscription price of €6.00 for every new share. In other words, for every 40 existing shares in SGL Carbon SE, shareholders could acquire 13 new shares.

The Company received confirmed acquisition declarations in advance from its major shareholders SKion GmbH and BMW AG. By way of those acquisition declarations, the above shareholders committed to participate in the capital increase in accordance with their respective shareholdings. The subscription rights relating to the holdings of shareholders that did not participate in the capital increase, Volkswagen AG and Voith, were placed with institutional investors by a bank syndicate.

A bank syndicate committed to subscribe to the new shares, acquire them at the subscription price, and offer them to existing shareholders in accordance with the conditions set out in the subscription offer.

On December 14, 2016, SGL Carbon SE successfully completed the capital increase it had approved and announced on November 29, 2016. The new shares were admitted for trading on the regulated market of the Frankfurt stock exchange and to the Prime Standard segment with post admission (listing) obligations on December 13, 2016. Nearly all of the 30 million new shares on offer were subscribed – 99.40% of the subscription rights were exercised – and included in the trading with existing shares as of December 14, 2016. The remaining new shares were placed through stock market transactions.

The Company generated net offering proceeds from the capital increase of about €173 million, and intends to use them – together with the net proceeds from the divestment of the activities of its former Performance Products (PP) reporting

segment – for the full repayment or early redemption of the Company's convertible bond due in 2018, as well as the full early repayment of its corporate bond.

### Overview of SGL Carbon SE bonds

The performance of the 2013/2021 corporate bond and the two convertible bonds (2012/2018 and 2015/2020) was positive in the past year. That trend was aided by the announcement concerning the sale of our graphite electrode business to Showa Denko, as well as by the capital increase that was successfully completed in December 2016. The convertible bond 2012/2018 benefited most of all, its price increasing by just below 7% year-on-year. The price of the corporate bond 2013/2021 was also up by a good 4%. Both financial instruments benefited from the announcement made in October 2016 to call the corporate bond 2013/2021 early and to repay the convertible bond at latest at its maturity in January 2018. The price of convertible bond 2015/2020 increased by just below 2% during the course of the year. Overall, the corporate bond 2013/2021 traded slightly above its nominal value, while the convertible bonds traded below theirs. During the initial weeks of 2017, the bond prices continued to develop positively, albeit to a more moderate extent.

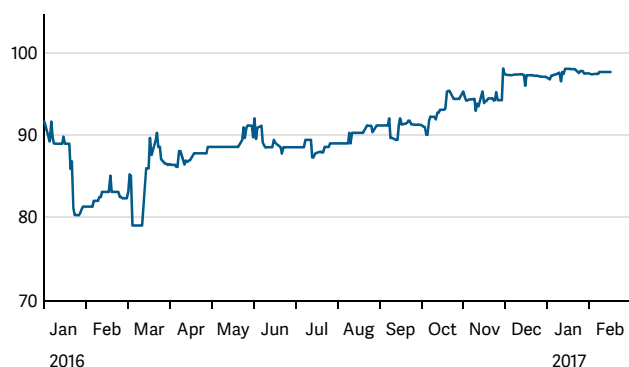
#### Corporate bond

WKN	ISIN	Coupon	Maturity date
A1X3PA	XS1002933403	4.875%	January 15, 2021

#### Convertible bonds

WKN	ISIN	Coupon	Maturity date
A1ML4A	DE000A1ML4A7	2.75%	January 25, 2018
A168YY	DE000A168YY5	3.5%	September 30, 2020

**Performance of convertible bond in €**  
(matures January 25, 2018)



**Further information on SGL Group, our shares and bonds**

Contact our Investor Relations department:

Söhnleinstrasse 8  
65201 Wiesbaden/Germany

Phone: + 49 611 6029-103  
Fax: + 49 611 6029-101  
E-mail: [Investor-Relations@sglgroup.com](mailto:Investor-Relations@sglgroup.com)

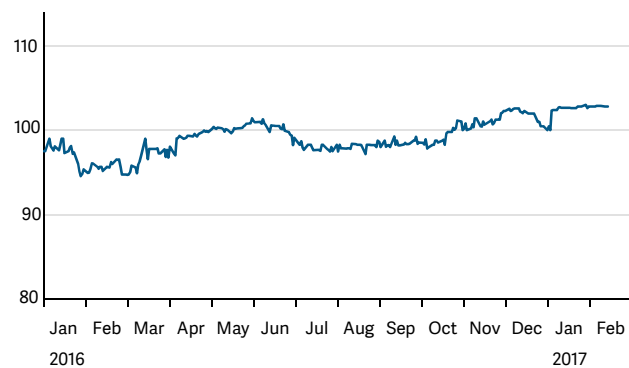
You may also visit the investor relations section of our website ([www.sglgroup.com](http://www.sglgroup.com)).

We look forward to hearing from you!

**Performance of convertible bond in €**  
(matures September 30, 2020)



**Performance of corporate bond in €**  
(matures January 15, 2021)





# Group Management Report

---

*We implemented key aspects of our strategic realignment in 2016 and laid the foundations for a successful future with the effective legal spin-off of the business unit Performance Products (PP) in June 2016, the agreement on the sale of our graphite electrode business to the Japanese company Showa Denko in October 2016 and our capital increase in December 2016. This Group Management Report provides detailed information on the business development and its underlying conditions in 2016 and also provides in-depth explanations of our results of operations, financial position, and net assets. In addition, we also report on sustainability and SGL Group's entrepreneurial responsibilities, and provide an outlook on the anticipated development with its material opportunities and risks.*

<b>SGL Group</b>	<b>42</b>	<b>Corporate Social Responsibility</b>	<b>74</b>
Business model of the Group	42	Integrity and values	74
Organizational structure and business activities	42	Employees	74
Management, objectives and strategy	45	Sustainable product solutions	76
Technology & Innovation	48	Resources and environmental protection	76
<b>Economic Report</b>	<b>50</b>	Safety	78
Overall economic and industry-specific underlying conditions	50	Corporate citizenship	79
Business overview	53	<b>Opportunity and Risk Report</b>	<b>80</b>
Key events impacting business performance	54	<b>Outlook</b>	<b>89</b>
Financial performance of the Group	55	<b>Remuneration Report</b>	<b>94</b>
Financial performance of the reporting segments	61	Remuneration for the Board of Management in fiscal year 2016	94
Financial position	63	<b>Disclosures pursuant to Sections 289 (4), 315 (4), as well as</b>	
Net assets	68	<b>Sections 289a and 315 (5) of the German Commercial Code (HGB)</b>	<b>102</b>
General statement on the current financial situation	71		
Non-financial performance indicators	72		

# SGL Group

---

## Business model of the Group Organizational structure and business activities

### Legal structure of the Company

SGL Carbon SE (the "Company"), headquartered in Wiesbaden (Germany), is quoted on the Frankfurt stock exchange. The shares are currently included in Deutsche Börse's SDAX index. SGL Group is made up of SGL Carbon SE, the operational holding company, together with its subsidiaries (a detailed overview of shareholdings of SGL Carbon SE can be found in **Note 32**).

### Business units and organizational structure

SGL Group is a globally active company with a workforce of 5,384 employees at the end of December 2016. In our continuing operations, we operate a total of 34 production facilities either independently or in cooperation with our joint venture partners, of which 18 are located in Europe, nine in North America and seven in Asia. With a service network in more than 100 countries, we can flexibly accommodate the regional and industry-specific requirements of our customers. In addition, we are consistently driving the optimization of our production structures - this also includes the sale of our small carbon fiber facility in Evanston (USA) in December 2016.

In fiscal 2016, as a consequence of the strategic realignment resolved in 2014, we completed the legal spin-off of our former business unit Performance Products and launched the sale process. We signed an agreement for the sale of our graphite electrode business to the Japanese company Showa Denko in October 2016. The remaining business with cathodes, furnace linings and carbon electrodes is to be sold in a separate sale process in 2017.

After implementing the strategic realignment, SGL Group's business activities focus on the development, production and distribution of customer-specific solutions and applications based on our material competence with carbon fibers and specialty graphites. SGL Group – The Carbon Company – operates globally as one of the leading and most innovative companies on the market. The Group's core expertise, developed over decades, includes a broad understanding of raw materials, application and engineering knowhow and a command of high-temperature manufacturing processes. The range of technologies and products focuses on five types of materials: carbon fibers (including its textile fiber precursor),

carbon fiber based composite materials, fine grain graphite, coarse grain graphite, as well as expanded natural graphite.

As a manufacturer of carbon fiber and specialty graphite solutions and applications, SGL Group supplies a broad range of industries. Our materials are characterized by excellent electrical and thermal conductivity, resistance to heat and corrosion, self-lubricating qualities and light weight combined with strength.

Due to these unique material properties, SGL Group sells to a wide spectrum of industries after its strategic realignment, ranging from the more traditional industrial sectors, such as the chemical industry, to newly developed future high-growth areas, such as the solar, lithium-ion battery and LED industries.

With the implementation of the strategic realignment SGL Group's organizational structure now comprises the two business units Composites – Fibers & Materials (CFM) and Graphite Materials & Systems (GMS), which also represent our reporting segments. Central and service functions, research and our SGL Excellence activities will continue to be included in the separate reporting segment T&I and Corporate. Until the sale has been finally concluded, the former reporting segment Performance Products (PP) will be disclosed under discontinued operations.

Resource allocation is decided at a business unit level and reviewed and approved by the Board of Management at its annual objectives meetings. As part of project CORE (for details see page 46), our two global business units are now responsible for the development, production and marketing of their products and solutions, while all administrative activities are concentrated in the corporate functions. In this context, the business units will from now on also be directly responsible for their research and development activities. The research and development expenses disclosed under T&I and Corporate thus only relate to corporate projects.

### Reporting structure

This annual report presents our business activities for the past fiscal years as well as the outlook based on the two business units set out above, which correspond to a total of three reporting segments together with the corporate functions: Composites – Fibers & Materials (CFM), Graphite Materials & Systems (GMS) as well as T&I and Corporate.

### Reporting on joint ventures

For strategic reasons, SGL Group holds interests in companies together with other shareholders. Some of these companies (e. g., SGL Quanhai Carbon, SGL Kumpers) are fully consolidated and included in the results of their respective segments. Our 51% share in SGL Automotive Carbon Fibers (Germany) and SGL Automotive Carbon Fibers (USA), our joint ventures with the BMW Group for the production of carbon fibers and carbon fiber based fabrics for the automotive industry, have been

accounted for as joint operations and proportionally consolidated in SGL Group's financial statements based on its respective ownership interests, and in line with accounting standard IFRS II Joint Arrangements. These activities are reported in the reporting segment CFM. In addition, SGL Group also holds the following material interests in companies that are accounted for using the equity method and also reported in our reporting segment CFM.

### Material investments accounted for At-Equity (as of December 31, 2016)

	Interest	Customer industry	Operational allocation to
Benteler SGL GmbH & Co. KG, Germany	50.0%	Automotive	CFM
Brembo SGL Carbon Ceramic Brakes S.p.A., Italy	50.0%	Automotive	CFM

You can find additional information on material investments accounted for at equity under **Note 6** of the notes to the consolidated financial statements.

### Management and control

Our Guiding Principles regulate responsibilities and structure the obligations of our Board of Management, the management of our business units and our central functions. The Board of Management determines the Group's strategic orientation. Fundamental business decisions are taken at only two management levels: the Board of Management and business unit. In fiscal year 2016, three global business units managed the group's operational business. Of these three units, one (Performance Products) was classified under discontinued operations from the middle of the year. The business units obtain the infrastructure and services they require from the respective companies and plants. In addition, corporate functions support the Board of Management and service functions (shared services) provide services for all business units and legal entities.

Beyond the Guiding Principles, we have also defined **Common Values** to establish our corporate culture and business conduct. These values are reflected in SGL Group's Code of Business Conduct and Ethics. The Code underscores SGL Group's obligation to comply with the law and sets standards for ethical and legal conduct. Every employee is aware of the Code and it can be accessed on the intranet at any time. Taken together, the Guiding Principles and Common Values shape our management culture, which is based on the principles of

leadership and management by objectives. The Board of Management, the business units and the centralized functions agree on objectives for the Group, the business units and individual executives, based on a defined set of key performance indicators. Remuneration models and performance related bonus programs for the Board of Management and all executive levels are derived from this process.

By way of a resolution of the Supervisory Board on December 19, 2013, a new remuneration system for the Board of Management was introduced on January 1, 2014. Details of the remuneration system and the remuneration received by the individual members of the Board of Management can be found in the remuneration report on page 94 ff.

### Products, services and business processes

The Composites – Fibers & Materials (CFM) reporting segment bundles all of the materials business based on carbon fibers and covers the entire, integrated value chain, from raw materials to carbon fibers and composite materials. Carbon fibers and carbon fiber composite materials will benefit sustainably from the substitution process for base materials. They are increasingly in demand as substitute materials for traditional materials because of their unique properties, such as the combination of lower weight and higher stiffness. We focus, in particular, on customers from the automotive, wind, aviation and other industries. As industrial applications for composite materials are still in their infancy, we started to establish a Lightweight and Applications Center (LAC) at our Meitingen (Germany) facility in 2016. The business unit will use

the LAC to support its customers in the optimum use of fibers and materials for composite materials. In future, the LAC will allow processes and products to be developed, as well as prototypes and small series.

In our two joint ventures with the BMW Group formed in 2009, the so-called SGL ACF companies (SGL Group's participating interest in each case: 51%) we produce carbon fibers at the facility in Moses Lake, Washington (USA) which are then further processed to become carbon fiber based fabrics at a second location in Wackersdorf (Germany). BMW Group uses this to produce components, for example for the passenger cell in the BMW i3 and i8, and also individual components for the 7-series.

The value chain is supplemented by our joint ventures Brembo SGL and Benteler SGL, accounted for at equity, which develop and produce fiber-based components automotive industry.

The joint venture with Brembo S.p.A. (Italy) develops and produces carbon ceramic brake discs, particularly in the market for luxury class vehicles and sports cars (<http://www.carbonceramicbrakes.com>).

In our joint venture with Benteler, we primarily develop and produce fiber-reinforced components for the automotive industry with the aim of promoting the use of fiber composite components in the automotive industry (<http://www.benteler-sgl.com>).

The main raw material in the reporting segment CFM is acrylonitrile (ACN) for the production of acrylic fibers, which, as a so called PAN precursor, can then be further processed to carbon fibers. We secured our future supply of the raw material PAN precursor in 2012 with the acquisition of the Portuguese acrylic fiber manufacturer Fisipe. By converting textile lines to PAN precursor as required, the development of the entire carbon fiber value chain is being driven forward. In addition, we supply our joint venture with the BMW Group with PAN precursor raw material from our joint venture with Mitsubishi Rayon Corporation, Japan.

The business unit Graphite Materials & Systems (GMS) comprises a broad range of customized graphite-based solutions and applications. Graphite components are manufactured, purified and, in some cases, refined by adding a special coating – all according to customer requirements. At

present, product developments that support efficient power generation and energy storage, such as anode materials for lithium-ion batteries, are enjoying strong growth. In addition, sales revenue in the business unit GMS is generated primarily from customers in the solar, semiconductor and LED industries, the chemical and automotive industries and in the areas of metallurgy and high temperature applications. The emphasis is on finished products with a high value-added content. These components are used, for example, in heating elements for monocrystalline production of silicon in the semiconductor and solar industries. In addition, solutions are being offered for the automotive and other manufacturing industries in the form of bearing and pump components, as well as graphite based seals. So-called expanded graphites based on natural graphite are utilized in a large number of industries such as heating and air-conditioning equipment, as well as chemical and automotive applications. In addition, it also offers high quality products and solutions for the chemical and pharmaceutical industries and the environmental sector, particularly with graphite heat exchangers, columns, pumps and systems.

The principle raw materials used by the business unit GMS are petroleum coke and pitch. We purchase these raw materials primarily from suppliers with whom the Company has maintained long-term business relationships based on annual framework agreements. We use both international and local energy suppliers to cover our energy requirements (natural gas and electricity) for the manufacturing processes, some of which are very energy intensive.

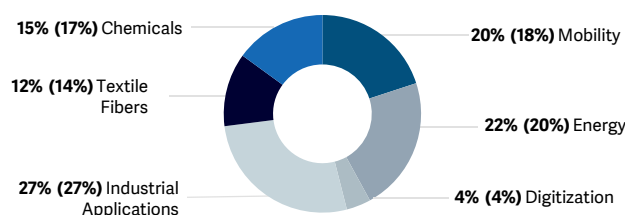
The core product of the business unit **Performance Products (PP)**, which is held for sale, consists of high-quality graphite electrodes utilized in electric arc furnaces that recycle scrap to produce steel. In addition, this business unit produces high quality cathodes which are used to produce aluminum. In contrast to the electrodes, cathodes used in aluminum smelters have a life of up to approximately seven years, and are, therefore, considered capital goods. Carbon electrodes, which are used in other metallurgical smelting applications (e. g. silicon), as well as furnace linings for producing primary steel, which are also investment goods, round off the business unit PP.

### Major sales markets

In our continued operations, industrial applications continue to be SGL Group's largest customer group, still accounting for

27% (previous year: 27%). The proportion of sales revenue with customers from the energy industry (which includes, in particular, the lithium-ion battery, wind and solar sectors) has increased slightly from 20% to 22%, and sales revenue in the mobility segment (automotive, transport and aerospace) increased from 18% to 20%. During the year under review the proportion of sales revenue with the chemicals industry fell to 15% (previous year: 17%). This was due in particular to the strong downturn in investments in the North American oil industry as a result of the low oil price. The proportion of sales revenue with customers for textile fibers has also fallen due to the lower oil price. In contrast, the proportion of sales revenues from digitization (includes the semiconductor and LED industries) is on a par with the previous year at 4%.

**Sales revenue by customer industry, 2016 (2015)(Group)**



In our discontinued operations Performance Products, sales revenue was mostly recorded with customers in the steel and aluminum industries, as was the case in the previous year.

## Management, objectives and strategy

### Internal management system

SGL Group's management structures and principles are based on our Guiding Principles, which set out the rules for cooperation and the responsibility levels for both strategic and day-to-day operations. Above all, our goal is to sustainably increase SGL Group's enterprise value. SGL Group's internal management system seeks to fulfill this goal. The system comprises regular meetings of appointed committees, a monthly management information system, rolling 12-month planning and reports, as well as actual-to-budget comparisons with gap analyses. Furthermore, steering groups are appointed to work with management to direct and monitor special investment projects, potential acquisitions and defined tasks concerning topics such as personnel issues, safety, compliance and environmental protection.

Medium to long-term market and demand indicators for the business unit **Composites – Fibers & Materials** are available only to a limited extent, as developments are still highly project driven. As a result, the business development of these activities can be affected by project delays. In spite of this, however, we believe that there is an increasing trend in substituting traditional materials with carbon fibers and carbon fiber based composite materials in a range of applications, such as in the aviation, automotive and wind industries.

Key leading indicators for the anticipated development of operations in the business unit **Graphite Materials & Systems** include the actual or forecasted growth in important customer markets, incoming orders and corresponding capacity utilization in the Company.

In the former business unit **Performance Products** (discontinued operations) the forecast and actual growth on the steel and aluminum market and our order intake generally show a reliable picture of anticipated developments for the current fiscal year.

### SGL2015 cost savings program successfully completed

We initiated the SGL2015 cost savings program in the late summer of 2013, in particular as a result of the sudden downturn in the graphite electrode business. This program was based on three pillars: Firstly, we reviewed our organizational structure, in particular in administrative functions, with the aid of external consultants. This included simplifying business processes as well as streamlining our management structures. Secondly, SGL2015 included activities to restructure our sites (relocating, discontinuing or selling production facilities), such as the closure of the graphite electrode plant in Frankfurt-Griesheim which was publicly announced in the spring of 2016. The third pillar in the program was portfolio optimization (possible spin-off of non-core activities, transferring activities to partnerships).

Originally, based on the actual costs in 2012, savings of approx. €150 million were targeted until the end of 2015. Around €69 million of this was already realized in 2013, followed by a further €88 million in 2014. As a result, we increased the savings target in two stages to more than €200 million in September 2014 and €240 million in the first quarter 2015. Further cost savings of €45 million were generated in 2015, and another €26 million in the first nine months of 2016. As a result, in fiscal year 2016 through to the end of the third quarter €228 million has been saved since the program was initiated. As the



accumulated savings target of €240 million included the losses of €15 million incurred in 2012 at HITCO (components for the aircraft industry) and SGL Rotec (rotor blades), both of which have been sold in the meantime, the savings target has been slightly surpassed.

### Project CORE

Project CORE (COrporate REstructuring) was set up in September 2016 to refocus the business model of the “new” SGL Group on growth. The transformation process primarily comprises shifting the focus of our business units CFM and GMS to the development, production and marketing of their products, while all administrative tasks are concentrated in our corporate functions. Simultaneously, our company’s administrative structures are being aligned to the smaller SGL Group following the sale of the former business unit Performance Products. By the end of 2018, sustainable savings of around €25 million (compared to 2015) should result from this project.

In order to further optimize our business processes, we launched an additional group-wide program called “Business Process Excellence (BPX)” in the beginning of 2015. This program aims to further simplify and standardize central processes, and thus realize additional sustained improvements. In the first stage, this program focuses on purchasing, supply chain management and sales. This program will be merged with our proven SGL Excellence Initiative during the course of fiscal year 2017.

### Financial targets

Our key performance and management indicators, uniformly defined internally and externally, were revised in the second half of 2014. As a result, the key performance and management indicator is:

ROCE <sup>1)</sup>	min. 15%
--------------------	----------

<sup>1)</sup> Based on EBITDA before non-recurring charges to average capital employed - continuing operations (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for at equity and working capital)

Derived from the above EBITDA based target return on capital employed, we also consider the return on capital employed based on the operating result (EBIT) as part of the ongoing internal management of the Group and business units. The

<sup>1)</sup> Based on EBIT

<sup>2)</sup> Based on EBITDA. Capital employed (CE) is defined as the sum total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity, and working capital

reconciliation is based on relatively consistent levels of depreciation and amortization.

Additional significant financial targets in the medium term are:

Gearing <sup>1)</sup>	-0,5
Equity ratio	> 30%
Consolidated net result - continuing operations	Positive
Leverage ratio <sup>2)</sup>	< 2.5
Free cash flow	Positive

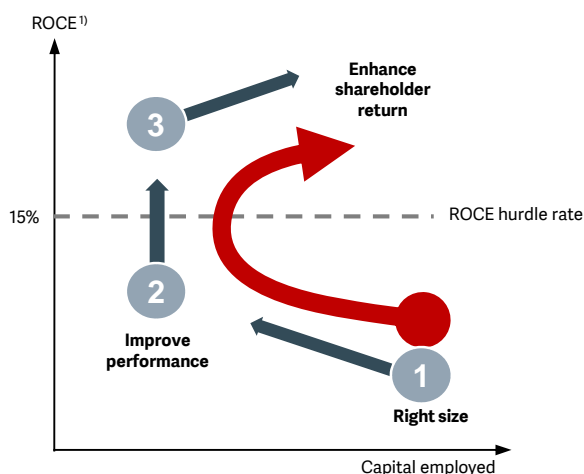
<sup>1)</sup> Net financial debt to equity attributable to the shareholders of the parent company

<sup>2)</sup> Net financial debt to EBITDA before non-recurring charges

### Implementation of strategic realignment

We already defined the cornerstones of our strategic realignment in the fall of 2014. The core element was transitioning the central KPI from return on sales (ROS)<sup>1)</sup> to return on capital employed (ROCE)<sup>2)</sup>, as this KPI more accurately reflects the profitability of our capital-intensive business and in future will lead to our capital expenditure being substantially more return oriented. In addition, the ongoing review of our portfolio is based on achieving the ROCE target over the medium term. In order to consistently implement this objective, the long-term incentive systems for both the Board of Management and also all of the top and middle-level executives have been geared to Group ROCE.

### Strategic realignment. Right size – Improve performance – Enhance shareholder return



<sup>1)</sup> Measured by EBITDA divided by capital employed.

The strategic process comprises three elements which partially overlap. The first stage was to review the portfolio regarding which production equipment, products or businesses can reach the minimum profitability target in a certain period. The sale of the rotor blade production in 2013, the sale of the aerostructures production of HITCO Carbon Composites in 2015 and the termination of the joint venture with Lindner for marketing graphite radiant ceilings at the end of 2014/beginning of 2015 as well as the sale of the small carbon fiber facility in Evanston (USA) in December 2016 were decisions taken in this context. In addition, we also analyzed for which activities we are no longer the best owner given the changed market conditions. As a result, we decided to sell the former business unit PP, which is the last step in this transformation stage.

The second stage comprises activities to improve earnings, initially summarized in the Group-wide SGL2015 cost savings program. Project CORE was initiated in September 2016 to refocus the new SGL Group on growth and to align our company's administrative processes and structures to the smaller SGL Group following the sale of the former business unit Performance Products.

In a third stage we will grow again organically, which will lead to higher capacity utilization and an improved product mix towards applications and solutions with higher returns, thus

also leading to a more than proportional improvement in earnings. There is sufficient available capacity for most of our businesses due to the high level of investment in the previous years. From the current perspective, we expect capital expenditure to remain approximately on the level of depreciation and amortization.

We defined additional strategic milestones for long-term profitable growth in July 2015. A comprehensive growth initiative was resolved for the business units GMS and CFM, which targets organic revenue growth of approx. 50% until 2020 compared to 2014. In addition, selective external growth activities are planned to supplement our portfolio in terms of our technology and market positions. In addition, we decided to carve out the business unit Performance Products (PP) into a legally independent entity within SGL Group, allowing the unit to optimally adjust its business model to the changed market conditions, in particular for graphite electrodes.

PP's business model was increasingly moved toward standardized products for cyclical markets which offer long-term growth potential. We took this step based on the changed underlying conditions, in particular for graphite electrodes. The corresponding activities aim to ensure that this business unit is able to compete over the long term. At the same time, this business unit's independence gave it the opportunity to react flexibly to strategic options that may result in this industry. This gave SGL Group room to participate in possible future consolidation scenarios in the graphite electrode industry. Initially, we planned to complete the carve out at the latest by the end of 2016.

The renewed deterioration in the market conditions for graphite electrodes at the end of 2015 as a result of further increases in Chinese steel exports and a renewed drop in iron ore prices led to a substantial downturn in the earnings situation in the business unit PP in fiscal year 2016. This new development required accelerated implementation and conscientious execution of the activities that were started. As a result, the technical carve out process of the business unit PP from the Group was completed in the middle of 2016 and thus substantially earlier than had been expected, and the sales process was already initiated at the start of 2016.

Finally, an agreement was reached with the Japanese company Showa Denko in October 2016 for the sale of the graphite electrode business based on an enterprise value of €350 million.

After deducting liabilities (in particular provisions for pensions and restructuring) we are expecting cash proceeds in excess of €200 million based on the closing balance sheet. We expect this transaction to be closed in mid 2017. The remaining business with cathodes, furnace linings and carbon electrodes is to be sold separately in 2017. The proceeds from the sale will substantially reduce our debt.

In addition, in December 2016 we successfully performed a capital increase against cash contributions with indirect subscription rights for shareholders of the company. The company's share capital was increased by using the existing authorized capital by issuing 30 million new no-par value bearer shares, each with a proportionate interest in the share capital of €2.56.

We intend to use the net proceeds from the rights issue of around €173 million – together with the proceeds from the sale of the discontinued business unit PP – for the full repayment of the convertible bond which matures in 2018 and the early redemption of our corporate bond. This will strengthen our capital structure, improve our leverage ratio and increase the Group's financial flexibility.

#### **Growth initiatives for CFM and GMS:**

##### **Dynamic revenue growth planned through to 2020**

The business units CFM and GMS are already experiencing dynamic market and product developments with growth potential that is considerably above average. SGL Group is an enabler for its customers' production processes and products with its innovative carbon fiber and specialty graphite products, helping them to serve global mega-trends such as mobility, digitization and energy efficiency. We offer our customers tailored applications along the entire material value chain.

Taken together, these two business units recorded revenues of €762 million in 2016 and EBIT before non-recurring charges of €48 million. Historically, GMS has already achieved its target returns, and CFM was able to substantially improve its earnings in the year under review. As part of the accelerated organic growth, the market position for both business units is to be developed along the value chain, and processes and cost structures in the units further optimized. Combined revenues are estimated to increase by approx. 50% until 2020, compared to the €737 million in 2014, while meeting the targeted minimum return on capital employed ( $ROCE_{EBITDA}$ ) of 15%. In

addition, we also plan to selectively use external growth opportunities. These will primarily serve to supplement the portfolio with regard to our technical competences and regional market positions.

#### **Share price performance in 2016**

You can find a description of our share price performance as well as key indicators and other information on all aspects of our shares on pages 35 – 40.

### **Technology & Innovation**

#### **Our centralized research and development**

Our state-of-the-art research infrastructure at the Group's largest site in Meitingen offers optimal conditions for our global research and development activities "Technology & Innovation" (T&I). Our carbon fiber products are tested and further developed in the laboratories for composite materials. The laboratory for energy systems enables us to examine our materials for specific applications, and thus forms the basis for developing improved carbon and graphite products for batteries and battery cells. Our development of synthetic carbon and graphite materials is supported by pilot plants in Meitingen. In addition, the pilot plant for precursors at Fispes in Portugal will be supplemented by an innovative, pioneering carbon fiber pilot plant.

T&I's research and development activities support SGL Group's strategic objectives and fall into the core areas of Composites – Fibers & Materials, Graphite Materials & Systems as well as Future Growth Areas.

Our research expenditure totaled €30.3 million in the past fiscal year (2015: €29.7 million), accounting for a nearly unchanged 3.9% of consolidated sales revenues (2015: 3.8%). At the end of 2016, there were 110 T&I employees (2015: 115).

#### **Highlights from our development areas**

We also continued our long-standing programs in **Composites – Fibers & Materials** in 2016. These include "Air Carbon II", a project in which we develop innovative carbon fibers together with partners from the European aviation industry. We have successfully reached the planned milestones in this project. We have also successfully continued our development program for thermoplastic carbon fiber composite materials and launched new materials from this group on the market in 2016. This group of materials offers

advantages compared to duroplastic matrix systems, such as shorter cycle times, high damage tolerance and improved recycling which makes them particularly interesting for use in automotive construction. In addition, in the field of duroplasts we were also able to develop a new materials tool box made of pre-impregnated semi-finished products and to present this to the market. This is based on a very quick to cure resin formula, which allows very short cycle times in automotive construction in particular.

Our business unit **Graphite Materials & Systems** develops components for future energy systems such as lithium ion batteries and redox flow batteries. In 2016 we once again expanded our technical competence for lithium-ion batteries. In our close strategic alliance with Hitachi Chemical, the global market leader for graphite anode materials for lithium-ion batteries, we are working on optimizing costs while consistently maintaining high quality. In order to meet the future requirements for e-mobility, we are developing the next generation of anode materials for lithium-ion batteries with increased storage density as part of funded projects together with partners. These batteries will enable a greater reach for electric vehicles. We have successfully transferred a lower-cost version of the process to produce graphite anode materials for lithium-ion batteries to series production with support from the development department. In addition, we developed a new material for high-temperature composite materials in 2016. This will allow us to sell into customer segments which we were previously unable to reach.

In order to develop new areas of business over the long term, in 2016 we launched research and development work in the **Future Growth Areas** defined in 2015. As a result of an idea campaign, we have been able to generate far more than 100 ideas for new products and processes in these areas, and we have successfully completed feasibility studies for the ideas with the highest rankings. For example, in the additive manufacturing area ("3D printing") with carbon materials, we have created the first sample components for applications in the chemicals industry or for personal protection. Our start-up for the production of fuel cell components has once again increased its sales revenues by a double-digit percentage.

### **Strategic industry alliances and research networks are the key to success**

As part of the strategic alliance for synthetic graphite with the Technical University AGH in Krakow, several masters and

doctoral candidates are working on long-term topics for raw material and process development as well as application modeling. In addition, SGL Group is an active member of the management bodies of international scientific carbon societies. As a co-founder of the competence network for lithium-ion batteries (KLiB), we are working together with companies including BASF, Bosch, Daimler and BMW on the development of lithium-ion batteries for e-mobility and stationary energy storage.

SGL Group is an active member of Carbon Composites e.V. (CCeV) and is represented on its board. This association of companies and research institutions spans the entire value chain for high-performance composite materials in Germany, Austria and Switzerland. Since 2013 CCeV has formed the new umbrella organization for the German composites industry "Composites Germany" together with three other associations and organizations. The professorship of Carbon Composites (LCC) endowed by SGL Group at the Technical University of Munich (TUM) is a hub for multinational projects with industrial partners. The existing networks, for example, with universities in Singapore, help us to internationalize our own development activities. We also further safeguarded our expertise in 2016 with new patent registrations, in particular for our future areas.

### **T&I is SGL Group's talent pool**

Last year, T&I also fulfilled its task of winning new talents for the company. T&I supported a total of 39 diploma students, interns and student trainees in 2016. We are thus developing junior talents, in particular for engineering and materials sciences. During the past fiscal year, nine excellently trained T&I employees transitioned to our business units to take over new positions and to reinforce networking within the company.

# Economic Report

## Overall economic and industry-specific underlying conditions

### Economic conditions

According to the International Monetary Fund (IMF), global economic growth remained moderate in 2016 at 3.1%. It was lower than the original forecast of 3.4%. The structural downturn in the pace of growth in China continued, which meant that there was a low level of impetus for industrialized and other emerging nations. There was a high level of uncertainty as a result of various political crises, and these also depressed the global economy. As a result, investment activities in established economies remained low - according to the IMF, these only grew by 1.6%. This was perceptibly lower than in the previous year, and also less than initially forecast (+2.1%). Many emerging and developing nations also suffered from a low intake of raw materials. Growth in these countries totaled 4.1% and was comparatively moderate, just slightly lower than the former forecast of 4.3%.

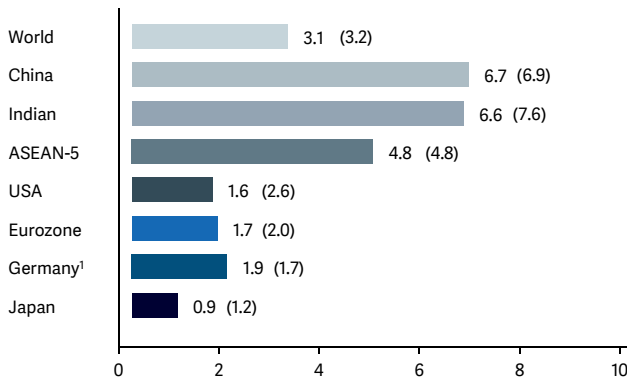
### US economy weakened significantly in 2016

According to the IMF, the US economy only grew by 1.6% in 2016, slower than previously and lower than had been hoped. Industrial production and investments remained weak, particularly in the energy sector. The upswing only became more solid later in the year, with the result that the US Federal Reserve took a long time to put the second stage of the interest-rate turnaround in place.

The euro zone benefited from the ECB's expansive monetary policy (low interest rates, weak euro), and the robust domestic market. The growth rate was solid at 1.7% (IMF), and all euro zone countries recorded positive growth. In Germany growth was higher than average in the euro zone, driven by private and government consumption and increasing construction investments. In contrast, investments in equipment weakened due to a high degree of uncertainty.

China's economic growth continued to flatten, in line with expectations. The pace of expansion in South-East Asia (ASEAN-5) did not accelerate. Russia's economy contracted slightly, with Brazil's economy shrinking even more.

Gross domestic product in 2016 (2015) at a glance  
Real year-on-year change in %



Source: IMF, World Economic Outlook (update) from January 2017.

<sup>1)</sup> German Federal Statistical Office

## Development of key customer industries in continuing operations

### Market segment mobility

#### Automotive industry continues to grow, upswing in lightweight construction

According to the industry experts from LMC automotive, the global automotive market (light vehicles) continued to grow in 2016 (sales +4.6%). According to information from the VDA (Verband der Automobilindustrie), sales continued to rise in the largest markets for cars and light vehicles: China (+17.8%), USA (+0.4%) and Western Europe (+5.8%). China and the USA recorded new record sales levels, with Western Europe enjoying its best year since 2007. In contrast, sales in Japan fell slightly (-1.6%), and significantly in Brazil (-19.8%) and Russia (-11.0%) as a result of the respective recessions. Sales of cars with alternative drives increased at a substantially higher rate than total sales in the three high-volume markets (see lithium-ion batteries). The industry is working at full speed on connectivity and, in particular, in reducing emissions. The German automotive industry alone will invest more than €40 billion in alternative drives through to 2020. Decreasing weight significantly is absolutely mandatory for both electric cars (increasing range) and also for traditional models with combustion engines (reducing emissions). This can only be achieved using lightweight construction, and carbon fiber materials play a key role here.



### **Aerospace: SGL focuses on specific applications with high potential**

The aerospace industry is the world's largest customer for carbon fibers. Volume is currently being driven in particular by the Boeing 787 (Dreamliner) and the Airbus A350 XWB. Specially certified fiber composite components are widely used in these applications. As a result, carbon fibers have become well established in lightweight aerospace construction. In 2016 a total of 137 (previous year: 135) Dreamliners and 49 (previous year: 14) A350 were shipped. Our carbon fiber business with the aerospace industry focuses on components and elements for interior cabin fittings, which are not structurally relevant and can thus be manufactured with our cost-effective industrial carbon fibers. This is also a key factor for the modernization of existing models, irrespective of the development of totally new aircraft types, and thus offers long-term, attractive opportunities.

### **Market segment energy**

#### **Lithium-ion batteries: E-mobility is now the dominant driver**

Consumer electronics (notebooks, tablets, smartphones) has traditionally been a key demand driver and still the largest end market for lithium-ion batteries. Sales of these mobile devices are expected to have fallen by around 2% in 2016 according to Gartner. However, demand for lithium-ion batteries is now a key factor in both the automotive industry and also as part of increasing environmentally-friendly electricity generation in the energy sector (stationary storage), and is enjoying dynamic growth. Growth in electric mobility is currently creating the greatest impetus on the market. Tesla and BYD are pioneers, however traditional manufacturers are now increasingly developing electric and hybrid vehicles. Sales of electric vehicles were up by 30% in the USA in 2016. In Western Europe, the number of new registrations for hybrid e-cars increased by 28.8% to 303,506, with sales of pure electric cars increasing by 9.7% to 206,584 units (ACEA). According to IHS Automotive, car production in China increased by a total of 13.6%. In the period through to October alone, around 80% more electric cars (including hybrids) were produced (CAAM).

#### **Wind industry: Installed capacity increased substantially**

Globally, the wind industry continued to grow compared to the record year 2015. Through to the end of June 2016, according to information from the World Wind Energy Association (WWEA), new installations amounted to 21.7 GW and thus slightly higher than the high level of construction in the same period of the previous year (21.6 GW). WWEA is anticipating new installations

for the year as a whole at a good 65 GW (up by around +2.5%). In its current forecast from October, the Global Wind Energy Council (GWEC) is only forecasting 60 GW for 2016 (April forecast: 64 GW). In a multi-year comparison, however, this is very high growth in absolute terms. Wind energy capacity installed worldwide reached an anticipated level of 500 GW (WWEA) at the end of 2016. This would represent an increase of 15%. China, Germany, India and Brazil once again recorded buoyant expansion activities in 2016 while expansion stumbled in the USA and Spain.

### **Solar/polysilicon: Continued capex to expand capacity driven by the PV market**

Polysilicon is processed by two key industries, with at least 90% being processed by the photovoltaic (PV) industry and also in the semiconductor industry. The PV market is continuing its 10-year growth track and in 2016 enjoyed surprisingly strong growth, boosted by non-recurring factors related to subsidies. Demand boomed in China, the largest photovoltaic market. Global new installed PV capacity surged in 2016 to a new record-breaking level ranging from 74 to 77 GW. Depending on how this is defined, growth ranged from 34% (IHS) to 45% (GTM Research). Driven by positive forecasts for dynamic PV growth in future, both the PV and also the capital-intensive polysilicon market regularly operate with excess capacity, which is filled as demand successively increases. Manufacturers further expanded their polysilicon capacity in 2016.

### **Market segment digitization**

#### **Semiconductors/polysilicon: Stagnation as in the previous year**

As was already the case in the previous year, sales revenue in semiconductors, the second end market for polysilicon, stagnated at around USD 335 billion (-0.1%) according to estimates by the industry association Semiconductor Trade Statistics (WSTS). Demand for PCs, tablets and smartphones continued to be subdued.

### **LED: Double-digit market growth - hardly any investments outside China**

A large amount of the electricity produced worldwide is used for lighting. The trend towards saving energy and the technical progress made in LEDs (environmentally friendly, technical advantages, lower costs) is driving demand for LED lamps. Traditional lamps and also energy-saving lamps are increasingly being replaced by LEDs. There is a broad range of applications, from light sources in private homes and also

commercial and industrial areas, through to public lighting. In addition, LEDs are increasingly being used in the automotive sector. According to estimates by the industry experts from TrendForce (LEDinside), the market for LED lighting grew by 15% to around USD30 billion in 2016.

### Market segment chemicals

#### Lower pace of growth, German manufacturers have cut investments

According to estimates by the Verband der Chemischen Industrie (VCI), growth in chemicals and pharmaceuticals production flattened globally in 2016 to 3.5%. The forecast of +4.0% was not met. Demand for chemicals remained low as a result of the weak global industrial production. Production in China increased by 8.5% and by 2.5% in India, however this growth was not as strong as previously. Output grew by 3.0% in South Korea and by 0.5% in Japan. US chemicals production stagnated (previous year: +2.3%). In the EU growth was just 1.5%, after 3.6% in the previous year. The German chemicals sector once again lagged this figure (+0.5%). Without pharmaceuticals (+2.0%), chemicals production in Germany stagnated. Production of basic chemicals increased, supported by the lower oil price and the weaker Euro. Acrylic fibers also benefited from this. In contrast, consumer chemicals production fell substantially once again (-2.5%). Capacity utilization in the German chemicals industry was practically constant in 2016 at 83.7% (previous year: 83.3%), and capex was reduced (Germany -0.3%, rest of world -2.8%). The propensity to invest was also low globally throughout this industry, with investments contracting massively in petrochemicals and the US oil industry in particular.

### Development of key customer industries in discontinued operations

#### Steel industry: Continued pressure from China - no sign of relief for electric steel

According to estimates by the World Steel Association (WSA), demand for steel stabilized at 1.5 billion tons in 2016 (+0.2%). This fell by 3.0% in the previous year. Demand continued to be lower in China (-1.0%), the USA (-1.2%) and also in Russia and Brazil as a result of recession. In spite of this, however, global steel production was ramped up slightly to 1.63 billion tons (+0.8%). As a result, production once again outstripped demand, and capacity utilization continued to be too low totaling 69.3% on average over the year (previous year: 69.7%).

Despite the downturn in domestic demand, lower global demand and plans to reduce overcapacity, China increased its production once again by 1.2% (almost exclusively in blast furnace steel). Chinese exports thus depressed the global market again in 2016. Given this background, electric steel production in other countries remained under pressure.

#### Aluminum production stagnates - hardly any investments outside China

Global primary aluminum production fell in 2016 to 55.3 million tons (-4.5%) according to information from the IAI (International Aluminum Institute) as a result of the weak pace of demand, however there were highly divergent trends in the various regions. According to the Aluminum Association, production in the USA slumped by 48.4%, however output in Canada increased by 11.4% (according to IAI North America is down -9.9% on the whole). In contrast, production increased in Europe (West +0.9%, East +4.0%) and in the Gulf States (+1.8%). Asian countries outside China increased production substantially (+14.7%). More than half of the world's primary aluminum is produced in China. According to IAI, production in China fell by 9.2% after the strong increase in the previous year, however not enough to sustainably relieve the pressure on the market. Global production once again exceeded demand in 2016, despite increased demand. Manufacturers outside China held back on investments.

## Business overview

Disclosures concerning the financial performance of SGL Group are made in part on the basis of the following key financial indicators, which are used to control SGL Group, although they are not derived directly from the consolidated financial statements. The following overview shows how those financial indicators are calculated.

	2016	2015
Operating profit/loss (EBIT)	23.7	6.9
Plus: restructuring expenses	9.8	6.8
Minus: reversal of impairment losses	-12.8	0
<b>Operating profit/loss (EBIT) before non-recurring charges</b>	<b>20.7</b>	<b>13.7</b>
Plus: amortization/depreciation expense on other intangible assets and property, plant and equipment	49.2	50.2
<b>EBITDA before non-recurring charges</b>	<b>69.9</b>	<b>63.9</b>
<b>Capital employed<sup>1)</sup></b>		
Capital employed as of 31.12. of the prior year	1,320.4	1,401.6
Minus: capital employed of PP	-479.7	-628.9
<b>Adjusted capital employed as of 31.12. of the prior year</b>	<b>840.7</b>	<b>772.7</b>
Capital employed as of 31.12. of the financial year	829.9	1,320.4
Minus: capital employed of PP	0.0	-479.7
<b>Adjusted capital employed as of 31.12. of the financial year</b>	<b>829.9</b>	<b>840.7</b>
<b>Average capital employed<sup>2)</sup></b>	<b>835.3</b>	<b>806.7</b>
<b>ROCE<sup>3)</sup><sub>EBIT</sub></b>	<b>2.5%</b>	<b>1.7%</b>
<b>ROCE<sup>4)</sup><sub>EBITDA</sub></b>	<b>8.4%</b>	<b>7.9%</b>

<sup>1)</sup> Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity, inventories, trade receivables less trade payables

<sup>2)</sup> Adjusted capital employed as of 31.12. of the prior year plus adjusted capital employed as of 31.12. of the financial year divided by 2

<sup>3)</sup> EBIT before non-recurring charges to average capital employed

<sup>4)</sup> EBITDA before non-recurring charges to average capital employed

## Strategic realignment characterizes fiscal 2016

In the previous annual report and at our year-end press conference in March 2016, we presented targets that included the business unit PP as continuing operations. After deciding to divest PP and classifying it under discontinued operations for the first time in our interim report as of June 30, 2016, we adjusted our outlook to the new structure of SGL Group for all financial indicators affected by the change. Presenting PP under discontinued operations mainly impacts our forecasted sales revenue, EBIT and EBITDA before non-recurring charges, and both ROCE figures (relating to EBIT and EBITDA).

## Sales revenue 3% below prior year level

At €769.8 million, Group sales revenue was as expected about 3% below the level of the previous year (currency adjusted: minus 2%). Declining sales revenue in the reporting segment GMS was particularly impacted by lower sales especially with the North American oil and gas sector in the chemicals market segment, as well as in the reporting segment CFM by lower sales revenues in the textile fibers market segment due to price effects caused by lower oil prices.

## EBIT and EBITDA before non-recurring charges, ROCE<sub>(EBIT)</sub> and ROCE<sub>(EBITDA)</sub> significantly improved

EBIT before non-recurring charges improved significantly to €20.7 million in the reporting period as forecasted compared with €13.7 million in 2015. This is particularly driven by the continued encouraging trend seen in the reporting segment CFM, which showed an increase in EBIT before non-recurring charges from €11.3 million to €20.1 million. The EBITDA trend in SGL Group's continuing operations was positive, increasing noticeably from €63.9 million to €69.9 million, and the corresponding EBITDA margin also improved accordingly.

## Additional restructuring expenses from right sizing of administrative structures

Restructuring expenses increased from €6.8 million in fiscal year 2015 to a total of €9.8 million in fiscal year 2016. In addition to the measures that were carried out in 2016 in connection with SGL2015, it was also necessary to right size administrative structures to reflect the smaller SGL Group (project CORE) within the context of divesting our graphite electrode business. These measures already required additional restructuring expenses during the year under review. Our goal is to save approximately €25 million by the end of 2018 compared to 2015, which will include both savings in indirect spend and a reduction in headcount.

## SGL 2015 cost savings program successfully completed

By the end of fiscal year 2016, cumulative savings of more than €240 million had already been achieved with SGL2015 (including savings in our discontinued operations PP and AS). As a result, our envisaged savings target of €240 million (compared with 2012) was slightly exceeded.

## Investment volume reduced in 2016 as planned

As projected, capital expenditure for intangible assets and property, plant and equipment decreased significantly during

the year under review to approximately €35 million, down from €44 million in the previous year.

#### **Free cash flow from continuing operations improved but still negative as expected**

Free cash flow from continuing operations improved to minus €48.1 million, compared with minus €99.3 million in the previous year, but remained clearly negative as expected. The negative free cash flow resulted primarily from payments for capital expenditure and interest. The above factors were only partially offset by the improved operating result in fiscal 2016.

#### **Key events impacting business performance**

##### **Sale of graphite electrode business to Showa Denko**

On October 20, 2016, we signed the sale and purchase agreement to sell our graphite electrode (GE) business to Showa Denko (Japan) for an enterprise value of €350 million, which, after deduction of standard debt-like items (mainly pension and restructuring provisions) is expected to result in cash proceeds of at least €200 million. The final proceeds will be determined based on the balance sheet at closing.

The transaction is subject to customary closing conditions, relating in particular to antitrust approvals. Closing is expected by mid 2017. In connection with the valuation of the disposed GE business as of December 31, 2016, at fair value less cost to sell in accordance with IFRS 5, impairment charges of €18.0 million were recognized in the reporting period, which are solely attributable to the anticipated cash outflows of GE due to the continuation of this business until the closing date, including transaction costs.

The cathodes, furnace linings and carbon electrodes (CFL/CE) business, which is also part of the former business unit PP, will be sold separately in 2017. The sales process, which was begun with the legal separation of the business unit PP in 2016, was continued in early 2017. Given the outcome of the GE sale, we are confident that we will achieve more than the book value of the former business unit PP in the aggregated transactions. The financial figures for fiscal year 2016 and the prior year were adjusted for PP (excluding the balance sheet and related note disclosures in the consolidated financial statements). All assets and liabilities of PP as of December 31, 2016, are presented separately in the consolidated balance sheet as "Assets held for sale" or "Liabilities in connection with assets held for sale," excluding certain assets and liabilities relating to the Group's

former production sites in Frankfurt-Griesheim (Germany) and Narni (Italy).

##### **Capital increase**

On December 14, 2016, SGL Carbon SE successfully completed a capital increase by issuing 30 million new shares. Based on the established subscription price of €6.00, the Company's gross offering proceeds amounted to €180 million. The major shareholders of SGL Group – SKion GmbH and BMW AG – participated in the capital increase in accordance with their respective shareholdings. The funds will serve to strengthen the Group's equity, improve its leverage ratio, increase its financial flexibility, and will be used to repay outstanding debt. Primarily as a result of the capital increase, the Company's equity ratio increased to approximately 18% and its leverage ratio improved considerably to 1.35 as of year-end 2016.

The Company plans to use the net offering proceeds of about €173 million from the capital increase – together with the net proceeds from the divestment of the activities of its former Performance Products (PP) reporting segment – for the full repayment of the Company's convertible bond due in 2018, as well as the full early redemption of its corporate bond.

##### **Non-recurring charges from project CORE and agreement to sell Evanston plant**

In order to right size the corporate and administrative structures to a smaller SGL Group following the sale of the entire former business unit PP, we introduced project CORE (COporate REstructuring) in September 2016, with the intention of lowering overall costs by approximately €25 million by the end of 2018 compared to 2015. This will entail both savings in indirect spend and a reduction in headcount in administrative departments. Significant expenses in connection with project CORE, including the reduction in the size of the Board of Management, have been recorded in fiscal 2016 as restructuring expenses.

SGL Group is focusing its carbon fiber production at its plant in Moses Lake (a joint-venture plant with BMW Group in Washington State, USA), and Muir of Ord (Scotland), in order to further increase the efficiency of its production network. Production lines in Muir of Ord have been modernized during the past two years, partly in order to allow for the production of 24k carbon fibers, which up to now were manufactured solely in Evanston (Wyoming, US). Subsequently, SGL Group decided to sell its carbon fiber production plant in Evanston,

which had about 50 employees, to Mitsubishi Rayon Carbon Fibers & Composites Inc., a US subsidiary of Mitsubishi Rayon Corporation (MRC). A corresponding agreement was signed at the end of December 2016. The transaction is expected to close in April 2017. All of the Evanston plant's existing orders and customer accounts will be taken over by other SGL Group units. Reversals of impairments to non-current assets in the amount of €12.8 million were carried out in line with expected net sale proceeds based on the purchase and sale agreement.

For reporting purposes, reversals of impairments and restructuring expenses are all aggregated under the term "non-recurring charges." For full-year 2016, such non-recurring charges totaled income of €3.0 million (2015: expense of €6.8 million), comprising reversals of impairments of €12.8 million and restructuring expenses of €9.8 million as part of project CORE. In the previous year, total restructuring expenses of €6.8 million were incurred, which primarily related to our Bonn2020 concept (€4.4 million).

## Financial performance of the Group

### Income Statement

€m	2016	2015	Change
Sales revenue	769.8	789.5	-2.5%
Gross profit	136.9	140.1	-2.3%
Operating profit/loss (EBIT) before non-recurring charges	20.7	13.7	51.1%
<b>Operating profit/loss (EBIT)</b>	<b>23.7</b>	<b>6.9</b>	<b>&gt; 100%</b>
Financial result	-50.9	-52.3	2.7%
<b>Result from continuing operations before income taxes</b>	<b>-27.2</b>	<b>-45.4</b>	<b>40.1%</b>
Income tax expense	-6.8	-22.1	69.2%
Non-controlling interests	-2.0	-1.7	-17.6%
<b>Consolidated net result - continuing operations</b>	<b>-36.0</b>	<b>-69.2</b>	<b>48.0%</b>
Result from discontinued operations, net of income taxes	-75.7	-225.8	66.5%
<b>Consolidated net result (attributable to the shareholders of the parent company)</b>	<b>-111.7</b>	<b>-295.0</b>	<b>62.1%</b>
Earnings per share, basic and diluted (in €)	-1.19	-3.22	63.0%
Earnings per share continuing operations, basic and diluted (in €)	-0.38	-0.75	49.3%

### Sales development of the reporting segments

The 3% decrease in Group sales revenue year on year (currency adjusted: 2% decrease) can be attributed to the 2% decrease (currency adjusted: 3% decrease) in sales revenue in our reporting segment GMS, which was due to lower demand from energy-related sectors as a result of lower oil prices. In our reporting segment CFM, currency adjusted sales revenue decreased by 1% year on year. This can primarily be attributed to our acrylic fiber business, which recorded lower sales despite higher volumes, owing to lower raw material prices (acrylonitrile) as a result of lower oil prices. GMS' share in total Group sales increased slightly to about 58% (2015: about 57%).



**Sales revenue by segment**

€m	2016	Interest	2015	Interest	Change
CFM	317.4	41.2%	327.3	41.5%	–3.0%
GMS	444.1	57.7%	453.5	57.4%	–2.1%
T&I and Corporate	8.3	1.1%	8.7	1.1%	–4.6%
<b>Total continuing operations</b>	<b>769.8</b>	<b>100.0%</b>	<b>789.5</b>	<b>100.0%</b>	<b>–2.5%</b>
Discontinued operations (PP)	419.7		533.4		–21.3%
<b>Total</b>	<b>1,189.5</b>		<b>1,322.9</b>		<b>–10.1%</b>

Overall, the sales trend of SGL Group was negatively influenced by lower prices, particularly in our reporting segment CFM, to a total amount of €24 million. In contrast, higher volumes increased Group sales by a total of €5 million. As the average

exchange rate of the US dollar remained almost unchanged, no significant currency effects impacted the sales trend.

Please see pages 61–63 for details on the financial performance of our reporting segments.

**Sales revenue by destination**

€m	2016	Interest	2015	Interest	Change
Germany	206.1	26.8%	226.2	28.7%	–8.9%
Europe excluding Germany	170.5	22.1%	176.9	22.4%	–3.6%
North America	146.2	19.0%	162.5	20.6%	–10.0%
Asia	205.4	26.7%	180.0	22.7%	+ 14.1%
Rest of world <sup>1)</sup>	41.6	5.4%	43.9	5.6%	–5.2%
<b>Total</b>	<b>769.8</b>	<b>100.0%</b>	<b>789.5</b>	<b>100.0%</b>	<b>–2.5%</b>

<sup>1)</sup> Latin America, Africa, Australia

**Sales revenue by region: Europe remains largest sales market**

SGL Group's business activities continued to focus on Europe (€376.6 million; share in sales: 49%), in which Germany was the largest individual market with revenue of €206.1 million, equating to a 27% share in sales. Asia continues to be the Group's second-most important sales region, with the region's share in sales increasing markedly to 27% (2015: 23%). Sales in the North American region decreased noticeably year on year, with its share in Group sales decreasing to 19% (2015: 21%).

Weaker business in energy-related sectors affecting GMS caused the decrease in North America. The very encouraging sales trend seen in Asia was the result of an increase in sales to the lithium-ion battery and photovoltaic industries in our reporting segment GMS. The decrease in sales in Germany was caused by lower sales to the automotive industry in our reporting segment CFM.

**Sales revenue by origin**

€m	2016	Interest	2015	Interest	Change
Germany	319.0	41.4%	305.1	38.6%	+ 4.6%
Europe excluding Germany	252.9	32.9%	265.2	33.6%	–4.6%
North America	161.5	21.0%	170.1	21.6%	–5.1%
Asia	36.4	4.7%	49.1	6.2%	–25.9%
<b>Total</b>	<b>769.8</b>	<b>100.0%</b>	<b>789.5</b>	<b>100.0%</b>	<b>–2.5%</b>

### New order development

The order intake situation developed positively in both business units at the end of 2016. All in all, the combined order level in both business units at the end of 2016 was above that of the prior year.

The order intake trend seen in our reporting segment CFM continued to be positive for all market segments in general. The sales trend for acrylic fibers at the beginning of 2017 improved in line with the development of oil prices. In our reporting segment GMS, we recorded a slight decrease in order intake during the first half of 2016, but the situation improved somewhat by the end of the year. The reasons for this were the increasing need for graphite anode material in electric mobility, greater demand from the solar sector, and a slight upward trend in industrial production. We are also seeing a similar development in the chemical industry.

### Operating profit/loss (EBIT) before non-recurring charges increases to €21 million

€m	2016	2015	Change
Sales revenue	769.8	789.5	-2.5%
Cost of sales	-632.9	-649.4	2.5%
<b>Gross profit</b>	<b>136.9</b>	<b>140.1</b>	<b>-2.3%</b>
Selling expenses	-78.9	-75.3	-4.8%
Research and development costs	-30.3	-29.7	-2.0%
General and administrative expenses	-47.4	-45.4	-4.4%
Other operating income/expense	33.3	23.5	41.7%
Result from investments accounted for At-Equity	7.1	0.5	> 100%
<b>Operating profit/loss (EBIT) before non-recurring charges</b>	<b>20.7</b>	<b>13.7</b>	<b>51.1%</b>
Restructuring expenses	-9.8	-6.8	44.1%
Reversal of impairment losses	12.8	0.0	-
<b>Operating profit/loss (EBIT)</b>	<b>23.7</b>	<b>6.9</b>	<b>&gt; 100%</b>

Sales revenue from SGL Group's continuing operations decreased by €19.7 million or 2.5% year on year. At the same time, however, the cost of sales also fell by 2.5% year on year. Despite tariff increases included in salary and wage costs, the personnel expenses included in the cost of sales were kept constant overall due to the lower number of employees.

Accordingly, gross profit amounted to €136.9 million in fiscal 2016 (2015: €140.1 million), while the gross margin remained more or less unchanged at 17.8% (2015: 17.7%).

Unlike sales revenue, however, other functional costs (selling expenses, research and development expenses, and general and administrative expenses) increased by 4.1% to €156.6 million year on year (2015: €150.4 million).

### More than proportional increase in selling expenses

Selling expenses rose by 4.8% (€3.6 million) to €78.95 million in 2016 (2015: €75.3 million), increasing more than proportionately to the decrease in sales revenue. The main reasons for the increase were higher freight costs and a write-down on a customer receivable in our reporting segment GMS.

### R&D activities intensified with new Lightweight and Application Center

Our R&D activities are focused on developing new types of carbon fibers for the aviation industry, thermoplastic carbon fiber composites, and components for future energy systems. Research and development costs increased as a result of the construction of a new Lightweight and Application Center (LAC) in our reporting segment CFM, and amounted to €30.3 million (2015: €29.7 million). These costs continued to equate to roughly 3.9% of sales (2015: 3.8%).

### General and administrative expenses increase slightly despite savings

General and administrative expenses increased by €2.0 million year on year, from €45.4 million in 2015 to €47.4 million in 2016. Higher IT costs and external services were the reasons for the increase, as well as expenses for management incentive plans. As expected, no significant savings have been generated yet from the new project CORE (SGL2015 savings in 2015: €7 million).

### Other operating income and expenses

The net amount of other operating income and expenses that cannot be attributed to functional costs was plus €33.3 million in 2016 (2015: plus €23.5 million). Other income in 2016 included compensation of €14.5 million from customers with minimum purchasing requirements (2015: €18.7 million). The hedging of foreign currency positions resulted in a net expense of €2.3 million in fiscal year 2016 (2015: expense of €3.3 million). The figure for the year under review also comprised cost charges to joint ventures of €7.5 million (2015: €8.7 million), income from

the sale of fixed assets of €4.2 million (2015: €5.9 million), income from government grants for projects of €3.7 million (2015: €3.4 million), and insurance compensations of €0.3 million (2015: €2.7 million).

### Result from investments accounted for At-Equity improves significantly again

The result from investments accounted for At-Equity improved significantly again during 2016, increasing to €7.1 million, from €0.5 million in 2015. A considerable reduction in losses with Automotive Composites (Benteler SGL) contributed to that improvement in particular. The business performance of Ceramic Brake Discs (Brembo SGL) continued to be positive, but in fact, all investments accounted for At-Equity continued to improve their results and made a positive contribution to Group EBIT.

€m	2016	2015	Change
Sales revenue of investments accounted for At-Equity <sup>1)</sup>	261.4	246.5	6.0%

<sup>1)</sup> Aggregated, unconsolidated 100% values for all investments accounted for At-Equity

Since fiscal year 2016, the aggregated, unconsolidated sales revenue from our investments accounted for At-Equity relate exclusively to our reporting segment CFM, amounting to €261.4 million in the full year 2016 (2015: €245.9 million; 100%-aggregated values of each of the companies). Those revenues are not included in the consolidated sales revenue of SGL Group.

### Restructuring expenses (CORE)

Restructuring expenses totaled €9.8 million in fiscal 2016 (2015: €6.8 million). These expenses were incurred mainly in connection with project CORE (COrporate REstructuring), with the intention of saving an additional €25 million by the end of 2018 compared to 2015. This will entail both savings in indirect spend and a further reduction in headcount.

In fiscal year 2015, restructuring expenses were primarily incurred as part of our Bonn2020 strategy. Bonn2020 aims to implement cost savings initiatives and to develop a future strategy for the site. Measures were developed in collaboration with employee representatives, leading to restructuring expenses of €4.4 million.

Once again in 2016, we were able to generate significant savings from our SGL2015 initiative, which has been in place since 2013. Combined with our SGL Excellence activities, we realized total savings of €41 million (2015: €45 million) by optimizing our processes and sites. Consequently, we have managed to reduce our cost base by a total of more than €240 million compared with 2012.

### Reversal of impairment losses

Reversal of impairment losses in fiscal 2016 solely comprise reversal of impairments to non-current assets in the amount of €12.8 million in our reporting segment CFM relating to the carbon fiber plant in Evanston (USA), which is presented as held for sale. For more details, please refer to **Note 7** of the notes to the consolidated financial statements.

### Operating profit/loss (EBIT) before non-recurring charges increases to €21 million

EBIT before non-recurring charges increased to €20.7 million in 2016, up from €13.7 million in the previous year. The corresponding EBIT margin increased from 1.7% in 2015 to 2.7% in the year under review. After taking into account non-recurring income of €3.0 million in 2016 and non-recurring charges of €6.8 million in 2015, operating profit for fiscal year 2016 amounted to €23.7 million, up from €6.9 million in 2015.

€m	2016	2015	Change
<b>Operating profit/loss (EBIT)</b>	<b>23.7</b>	<b>6.9</b>	<b>&gt; 100%</b>
Financial result	-50.9	-52.3	2.7%
<b>Result from continuing operations before income taxes</b>	<b>-27.2</b>	<b>-45.4</b>	<b>40.1%</b>
Income tax expense	-6.8	-22.1	69.2%
Non-controlling interests	-2.0	-1.7	-17.6%
<b>Result from continuing operations</b>	<b>-36.0</b>	<b>-69.2</b>	<b>48.0%</b>
Result from discontinued operations, net of income taxes	-75.7	-225.8	66.5%
<b>Consolidated net result (attributable to the shareholders of the parent company)</b>	<b>-111.7</b>	<b>-295.0</b>	<b>62.1%</b>
Earnings per share, basic and diluted (in €)	-1.19	-3.22	63.0%
Earnings per share continuing operations, basic and diluted (in €)	-0.38	-0.75	49.3%

### Decrease in financing costs due to non-recurring charges in the previous year

€m	2016	2015	Change
Interest income	1.1	0.7	57.1%
Interest expense	-32.2	-29.7	-8.4%
Imputed interest convertible bonds (non-cash)	-8.1	-9.6	15.6%
Interest expense on pensions	-8.0	-6.9	-15.9%
<b>Interest expense, net</b>	<b>-47.2</b>	<b>-45.5</b>	<b>-3.7%</b>
Amortization of refinancing costs (non-cash)	-4.4	-3.2	-37.5%
Foreign currency valuation of Group loans (non-cash)	1.7	0.4	>100%
Other financial income/expense	-1.0	-4.0	75.0%
<b>Other financing result</b>	<b>-3.7</b>	<b>-6.8</b>	<b>45.6%</b>
<b>Financial result</b>	<b>-50.9</b>	<b>-52.3</b>	<b>2.7%</b>

Due to higher average liquidity and despite persistently low interest levels, interest income increased slightly to €1.1 million in 2016 (2015: €0.7 million).

Interest expense in particular reflects the cash interest component (coupon) of the corporate bond (interest rate: 4.875%) and the two convertible bonds (2015/2020: interest rate of 3.5%; 2012/2018: interest rate of 2.75%). The interest on investment projects capitalized in accordance with IFRS only decreased interest expense by €0.1 million in 2016 (2015: €1.1 million), thereby contributing to the increase in interest expense. At €32.2 million, cash interest expense increased overall compared with the previous year (2015: €29.7 million), due to the €0.7 million increase in interest expense for the convertible bond 2015/2020 issued in 2015 (3.5% coupon; nominal volume: €167 million), which replaced the 2009/2016 convertible bond (3.5% coupon; outstanding volume: €135 million), as well as due to lower capitalization of interest on borrowings in connection with non-current investment projects. The average cash interest rate was 3.7% p.a. in 2016 (2015: 3.6% p.a.).

The non-cash imputed interest on the convertible bonds is established by approximation of the below-market coupon with the comparable market interest rate at the time the convertible bonds are issued. The net interest expense in fiscal 2015 was still affected by the higher imputed interest on the 2009/2016 convertible bond. Due to the increase in the present value of defined benefit obligations, interest expense on pensions in the year under review of €8.0 million was higher

than the previous year (2015: interest expense of €6.9 million), despite the decrease in discount rates. All in all, net interest expense increased by 3.7% to €47.2 million as a result of the effects mentioned above, compared with the prior-year figure of minus €45.5 million.

In addition to the non-cash expense for amortization of refinancing costs, the other financing result includes the effects of market valuations of interest rate and currency hedges for Group loans, currency translation income and expenses arising from intercompany and external local loans, and other financial income and expenses. Overall, the other financing result amounted to minus €3.7 million in 2016 (2015: minus €6.8 million). The amortization of accrued refinancing costs resulted in an expense of €4.4 million during the year under review (2015: €3.2 million). The amortization of refinancing costs in fiscal 2016 includes the fully expensed transaction costs of €0.9 million, that were incurred in connection with the syndicated credit line that was replaced in December 2016. Foreign exchange gains and losses from financing our subsidiaries resulted in income of €1.7 million, compared with income of €0.4 million in 2015. Other financial expense amounted to €1.0 million in fiscal year 2016 (2015: expense of €4.0 million). In the previous year, this item primarily included the costs associated with the early redemption of the 2009/2016 convertible bond (€4.0 million).

The net financing result thus improved by 2.7% in the reporting period to minus €50.9 million (2015: minus €52.3 million).

### Group tax expense at €7 million

The income tax expense amounted to €6.8 million in the reporting period, down significantly from the tax expense for the prior year of €22.1 million. The tax expense in fiscal 2015 was the result of additional write-downs on deferred tax assets relating to loss carryforwards in the US due to reduced earnings expectations in the relevant three-year forecast horizon. In the year under review, tax payments amounted to €5.2 million (2015: €3.9 million).

For more information, please refer to **Note 10** of the notes to the consolidated financial statements.

### Increase in non-controlling interests

Non-controlling interests (minority interests) comprise our minority partners' share in the consolidated net result (including impairment losses). Within our Group, minority

shareholders relate in particular to SGL Kämpfers, SGL A&R Immobiliengesellschaft in Lemwerder (Germany), and SGL Tokai Process Technology Pte. Ltd. Altogether, our minority interests amounted to €2.0 million (2015: €1.7 million).

### Discontinued operations impacted considerably by divestment of graphite electrode business

The loss from discontinued operations includes income and expenses from the discontinued business unit Performance Products (PP) amounting to a net expense of €31.3 million, and from Aerostructures (HITCO) amounting to a net expense of €1.2 million. The loss from the discontinued business unit PP continued to be characterized by the significant drop in prices for graphite electrodes, although delivery volumes did increase slightly. In contrast, business with cathodes, furnace linings and carbon electrodes continued to be good as expected. The result from the discontinued business unit PP was also affected by impairment charges of €18.0 million, which resulted from the valuations of the assets of the GE business at fair value less cost to sell, as well as a tax expense of €25.2 million primarily resulting from deferred tax effects from the legal separation of the activities of the business unit PP. During the period under review, follow-up disposal costs of €1.2 million were incurred in Aerostructures (AS). The loss from discontinued operations of €225.8 million recognized in fiscal 2015 comprised the following: impairment to PP fixed assets of €78.9 million, PP restructuring expenses of €73.0 million, the PP net income for the year after tax of €22.2 million, the AS write-down of €65.5 million on anticipated disposal proceeds, and the AS net loss for the year after tax of €30.6 million.

### Consolidated net loss at €112 million due to discontinued operations

Including non-controlling interests, the consolidated net loss for the year attributable to shareholders of the parent company amounted to €111.7 million, compared with a consolidated net loss of €295.0 million in 2015. Based on the average number of shares of 93.7 million (2015: 91.7 million shares), basic earnings per share increased to a loss per share of €1.19 (2015: loss per share of €3.22). No diluted earnings per share were calculated due to the loss situation in fiscal years 2016 and 2015.

### Overview of financial performance

€m	2016	2015
Sales revenue	769.8	789.5
EBITDA before non-recurring charges	69.9	63.9
Operating profit/loss (EBIT) before non-recurring charges	20.7	13.7
<i>in % of sales revenue</i>	<i>2.7%</i>	<i>1.7%</i>
Consolidated net result (attributable to the shareholders of the parent company)	-111.7	-295.0
<i>in % of sales revenue</i>	<i>-14.5%</i>	<i>-37.4%</i>
Earnings per share, basic (in €)	-1.19	-3.22

### Net result of SGL Carbon SE

In 2016, SGL Carbon SE, the parent company of SGL Group, reported a net loss for the year of €309.1 million (2015: net loss of €396.2 million) in accordance with the German Commercial Code (HGB). The high loss was the result of restructuring expenses and transferred losses from subsidiaries caused by high write-downs on the carrying amount of investments. The net loss for the year and the accumulated loss of €747.6 million from 2015 resulted in a total accumulated loss of €1,056.8 million in fiscal 2016.



## Financial performance of the reporting segments

### Composites – Fibers & Materials (CFM): EBIT before non-recurring charges almost doubles

€m	2016	2015	Change
Sales revenue	317.4	327.3	–3.0%
EBITDA before non-recurring charges <sup>1) 2)</sup>	41.3	32.0	29.1%
Operating profit/loss (EBIT) before non-recurring charges <sup>1)</sup>	20.1	11.3	77.9%
Operating profit/loss (EBIT) <sup>1)</sup>	31.8	10.8	> 100%
Return on sales (EBIT-margin) <sup>3)</sup>	6.3%	3.5%	–
Payments to purchase intangible assets and property, plant and equipment	10.8	26.6	–59.4%
Cash Generation <sup>1) 4)</sup>	13.3	–23.4	> 100%
Depreciation/amortization expense	21.2	20.7	2.4%
Return on capital employed (ROCE <sub>EBITDA</sub> ) <sup>1) 5)</sup>	10.9%	9.2%	–
Headcount (Year end)	1,183	1,148	3.0%

<sup>1)</sup> Prior year figures adjusted for the reclassification of the result from investments accounted for at-equity as part of the operating profit/loss (EBIT)

<sup>2)</sup> Non-recurring charges include reversal of impairment of €12.8 million restructuring expenses of €1.1 million and €0.5 million in 2016 and 2015, respectively

<sup>3)</sup> EBIT before non-recurring charges to sales revenue

<sup>4)</sup> EBITDA less payments to purchase intangible assets and property, plant and equipment as well as changes in working capital

<sup>5)</sup> EBITDA before non-recurring charges to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

Sales revenue in our reporting segment CFM decreased by 3% (currency adjusted: decrease of 1%) in the past year to €317.4 million (2015: €327.3 million). This decrease was primarily caused by the 17% downturn in revenues in the textile fibers market segment, as the sales price is closely interlinked to the purchasing price for the raw material acrylonitrile, which in turn depends on the price of crude oil. In contrast, sales revenue with the aerospace industry enjoyed strong growth, in particular as a result of one-time high invoicing in HITCO's materials business in the first quarter. Revenues with the wind energy and automotive industries as well as industrial applications remained practically at the prior year's level.

Revenues for our companies accounted for at equity increased by 6% in the year under review to €261.4 million (previous year: €245.9 million; each 100% of the values of the companies) and are not included in the consolidated group revenues. The

primary reason for this development was the increased demand for our carbon ceramic brake discs.

Our joint venture with Brembo for the production of carbon ceramic brake discs continued to increase its deliveries to a record level in fiscal 2016, leading to sales growth of 7.8% compared with the prior year period. Production in Meitingen (Germany) and Stezzano (Italy) require constant increases in automation and investments in capacity in order to be able to meet the continued high demand. The operating profit realized in fiscal 2015 increased further during the course of 2016.

In our joint venture with Benteler, a continued increase in the quantities sold was seen in series production for structural components and leaf springs made from fiber-reinforced plastics. In contrast, several smaller contracts for series production expired, meaning that overall sales were lower than in the prior-year period. Despite the lower revenues, activities to enhance efficiency caused further improvements in the operating result, however this continued to be depressed by start-up costs.

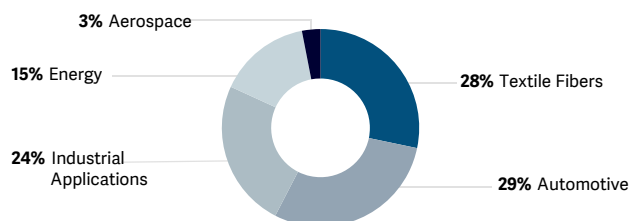
As forecast, EBIT before non-recurring charges in the reporting segment CFM once again improved significantly to €20.1 million in the reporting period, up from €11.3 million in the previous year. Return on sales therefore totaled 6.3% after 3.5% in the previous year. Business with the automotive industry contributed to the substantial improvement in earnings for this reporting segment, in particular as a result of the improved productivity at SGL ACF, as did the higher contributions to earnings from the companies accounted for at equity and also ramping up production for new products. The market segment for industrial applications was also able to lift its earnings thanks to the substantial improvement in capacity utilization at our carbon fiber plants and business with the aerospace industry benefited from the high level of invoicing in HITCO's materials business. In contrast, earnings in the textile fibers market segment deteriorated as one line was converted to our PAN precursor carbon fiber raw material, and also due to higher energy costs. Earnings in the market segments for wind energy remained practically on a par with the previous year.

Cost savings from the SGL Excellence Initiative at CFM amounted to €2.5 million in the past year after €2.1 million in the previous year.

Positive extraordinary factors of €11.7 million were also recorded in the year under review, mostly due to the reversal of impairment in the amount of €12.8 million for the carrying amounts of the production facilities in Evanston (USA), which had been written off in 2015, and after a contract was concluded for its sale in December 2016. In contrast, in 2015 a low level of restructuring expenses was included in the amount of €0.5 million. Overall, EBIT after non-recurring charges thus amounted to €31.8 million in the CFM reporting segment in fiscal 2016 compared to €10.8 million in the previous year.

As planned, we scaled back capital expenditure from €26.6 million in 2015 to €10.8 million in the reporting year. This was due in particular to the completion of the carbon fiber and fabric capacity expansion at SGL ACF, our joint venture with the BMW Group. Investments focused in particular on activities to convert a textile fiber line for future precursor production.

#### Sales revenue by customer industry, 2016 (CFM)



#### Graphite Materials & Systems (GMS): Downturn in North American industrial business due to oil price offsets positive development in battery business

€m	2016	2015	Change
Sales revenue	444.1	453.5	-2.1%
EBITDA before non-recurring charges <sup>1)</sup>	49.8	56.6	-12.0%
Operating profit/loss (EBIT) before non-recurring charges <sup>1)</sup>	27.8	34.1	-18.5%
Operating profit/loss (EBIT)	26.2	28.9	-9.3%
Return on sales (EBIT-margin) <sup>2)</sup>	6.3%	7.5%	-
Payments to purchase intangible assets and property, plant and equipment	15.0	15.2	-1.3%
Cash Generation <sup>1) 4)</sup>	39.0	27.0	44.4%
Depreciation/amortization expense	22.0	22.5	-2.2%
Return on capital employed (ROCE <sub>EBITDA</sub> ) <sup>1) 5)</sup>	12.7%	14.5%	-
Headcount (Year end)	2,496	2,504	-0.3%

<sup>1)</sup> Non-recurring charges include restructuring expenses of €1.6 million and €5.2 million in 2016 and 2015, respectively

<sup>2)</sup> EBIT before non-recurring charges to sales revenue

<sup>3)</sup> EBITDA less payments to purchase intangible assets and property, plant and equipment as well as changes in working capital

<sup>4)</sup> EBITDA before non-recurring charges to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

<sup>5)</sup> EBITDA before non-recurring charges to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

During the period under review sales revenue in the GMS reporting segment fell slightly by 2% to €444.1 million compared to €453.3 million in the prior year (currency adjusted minus 3%). The market segments showed varied trends. Business with anode materials for lithium-ion batteries (batteries and other energy market segment) grew by a favorable 10%. In addition, we were also able to increase our revenues in the Solar and Semiconductor market segments. In contrast, the Chemicals market segment suffered with sales down 13%, in particular as a result of the downturn in production activity in the US oil and gas business. Sales revenue in the other market segments - LED, automotive & transport as well as industrial applications remained at approximately the previous year's level.

EBIT before non-recurring charges fell by 18% in fiscal 2016 to €27.8 million (previous year: €34.1 million), in particular due to the substantial reduction in activities in the North American industrial business due to the oil price. As a result, the EBIT

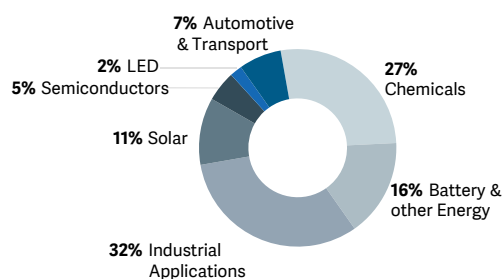
margin (before non-recurring charges) decreased to 6.3%, putting it slightly below the level of the prior-year period (7.5%).

Cost savings from our SGL Excellence Initiative totaled €10.5 million in the year under review (previous year: €8.2 million).

Only a low level of restructuring expenses of €1.6 million were incurred in the reporting segment GMS in fiscal 2016. €5.2 million was spent in the previous year – primarily due to activities to optimize the locations in Germany. Consequently, EBIT after non-recurring charges amounted to €26.2 million in fiscal 2016 (previous year: €28.9 million).

Capital expenditure totaled €15.0 million and was at the same level as the previous year (€15.2 million) and focused on replacement and maintenance activities as well as smaller projects to increase capacity for the automotive & transport, LED, industrial applications and battery & other energy market segments (anode material for lithium-ion batteries).

**Sales revenue by customer industry, 2016 (GMS)**



### **T&I and Corporate: Further improvement**

€m	2016	2015	Change
Sales revenue	8.3	8.7	-4.6%
EBITDA before non-recurring charges <sup>1)</sup>	-21.2	-24.7	14.2%
Operating profit/loss (EBIT) before non-recurring charges <sup>1)</sup>	-27.2	-31.7	14.2%
Operating profit/loss (EBIT)	-34.3	-32.8	-4.6%
Headcount (Year end)	263	433	-39.3%

<sup>1)</sup> Non-recurring charges include restructuring expenses of €7.1 million and €1.1 million in 2016 and 2015, respectively

EBIT before non-recurring charges improved significantly to minus €27.2 million in the reporting segment T&I and Corporate compared with minus €31.7 million in the previous

year, in particular as a result of a one-time positive effect from a land sale in Malaysia. Adjusting for this effect, EBIT was roughly at the previous year's level. Higher IT and consulting costs as well as higher expenses for management incentive plans were compensated by initial cost savings from project CORE. Expenses for Group research Technology & Innovation (T&I) were slightly lower than in the previous year.

Non-recurring items amounted to minus €7.1 million in the period under review (2015: minus €1.1 million). These mainly comprised expenses in connection with project CORE including the changes in the Board of Management as of December 31, 2016. EBIT after non-recurring charges thus deteriorated slightly to minus €34.3 million compared to minus €33.5 million in the previous year.

## **Financial position**

### **Financial management**

SGL Group's financial management is conducted centrally in order to manage liquidity, interest rate and currency risk in the best possible way, to ensure compliance with lending provisions, to optimize financing costs, and to utilize economies of scale. Financial management activities primarily cover cash and liquidity management, Group financing via bank and capital market products, financing activities to supply funds to Group companies, customer credit management, and the management of interest rate and currency risk.

The primary objective of financial management at SGL Group is to maintain the Group's financial strength and to ensure solvency at all times. Group Treasury, a centralized function at SGL Carbon SE, the Group holding company, governs worldwide financial management activities and is supported in its activities by employees at our local subsidiaries.

### **Liquidity management**

Operational liquidity management is centrally coordinated and managed in close cooperation with our subsidiaries on a global basis. Insofar as permitted by legal and economic frameworks, the major portion of cash in readily convertible currencies is concentrated at SGL Carbon SE, the Group holding company, by means of global cash pooling structures, and is used to balance intercompany liquidity needs. The majority of internal trading and clearing transactions is automated and settled via a central in-house cash center without the need for external bank accounts. The Group holding company acts as a clearing

center for the Group companies participating in this process. As a result of the carve-out of PP activities, the number of Group companies that participate in the centralized in-house cash center increased to 43 at the end of 2016, up from 30 in fiscal year 2015. Weekly settlement of supplier invoices is also handled through the global in-house cash center insofar as permissible, thus allowing central management of a large portion of the Group's global cash outflows. In fiscal year 2016, an average of approximately 77% of global supplier payments were handled centrally (2015: 77%). SGL Group constantly endeavors to increase the efficiency and transparency of payment transactions by maintaining a high degree of standardization and implementing continuous improvement processes. In order to safeguard the standards we have attained, we work with monthly KPIs (key performance indicators), which allow us to constantly measure the degree of payment transaction standardization we have achieved and the related average costs, as well as to continuously improve our system.

In addition to annual finance planning, which generally covers a period of five years, current liquidity planning is undertaken for short intervals of one day to one year. By combining finance and liquidity planning as well as by using the available liquidity, unused credit lines, and other financing options, we ensure that SGL Group has adequate liquidity reserves at all times. Those reserves allow SGL Group to respond flexibly to cash flow fluctuations during the year and to meet all payment obligations on time at all times.

Our financing agreements include stipulations regarding the investment of available cash funds. The stipulations form the basis for all cash investments. Another area we focus on with regard to the investment of cash funds is ensuring sufficient liquidity to cover cash flow fluctuations during the fiscal year and ensuring the financial stability and systemic relevance of our business partners. When investing funds, we also take the performance and success of collaboration with our business partners in recent years into account (core bank concept).

### Group financing

Group financing is geared to the strategic business plans of our operating business units as well as to central Group planning. Various sources of financing and financing options are examined on a regular basis to ensure that the Group's financing requirements are covered at all times with due consideration to the Group's financing objectives. We

considerably strengthened our liquidity position by placing a rights issue in December 2016, which increased our total cash and cash equivalents for continuing and discontinued operations to €333 million by year-end 2016, and gives us a more than sufficient liquidity reserve for fiscal year 2017.

In past years, selected properties, IT equipment, and vehicles were financed in part via operating leases. Further details can be found in **Note 26** of the notes to the consolidated financial statements.

### Market price risks

In order to limit financial market price risks, particularly currency and interest rate risk, SGL Group utilizes both primary and derivative financial instruments. Derivative financial instruments are used exclusively to mitigate and manage financial risk. In the context of foreign currency management, SGL Group concentrates on hedging transaction risks from future expected operating cash flows. In doing so, we consider the following major risk exposures:

- US dollar – euro
- US dollar – Japanese yen
- US dollar – British pound
- Japanese yen – euro
- Euro – Polish zloty

Currency forwards and standardized (plain vanilla) options are the instruments used by the Group to hedge currency risk. Interest rate hedging is not necessary at present given our use of mostly fixed-interest financing instruments, for which reason no interest rate hedges were entered into in fiscal year 2016. The anticipated risk from currency fluctuations has been adequately hedged for fiscal year 2017. Internal guidelines specify the conditions, responsibilities, and controls required for the use of derivatives. Further details on hedging instruments and the effects of hedging can be found in **Note 28** of the notes to the consolidated financial statements.

### Debt financing analysis

SGL Group's financing is primarily composed of a corporate bond in the amount of €250 million (coupon of 4.875%, maturing in 2021), a convertible bond in the amount of €240 million (coupon of 2.75%, maturing in 2018), and the convertible bond issued in fiscal year 2015 in the amount of €167 million (coupon of 3.50%, maturing in 2020). In addition, the Group has a credit facility in the amount of €50 million,

which remains undrawn as of the reporting date. The facility runs until the end of 2019. In the event the corporate bond is repaid early, the amount available under the syndicated credit line would increase to €150 million, and the increase of €100 million would be available to repay the convertible bond due in 2018.

All in all, undrawn credit facilities amounting to €56.1 million (2015: €206.6 million) were available to SGL Group at year-end 2016 to cover working capital and capital expenditure. Cash funds for continuing and discontinued operations totaled €333.0 million as of December 31, 2016 (2015: €250.8 million).

Since 2004, SGL Group has commissioned rating agencies Moody's and Standard & Poor's (S&P) to prepare issuer ratings, which support both private and institutional investors in evaluating the Group's credit quality. At present, SGL Group has ratings of CAA1 (Moody's) and CCC+ (Standard & Poor's), both with a stable outlook. The corporate bond issued by SGL Group was awarded a rating of B by S&P due to its top-ranking collateral structure (2015: BB-). Moody's continues to rate our corporate bond at B3 (2015: B1).

The rating agencies have published the following corporate ratings for SGL Group:

Rating agency	Rating	Date of rating
Moody's	CAA1 (outlook: stable)	May 16
Standard & Poor's	CCC+ (outlook: stable)	July 16

The rating agencies have published the following ratings for the corporate bond:

#### Corporate bond

Rating agency	Rating	Date of rating
Moody's	B3	May 16
Standard & Poor's	B	July 16

With the credit ratings issued by the rating agencies, SGL Group continues to have access to the capital markets should it decide to issue any further capital market instruments.

#### Non-recurring charges result in high negative free cash flow

The cash flow statement shows the change in cash and cash equivalents of SGL Group in the reporting period and is composed of cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities. Free cash flow is defined as cash flow from operating activities less cash flow from investing activities. The cash and cash equivalents shown on the cash flow statement correspond to "cash and cash equivalents" as reported on the balance sheet. Cash funds further include short-term time deposits with original terms of up to twelve months (2016: €5.0 million; 2015: €14.0 million). The cash flow statements for the reporting period and the previous year have been adjusted to reflect reclassification of the Performance Products (PP) and Aerostructures (AS) businesses as discontinued operations.

Free cash flow from continuing operations improved to minus €48.1 million after minus €99.3 million in the previous year. Together with the net cash provided by the operating activities of discontinued operations in the amount of €1.8 million (2015: €26.7 million) and the net cash used in the investing activities of discontinued operations in the amount of €34.7 million (2015: €53.5 million), the total free cash flow amounted to minus €81.0 million, after minus €126.1 million in 2015.



**Liquidity and capital resources**

€m	2016	2015	Change
<b>Cash flow from operating activities</b>			
Result from continuing operations before income taxes	-27.2	-45.4	40.1%
Non-recurring charges	-3.0	6.8	>-100%
Depreciation/amortization expense	49.2	50.2	-2.0%
Changes in working capital	-17.3	-22.1	21.7%
Payments resulting from the early settlement of US dollar hedges	0.0	-34.5	100.0%
Income taxes paid	-5.2	-3.9	-33.3%
Miscellaneous items	-12.7	-17.5	27.4%
<b>Cash flow from operating activities - continuing operations</b>	<b>-16.2</b>	<b>-66.4</b>	<b>75.6%</b>
<b>Cash flow from investing activities</b>			
Payments to purchase intangible assets and property, plant and equipment	-34.6	-44.4	22.1%
Dividend payments and capital repayments from investments accounted for At-Equity	9.0	12.0	-25.0%
Payments for capital contributions concerning investments accounted for At-Equity and investments in other financial assets	-7.0	-4.2	-66.7%
Proceeds from the sale of intangible assets and property, plant & equipment	0.7	3.7	-81.1%
<b>Cash flow from investing activities - continuing operations</b>	<b>-31.9</b>	<b>-32.9</b>	<b>3.0%</b>
<b>Free Cash flow<sup>1)</sup></b>	<b>-48.1</b>	<b>-99.3</b>	<b>51.6%</b>
Changes in time deposits	9.0	26.5	-66.0%
Cash flow from financing activities - continuing operations	163.2	28.7	>100%
Free cash flow from discontinued operations <sup>2)</sup>	-32.9	-26.8	-22.8%
Effect of foreign exchange rate changes and other changes	0.0	0.7	-100.0%
Cash and cash equivalents at beginning of year	236.8	307.0	-22.9%
<b>Cash and cash equivalents at end of year - continuing and discontinued operations</b>	<b>328.0</b>	<b>236.8</b>	<b>38.5%</b>
Time deposits at end of year	5.0	14.0	-64.3%
Total liquidity	<b>333.0</b>	<b>250.8</b>	<b>32.8%</b>
<b>Net change in total liquidity - continuing and discontinued operations</b>	<b>82.2</b>	<b>-96.7</b>	<b>&gt;100%</b>

<sup>1)</sup> Cash flow from operating activities - continuing operations, minus cash flow from investing activities - continuing operations

<sup>2)</sup> Cash flow from operating activities - discontinued operations, minus cash flow from investing activities - discontinued operations

### Net cash used in continuing operating activities amounted to €16 million

In fiscal 2016, net cash used in operating activities (continuing operations) improved significantly to €16.2 million, down from €66.4 million in the prior-year period. The decrease was mainly due to the significant improvement to the result from continuing operations, as well as the lower cash outflow resulting from changes in working capital.

In the previous year, the cash impact of unwinding US dollar currency hedges was responsible for the high cash outflow.

After adjusting for PP working capital of €195.1 million, working capital decreased to €254.2 million as of December 31, 2016 (December 31, 2015, including PP: €450.3 million). The slight change was also impacted by exchange rate effects relating to the rise in the US dollar as of the balance sheet date. After adjustment for currency effects, the operational increase in working capital totaled €17.3 million (2015: increase of €22.1 million). In contrast, tax payments increased slightly by €1.3 million to €5.2 million (2015: €3.9 million).

The cash flow shown under "Miscellaneous items" primarily reflects the payments made in the reporting period relating to SGL2015. Payments for the restructuring program totaled €6.5 million in fiscal 2016 (2015: €6.7 million). As in the previous year, higher interest payments in the amount of €31.3 million (2015: €30.9 million) also contributed to the cash outflow for continuing operations. Free cash flow from continuing operations amounted to minus €48.1 million in fiscal 2016 (2015: minus €99.3 million).

### Net cash used in continuing investing activities further declined

This item reflects payments for intangible assets and property, plant and equipment, equity-accounted investments and proceeds from the disposal of non-current assets. Capital expenditure amounted to €34.6 million in fiscal 2016, which was significantly below the prior-year level (€44.4 million). This can primarily be attributed to the completed expansion of production capacities at SGL ACF. The figures for fiscal year 2016 include cash inflows of €2.0 million relating to investments accounted for At-Equity (2015: cash inflows of €7.8 million). Payments received from joint ventures totaling €9.0 million (2015: €12.0 million) were offset by payments for capital increases at Benteler SGL of €7.0 million (2015: €3.0 million). Net cash used in investing activities therefore decreased by €1.0 million, dropping from €32.9 million in 2015 to €31.9 million in the reporting year.

### Capital expenditure, depreciation and amortization<sup>1)</sup>

€m	2016	2015
Payments to purchase intangible assets and property, plant and equipment	35	44
Depreciation/amortization expense	49	50

<sup>1)</sup> Including proportional consolidation of SGL ACF, excluding discontinued operations

Capital expenditure for intangible assets and property, plant and equipment was distributed as follows in fiscal year 2016: 31% for CFM (€10.8 million; 2015: €26.6 million), 44% for GMS (€15.0 million; 2015: €15.2 million), and 25% for central projects (€8.8 million; 2015: €2.6 million). The comparative figures for the previous year were 60% for CFM, 34% for GMS, and 6% for central projects. €13.6 million was invested in discontinued operations of PP (2015: €30.5 million).

All in all, other intangible assets and property, plant and equipment decreased by €300.1 million to €510.3 million in fiscal year 2016 (2015: €810.4 million). The decline in non-current assets was due to the reclassification of the PP business under discontinued operations in the amount of €280.8 million, and the fact that depreciation on property, plant and equipment was €14.6 million higher than capital expenditures. Currency effects resulting from the stronger US dollar as of the balance sheet date were almost entirely offset by the weaker British pound, increasing non-current assets by a total of €3.9 million. Proceeds from the disposal of non-current assets amounted to €0.7 million in the reporting year and related mainly to the sale of properties in Malaysia not required for operations, for which the main payment was not received until January 2017. In the previous year, this item included proceeds of €3.7 million from the sale of a parcel of land and a building in Germany. Proceeds from other non-current financial assets in 2016 include €0.9 million from the sale of an 11% shareholding in the stadium company of FC Augsburg.

### Net cash provided by/used in continuing financing activities

In the year under review, net cash provided by the financing activities of continuing operations amounted to €163.2 million, after net cash inflow of €28.7 million in 2015. The capital increase carried out in December 2016 provided net cash of €173.3 million in fiscal 2016, as a result of the €180.4 million cash provided less costs incurred of €7.1 million. In addition, net cash of €5.9 million was used in 2016 by assuming and repaying financial liabilities (2015: cash provided of €34.3 million). Cash provided in the previous year was predominantly the result of €167.0 million cash provided by the newly issued convertible bond maturing in 2020 less costs incurred and €134.7 million cash used in connection with the early repayment of the 2009 corporate bond. In 2016, net cash used in financing activities also included payments of €3.7 million relating to refinancing costs (2015: €4.2 million).

### Liquidity increases to €333 million

As a result of the cash flow generated by the capital increase, available liquidity increased to €333.0 million as of the end of fiscal year 2016 (2015: €250.8 million), consisting of liquidity from continuing operations of €329.5 million and liquidity from discontinued operations of €3.5 million. At the end of the fiscal year, liquidity included short-term time deposits in the amount of €5.0 million (2015: €14.0 million).

### Contractual payment obligations

The most significant contractual payment obligations comprise the repayment of debt, purchasing obligations and lease obligations. The total principal amount of debt repayment obligations was €782.4 million in 2016 (2015: €785.0 million). The loans taken out by the SGL ACF joint venture are repaid in installments from SGL ACF's free cash flow. The outstanding amount of the convertible bond issued in fiscal year 2015 in a principal amount of €167 million is due for repayment in 2020 unless the bondholders exercise their conversion rights before maturity, in which case up to 9.8 million new bearer shares will be created. The convertible bond issued in fiscal year 2012 in a principal amount of €240 million is due for repayment in 2018 unless the bondholders exercise their conversion rights before maturity, in which case up to 6.4 million new bearer shares will be created. The corporate bond in the amount of €250 million falls due in 2021.

As of December 31, 2016, trade payables, derivative financial instruments, and other financial liabilities totaled €152.4 million (2015: €230.5 million). Of that amount, liabilities totaling €35.4 million were due after one year (2015: €51.1 million). Income tax liabilities and other liabilities amounted to an additional €33.0 million at the end of 2016 (2015: €38.0 million). Further details can be found in **Note 25** of the notes to the consolidated financial statements.

### Net assets

#### Overview of net assets

€m	Dec. 31, 16	Dec. 31, 15
Total assets	1,899.2	1,856.1
Equity attributable to the shareholders of the parent company	331.8	289.3
Equity ratio	17.5%	15.6%
Working capital <sup>1)</sup>	254.2	255.1
Capital employed <sup>2)</sup>	829.9	840.7
Return on capital employed (ROCE <sub>EBITDA</sub> ) <sup>3)</sup>	8.4%	7.9%
Return on capital employed (ROCE <sub>EBIT</sub> ) <sup>4)</sup>	2.5%	1.7%
Net financial debt	449.4	534.2
Gearing <sup>5)</sup>	1.35	1.85

<sup>1)</sup> Continuing operations: Total of inventories and trade receivables less trade payables

<sup>2)</sup> Continuing operations: Total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital

<sup>3)</sup> EBITDA before non-recurring charges to average capital employed - continuing operations

<sup>4)</sup> Operating profit/loss (EBIT) before non-recurring charges to average capital employed

<sup>5)</sup> Net financial debt to equity attributable to the shareholders of the parent company

As of December 31, 2016, total assets increased by €43.1 million, or 2.3%, to €1,899.2 million (2015: €1,856.1 million). Balance sheet KPIs changed significantly in the reporting year due to the reclassification of PP activities as assets held for sale. The increase in total assets as of December 31, 2016 resulted primarily from the €78.7 million increase in liquidity, as well as the reversal of impairments in the amount of €12.8 million on assets held for sale in connection with production facilities at the carbon fiber plant in Evanston (USA). The increase was partially offset by currency losses – particularly as a result of the weaker British pound and Polish zloty – which decreased total assets slightly by €0.7 million (2015: increase of €38.3 million) as they more than offset the effects from the stronger US dollar.

Equity attributable to the shareholders of the parent company increased by €173.3 million as a result of the capital increase, as well as by €1.4 million as a result of the non-cash measurement of puttable instruments regarding a non-controlling interest in a partnership (2015: €12.3 million). The increase was partially offset by the consolidated net loss of €111.7 million (2015: net loss of €295.0 million), which included losses from discontinued operations in the amount of €75.7 million (2015: €225.8 million). Foreign exchange effects decreased equity by €12.5 million, and the adjustment to discount rates for pension provisions in

Germany and the US to reflect the lower anticipated interest rate climate decreased equity by €9.3 million (after tax effects). In total, these effects led to an improvement in the equity ratio to 17.5% year on year (2015: 15.6%).

Gearing – the ratio of net financial debt to equity attributable to the shareholders of the parent company – improved to 1.35 (2015: 1.85). As a manufacturing company, SGL Group has a high proportion of non-current assets due to its production equipment, which is largely financed by equity (52%; 2015: 31%). The return on capital employed –  $ROCE_{EBIT}$  – defined as the ratio of operating profit (EBIT) before non-recurring charges to average capital employed – improved to 2.5% in the year under review (2015: 1.7%). The return on capital employed –  $ROCE_{EBITDA}$  – defined as the ratio of operating profit before depreciation and amortization (EBITDA) and before non-recurring charges to average capital employed – improved to 8.4% in the year under review (2015: 7.9%).

#### Balance sheet structure

€m	Dec. 31, 16	Dec. 31, 15	Change
<b>ASSETS</b>			
Non-current assets	636.2	939.6	–32.3%
Current assets	722.3	901.8	–19.9%
Assets held for sale	540.7	14.7	> 100%
<b>Total assets</b>	<b>1,899.2</b>	<b>1,856.1</b>	<b>2.3%</b>
<b>EQUITY AND LIABILITIES</b>			
Equity attributable to the shareholders of the parent company	331.8	289.3	14.7%
Non-controlling interests	16.1	16.5	–2.4%
Non-current liabilities	1,127.4	1,204.8	–6.4%
Current liabilities	237.3	345.5	–31.3%
Liabilities in connection with assets held for sale	186.6	0.0	-
<b>Total equity and liabilities</b>	<b>1,899.2</b>	<b>1,856.1</b>	<b>2.3%</b>

When viewing individual items on the balance sheet, it must be taken into account that the assets and liabilities of the business unit PP were reclassified as held for sale as of December 31, 2016. The figures as of December 31, 2015 have not been adjusted. As a result of the reclassification, non-current assets decreased by €297.1 million, current assets by €278.7 million, non-current liabilities by €85.5 million, and current liabilities by €92.8 million year on year. The commentaries on the changes in

balance sheet items below have taken into account the effects from the reclassification of PP reclassification.

#### Assets

Operating **non-current assets** fell by a total of €6.3 million to €636.2 million in the reporting year (2015: €939.6 million). The decline was predominantly the result of lower capital expenditure compared to depreciation and amortization, which decreased non-current assets by €14.6 million year on year (2015: decrease of €5.8 million). In contrast, due to the positive result, the carrying amount of investments accounted for At-Equity increased by €4.5 million, and deferred tax assets increased by €6.3 million. At €0.1 million, currency effects had no significant impact on non-current assets compared with the previous year (2015: €14.0 million).

Adjusted for the reclassification of PP, **current assets** increased by €99.2 million to €722.3 million (2015: €901.8 million). Changes in exchanges rates, especially with respect to the weaker British pound, decreased current assets by €2.0 million. After adjustment for currency effects and the reclassification of the PP business, current assets increased by €101.2 million. The increase was primarily attributable to the €78.7 million increase in cash funds resulting from the capital increase in December 2016. The operational reduction in current assets relates in particular to the €3.3 million decrease in trade receivables. The 3.8% decline in trade receivables exceeded the 2.5% decrease in sales revenue. In contrast, the inventories on the balance sheet increased by 3.9%, or €10.2 million. Operationally, inventories increased by €7.9 million after adjusting for foreign exchange effects of €2.3 million.

**Assets held for sale** increased from €14.7 million in the previous year to €540.7 million as of the end of 2016. In addition to the assets of the former business unit PP totaling €510.1 million, this item also includes the assets relating to the sites in Gardena and Evanston (USA) that were no longer needed for operations as of year-end 2016.

#### Equity and liabilities

**Shareholders' equity** increased by €42.5 million to €331.8 million as of December 31, 2016 (2015: €289.3 million). The increase was mainly the result of the €173.3 million cash equity increase. The increase was partially offset by the consolidated net loss of €111.7 million, which was impacted by losses of €77.9 million from discontinued operations. Additional factors that have directly affected equity are the adjustment to discount rates for pension

provisions in Germany and the US to reflect the lower anticipated interest rate climate, which decreased equity by €9.3 million (after tax effects), the adjustment to puttable instruments for non-controlling interests in a partnership, which resulted in an addition of €1.4 million to equity (2015: an addition of €12.3 million), currency losses leading to a deduction of €12.5 million (2015: deduction of €24.2 million), due in particular to the performance of the British pound in 2016, and changes in cash flow hedges, which resulted in a deduction of €1.4 million (2015: deduction of €0.2 million). The equity ratio (excluding non-controlling interests) increased to 17.5% as of the end of the reporting period (2015: 15.6%).

	Equity attributable to the shareholders of the parent company	Non-controlling interests	Total equity
<b>Balance Jan. 1, 2016</b>	<b>289.3</b>	<b>16.5</b>	<b>305.8</b>
<b>Capital increase (after deduction of transaction costs)</b>	<b>173.3</b>	<b>0.0</b>	<b>173.3</b>
<b>Capital movements from share-based payment plans</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.1</b>
<b>Dividends</b>	<b>0.0</b>	<b>-0.5</b>	<b>-0.5</b>
Net result for the year	-111.7	2.0	-109.7
Other comprehensive income	-20.4	-0.2	-20.6
<b>Comprehensive income</b>	<b>-132.1</b>	<b>1.8</b>	<b>-130.3</b>
Other changes in equity <sup>1)</sup>	1.4	-1.7	-0.3
<b>Balance Dec. 31, 2016</b>	<b>331.8</b>	<b>16.1</b>	<b>347.9</b>

<sup>1)</sup> In particular in connection with non-controlling interests in subsidiary partnerships

Up to 9.8 million new shares in SGL Carbon SE can still be created from the convertible bond issued in 2015 and up to 6.4 million new shares from the convertible bond issued in 2012.

On a comparable basis, the increase in **non-current liabilities** was associated with the adjustment of discount rates for pension provisions in Germany (by -0.45 percentage points to 1.80%) and the US (by -0.25 percentage points to 4.00%) to reflect the lower anticipated interest rate climate, which increased this balance sheet item by a total of €5.2 million. Furthermore, the second and last tranche payable in fiscal 2017 on the outstanding purchase price liability of €8.9 million to the acquirer of the Aerostructures business was reclassified to a

current liability. All in all, non-current liabilities increased on a comparable basis by €8.1 million to €1,127.4 million (2015: €1,204.8 million).

**Current liabilities** decreased on a comparable basis by €15.4 million to €237.3 million as of year-end 2016 (2015: €345.5 million). On a comparable basis, trade payables increased by €7.9 million to €103.9 million (2015 comparable figure: €96.0 million). After adjusting for currency effects of €1.3 million, the operational increase in trade payables was €6.6 million. The operational decrease in current other provisions of €9.6 million was the result of the restructuring provisions utilized during the year under review.

#### Net financial debt

€m	Dec. 31, 16	Dec. 31, 15	Change
Carrying amount of current and non-current financial liabilities	751.9	744.8	1.0%
Remaining imputed interest for the convertible bonds	20.5	28.6	-28.3%
Accrued refinancing cost	10.0	11.6	-13.8%
<b>Total financial debt (nominal amount)</b>	<b>782.4</b>	<b>785.0</b>	<b>-0.3%</b>
Liquidity - continuing operations <sup>1)</sup>	329.5	247.9	32.9%
Liquidity - discontinued operations <sup>1)</sup>	3.5	2.9	20.7%
<b>Total liquidity - continuing and discontinued operations</b>	<b>333.0</b>	<b>250.8</b>	<b>32.8%</b>
<b>Net financial debt - continuing and discontinued operations</b>	<b>449.4</b>	<b>534.2</b>	<b>-15.9%</b>
thereof: SGL ACF			
Non-current financial liabilities	117.1	125.4	-6.6%
Cash and cash equivalents	6.9	9.9	-30.3%
Net financial debt SGL ACF	110.2	115.5	-4.6%
<b>Net financial debt excluding SGL ACF</b>	<b>339.2</b>	<b>418.7</b>	<b>-19.0%</b>

<sup>1)</sup> Prior year figures adjusted to reflect PP as discontinued operations

Financial liabilities at year-end 2016 were composed of our corporate bond as well as the convertible bonds (2012/2018 and 2015/2020), liabilities to local banks, the pro-rata financial liabilities of SGL ACF and other financial liabilities, as well as the remaining net imputed interest component for the convertible bonds still outstanding and refinancing costs. Financial liabilities are recorded in the consolidated balance sheet under "interest-bearing loans" and "current portion of

interest-bearing loans." Liquidity comprises the "cash and cash equivalents" of continuing and discontinued operations, as well as "time deposits" (with a residual term of less than 12 months).

As a result of the proportional consolidation of SGL ACF, net financial debt of €110.2 million is included as of December 31, 2016 (2015: €115.5 million). The financial liabilities of SGL ACF are comprised of BMW Group shareholder loans.

As of December 31, 2016, **liquidity** had increased to €333.0 million (2015: €250.8 million), mainly as a result of the capital increase that generated cash of €173.3 million, less the negative free cash flow of €81.0 million. Taking into account the liquidity of continuing and discontinued operations, current and non-current financial liabilities of €751.9 million (2015: €744.8 million), the remaining imputed interest components of the convertible bonds in the amount of €20.5 million (2015: €28.6 million), and the remaining refinancing costs of €10.0 million (2015: €11.6 million), net financial debt of SGL Group amounted to €449.4 million at year end (2015: €534.2 million). Net financial debt thus decreased by €84.8 million, or 15.9%, compared with December 31, 2015.

## **General statement on the current financial situation**

### **Business overview fiscal year 2016**

We signed an agreement for the sale of the graphite electrode business to the Japanese chemicals company Showa Denko in October 2016. This agreement marked a major step forward for the SGL Group's strategic realignment. From now on, the graphite electrode business will no longer impact the company's development.

The existing structures and costs still correspond to the old, much larger SGL Group with bulk transactions. We are explicitly addressing this issue by implementing project CORE (Corporate REstructuring) which we launched in 2016. The business model is being transformed to growth and the business units will now only focus on the tasks that create growth - development, production and sales. Administrative tasks will be streamlined through process optimizations and concentrated in the central functions. With project CORE we have identified a savings target of €25 million until the end of 2018, which will additionally enhance our profitability.

We succeeded in reaching most of the targets we had set for fiscal year 2016. In total, our EBIT and EBITDA in 2016 were substantially higher than in the previous year. We recorded a significantly higher contribution to earnings in our CFM business unit in particular. However, it was not possible to realize any improvement in our GMS business unit – in contrast to our original expectations.

We succeeded in meeting all of the expectations associated with our SGL2015 cost savings program. After having targeted an amount in the mid double-digit million euro range, the savings we generated since setting up this program amounted to more than €240 million. This is also reflected in the result for T&I and Corporate where the expenses were lower than our original forecasts.

In total, we have been able to substantially improve our consolidated earnings (continuing operations) as expected, even though we continued to record a loss.

As projected, we reduced capital expenditure significantly. This was once again lower than amortization and depreciation. The reduction was not only the result of the investment projects completed in past years. In light of the difficult economic climate, we continue to be very cautious with our expenses and pursue a very restrictive investment policy.

The free cash flow was once again negative in line with expectations, despite the improved earnings situation, and was depressed in particular by payments made in connections with discontinued operations.

In contrast, restructuring expenses from continuing operations increased year-on-year as expected. This was primarily due to the activities required for project CORE.

### **Assessment of the financial situation by company management**

We have made great progress in the past weeks to strengthen the financial foundations of the new SGL Group. We will repay a substantial proportion of our debts and improve our balance sheet ratios thanks to our successful capital increase in December 2016 and the anticipated proceeds from the sale of our business unit Performance Products. We will thus place the new SGL Group on solid financial foundations. We have launched a separate sales process for the remaining portion of our former business unit Performance Products, comprising



cathode, furnace linings and the carbon electrode business. We expect a transaction agreement still in fiscal year 2017.

We are creating a solid foundation for our high-growth divisions with project CORE. At the same time, the new SGL Group is becoming more flexible, faster and more customer-oriented. The new SGL Group is focusing all of its efforts and attention on innovative materials and solutions for the mega-trends mobility, energy supply and digitalization.

During fiscal year 2016 we continued to consistently complete the measures from our SGL2015 cost savings program. In 2017, we will focus on implementing the strategic realignment further. This will involve successfully implementing the growth initiatives identified in the business units CFM and GMS. In our former business unit PP, we are focusing on supporting the sale process for our business with cathodes, furnace linings and carbon electrodes as well as handing over the graphite electrode business to the buyer Showa Denko. In addition, we are working at full speed to implement the project CORE process improvements and savings targets.

The businesses of SGL Group began the fiscal 2017 with overall favorable developments. Revenues invoiced in the initial weeks of 2017 were higher than the prior-year level.

In the reporting segment Composites – Fibers & Materials, we are expecting sales revenue to increase slightly in the first quarter of 2017, in particular due to the higher price level for textile fibers.

At GMS, business with graphite specialties started in the first quarter of 2017 at a slightly higher level than in the previous year. We are expecting further increases in deliveries to customers from the second quarter of 2017. Order intake for Process Technology remains subdued in the first quarter of 2017, and continues to be characterized by further postponements. The rising oil price will impact order intake only with some time lag. In total, sales revenue in GMS during the first quarter of 2017 is expected to be higher than the level of the previous year.

Total sales revenue of SGL Group's continuing operations in the first quarter of 2017 will be above the level of the prior-year quarter, in particular due to improvements in GMS.

## **Accounting principles used and significant estimates made**

SGL Group prepares its consolidated financial statements in accordance with IFRS, as detailed in the notes to the consolidated financial statements. The principles described in the notes to the consolidated financial statements are integral to an understanding of SGL Group's financial position, financial performance, and cash flows. Under IFRS, it is necessary to make estimates in certain cases. Such estimates involve subjective evaluations and expectations that are based on uncertainty and are subject to change. As a result, assessments may change over time and thus impact the presentation of SGL Group's financial position, financial performance, and cash flows. The Board of Management therefore points out that estimates are routinely adjusted, given that unforeseeable events may alter expectations.

Additional information on accounting principles involving estimates and assumptions can be found in **Note 2** of the notes to the consolidated financial statements.

Discretionary decisions are also made by management in relation to the application of other IFRS standards. As discussions concerning the application of a number of IFRS standards are currently ongoing, it is not inconceivable that future decisions published on the application of IFRSs will lead to an interpretation that differs from the method currently adopted by SGL Group. In such case, SGL Group would be compelled to adjust its accounting practices.

## **Non-financial performance indicators**

### **Assets not recognized and off-balance sheet financial instruments**

Various assets of the SGL Group are not included in the balance sheet. These off-balance sheet assets primarily concern leased and rented goods (operating leases for land, buildings, computer equipment, vehicles and other property, plant and equipment).

The total value of these off-balance sheet items and financing instruments has had no major effect on the presentation of net assets, financial position and results of operations of the Group. Further details can be found in **Note 26** of the notes to the consolidated financial statements.

---

The “SGL Group – The Carbon Company” brand is among the intangible assets not recognized in the balance sheet. In addition, our long-term relationships with suppliers and customers also have considerable value. For one thing, these relationships stabilize the course of our business and shield us from short-term market fluctuations. In addition, this very close cooperation also facilitates joint research and development projects in which the expertise and development capacities of the companies involved can be concentrated.

### **Funding status of pension obligations**

The funding status of pension obligations, which represents the difference between the present value of the pension obligations and the fair value of the plan assets, was minus €303.0 million as of December 31, 2016 after minus €377.2 million as of December 31, 2015. As of December 31, 2016, the Group's pension obligations totaled €403.4 million compared with €522.5 million in the previous year. This reduction is due in particular to the reclassification of provisions for pensions for the former business unit Performance Products as discontinued operations. On a comparable basis, provisions for pensions increased as a result of lower discount rates. Consequently, the actuarial losses from defined benefit pension plans recognized in equity (under retained earnings) increased by €9.3 million after taxes. The status of the plan assets designated to fund the pension obligations decreased from €145.3 million to €100.4 million as of December 31, 2016.

Further information on the effects in the balance sheet and the income statement and on pensions and similar obligations can be found in **Note 23** of the notes to the consolidated financial statements.

# 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 <sup>1)</sup>	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%
<b>Total continuing operations</b>	<b>3,942</b>	<b>100.0%</b>	<b>4,085</b>	<b>100.0%</b>	<b>-3.5%</b>
Discontinued operations (PP)	1,442		1,573		-8.3%
<b>Total</b>	<b>5,384</b>		<b>5,658</b>		<b>-4.8%</b>

<sup>1)</sup> Prior year figures adjusted to reflect PP as discontinued operations

**Employees by business unit**

Headcount <sup>1)</sup>	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%
<b>Total continuing operations</b>	<b>3,942</b>	<b>100.0%</b>	<b>4,085</b>	<b>100.0%</b>	<b>-3.5%</b>
Discontinued operations (PP)	1,442		1,573		-8.3%
<b>Total</b>	<b>5,384</b>		<b>5,658</b>		<b>-4.8%</b>

<sup>1)</sup> 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 Lavrado, 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 (CO<sub>2</sub>), 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 <sup>1)</sup>	2016	2015	Change
<b>Energy consumption</b>			
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) <sup>2)</sup>	1.13	1.15	-2%
<b>CO<sub>2</sub>-emissions <sup>3)</sup></b>			
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) <sup>2)</sup>	0.36	0.37	-3%
<b>Water requirement</b>			
in millions of cubic meters (Mio. m <sup>3</sup> )	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 <sup>3</sup> per €1,000 in sales revenue) <sup>2)</sup>	11.2	11.4	-2%
<b>Waste volume</b>			
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) <sup>2)</sup>	24.8	26.8	-7%

<sup>1)</sup> Prior year figures are reported on a comparable basis

<sup>2)</sup> Adjusted sales revenue (excluding price and currency effects); base year 2015

<sup>3)</sup> From primary and secondary energy consumption. The calculation of CO<sub>2</sub>-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 CO<sub>2</sub> 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 2016 (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 <sup>1)</sup>	2016	2015	Change
<b>Energy consumption</b>			
in gigawatt hours (GWh)	1,277	1,328	-4%
<b>CO<sub>2</sub>-emissions<sup>2)</sup></b>			
in thousands of tons (kt)	431	446	-3%
<b>Water requirement</b>			
in millions of cubic meters (Mio. m <sup>3</sup> )	2.30	2.65	-13%
<b>Waste volume</b>			
in thousands of tons (kt)	15.0	15.5	-3%

<sup>1)</sup> Prior year figures are reported on a comparable basis

<sup>2)</sup> From primary and secondary energy consumption. The calculation of CO<sub>2</sub>-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 CO<sub>2</sub> 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 regional quality. 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 <sup>1) 2)</sup>	2016	2015
Social	48%	52%
Art/Music	6%	5%
Sport	19%	15%
Education	23%	26%
Other	4%	3%

<sup>1)</sup> Prior-year figures have been made comparable

<sup>2)</sup> 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 <sup>1) 2)</sup>	2016	2015
Social	61%	45%
Art/Music	6%	10%
Sport	6%	15%
Education	28%	15%
Other	0%	15%

<sup>1)</sup> Prior-year figures have been made comparable

<sup>2)</sup> 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.

# Opportunity and Risk Report

---

The Board of Management of SGL Carbon SE is responsible for establishing and maintaining an appropriate and suitable risk management and internal control system. In addition, it has overall responsibility for the scope and design of the systems that have been implemented.

## Risk policy

Our risk policy is geared toward protecting shareholder value, increasing it systematically and continuously, and achieving financial targets. The principles of this policy are set out in standard SGL Group guidelines for risk management and represent an integral part of our corporate strategy. All significant corporate decisions are made only after a detailed risk analysis and assessment. As a matter of principle, we do not take on unmanageable or inappropriately high risks.

## Risk Management System (RMS)

Our risk management system (RMS) is a global management instrument that ensures the implementation of SGL Group's risk policy. This is achieved through the early identification, analysis and assessment of risks and the immediate introduction and tracking of response measures. Our opportunity management system is integrated into SGL Group's RMS. We use this system to identify opportunities that help us to achieve sustainable commercial success. Moreover, variable salary components provide our managers at all levels with an additional incentive to identify and take advantage of potential opportunities. We also continuously monitor global trends in order to identify opportunities for our Company.

The RMS comprises a number of linked functions and control mechanisms, with which earnings, asset and liquidity risks are recorded and aggregated from the bottom up and reported to the Board of Management no less than on a quarterly basis. This includes the recording, monitoring and control of business risks and opportunities as well as the integration of RMS into our strategy and planning process. We consider risks to be each and every deviation from our expected results and, in contrast, we consider opportunities to be positive deviations beyond our expected results. This risk report covers the current year and includes a summary for the complete planning horizon of five years; the opportunity report only covers the current year.

The RMS covers all areas of the Company and is continually modified in line with changing circumstances. The corporate functions support the Board of Management with the organization of the system. Group Controlling coordinates the

risk management process at the Group level and stipulates the structure and the tools to be used, continually develops the RMS in accordance with international standards and ensures that the group-wide risk management guidelines remain up to date for all organizational units, including its principles, definitions of terms, concepts, reporting channels and responsibilities. Specific individual risks in operational units and corporate functions are recorded and monitored on an ongoing basis. Any core risks and their financial impact are reviewed quarterly on the basis of the probability of occurrence and suitable response measures are defined. This allows us to identify potential risks early, particularly any which may jeopardize the Company's existence as a going concern, and implement response measures. Furthermore, any potential new risks or the occurrence of existing risks are reported immediately to the Board of Management, independent of the normal reporting intervals.

Internal Audit is responsible for monitoring the functionality of the RMS. The Supervisory Board carries out its control function routinely at all meetings, receiving a risk report from the Board of Management in which the risk situation and response measures are compiled.

## Internal Control System (ICS)

We define an internal control system (ICS) as the policies, procedures and measures that have been implemented by management with the aim of ensuring the effectiveness and profitability of operations (which also comprises the protection of assets, including the prevention and detection of damages to assets), the proper application of accounting standards, the reliability of both internal and external accounting, and compliance with the legal regulations that are applicable to the Company. The ICS is based on group-wide standardized documentation of the risks and controls for existing process structures. Approximately 470 business processes worldwide are covered by nearly 1,420 controls. A large number of these controls are performed automatically or with IT support. Together with the process-related controls that are documented for all material subsidiaries of SGL Group, process-independent controls and measures at management level form the foundation of a functional ICS. The materiality of our companies is assessed annually on the basis of quantitative factors (company's contribution to net sales, total assets or net gains/losses) as well as qualitative risk indicators.

Our central ICS function implements, maintains and enhances the ICS on behalf of the Board of Management. Local ICS officers support the process and control owners at the companies and serve as local contact persons for all ICS-related issues. The process owners ensure the process and control documentation is accurate and up to date. Control owners perform the controls, ensure controls are documented and update the control documentation. Our Group IT serves as the point of contact for all IT-related issues and designs the IT controls.

Independent auditors and Internal Audit review the effectiveness of the ICS at the process level through random sampling on an annual basis. The Supervisory Board is informed of the Group's risk situation as well as of any fundamental weaknesses in SGL Group's ICS at its regular Audit Committee meetings.

#### **Significant characteristics of the RMS and ICS with regard to the group accounting process**

Risks that could influence the preparation of financial statements in accordance with applicable accounting standards and regulations are evaluated with respect to their influence on the financial statements. The ICS is intended to support the accounting process – by way of implementing the system's controls – to ensure that, in spite of potential risks, the consolidated financial statements are prepared in accordance with applicable standards and regulations. Various process-integrated and process-independent control measures contribute to achieving this objective. Both the RMS and ICS cover all material subsidiaries and all processes that are relevant to the preparation of the consolidated financial statements.

The responsibilities and functions within the accounting process (e.g. local accounting, management accounting and treasury as well as group accounting) are established and strictly separated. Together with a consistent dual control procedure, this contributes to the early detection of errors and the prevention of potential misconduct.

The SGL Group accounting manual defines the consistent accounting and valuation principles for the domestic and foreign subsidiaries that are consolidated in the group financial statements in compliance with the International Financial Reporting Standards (IFRS). Changes to accounting regulations and the scope of consolidation are regularly incorporated into

the manual and communicated to all employees involved in the accounting process. Our Group Accounting staff provides detailed explanations of more complex subject matter. In order to reduce the risk of misstatements in the accounting of more complex accounting issues, we consult external service providers, such as actuaries to prepare expert opinions concerning pensions.

SAP-based consolidation software is used to prepare the consolidated financial statements. Group Accounting is responsible for this process. Binding content and deadline requirements minimize the discretion of decentralized units when recording, measuring and presenting assets and liabilities. For the consolidated financial statements, data is recorded at company level, automatically uploaded into the group-wide consolidation software and validated. A group-wide, standardized model chart of accounts has been established for recording of business transactions.

The identified risks and any implemented response measures are updated in the quarterly reporting and reported to the Board of Management. Independent auditors and Internal Audit assess the effectiveness of our internal accounting controls on an annual basis. Moreover, the Supervisory Board is also involved in the control system through the Audit Committee. The Audit Committee primarily monitors the accounting process, the effectiveness of the internal control system, the risk management system, the internal audit system and the audit of the financial statements.

No matter how thoroughly we have developed the RMS and ICS, both systems still have their limitations. Consequently, we can neither guarantee with absolute certainty that targets will be reached, nor that false information will be prevented or uncovered. In particular, personal judgments, erroneous controls or other circumstances can limit the effectiveness and reliability of our RMS and ICS, meaning that applying these systems group-wide may also only provide reasonable assurance with regard to the correct, complete and timely recognition of issues within Group Accounting.

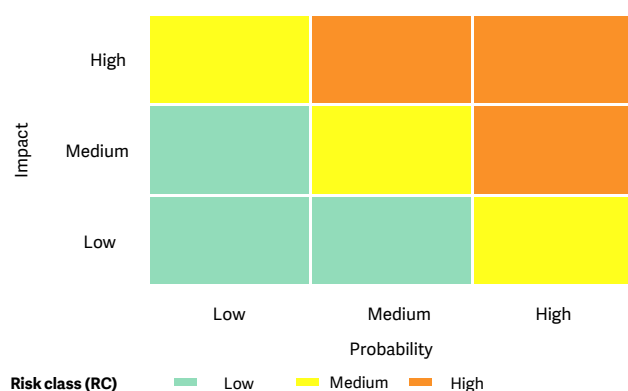
#### **Opportunity and risk areas**

Risk factors that could impact our group's business activities are assessed in the following risk and opportunity areas. If these areas also contain opportunities, such opportunities are explicitly mentioned. The order of the strategic, operational, financial, and compliance risks presented reflects the current

estimation of their probability of occurrence for SGL Group and therefore provide an indication of the current importance of these risks for us.

This is also clarified by categorizing the risks into the risk classes (RCs) high, medium, and low. It should be noted that risks that are currently assessed as having a low probability of occurrence could potentially cause a greater loss to SGL Group than risks that are currently assessed as having a high probability of occurrence. The risks named here could arise individually or cumulatively. Additional risks, which have either not yet been identified or are currently not classified as significant, could also affect our business activities. Unless explicitly indicated, the risks described below relate to all of our segments.

#### Risk classification chart



#### Opportunities and risks in the development of growth markets (RC: medium)

SGL's growth strategy targets markets with dynamic performance and high growth rates. This harbors opportunities and risks depending on the actual development in these markets compared to our planning assumptions.

Both business units CFM and GMS are already experiencing dynamic market and product developments with growth potential that is considerably above average. SGL Group is an enabler for its customers' production processes and products with its innovative carbon and graphite products, helping them to serve global mega-trends such as mobility, digitization, and energy efficiency. Customers receive tailored applications for the entire material value chain. This harbors opportunities for accelerated and steadily rising sales.

Acquiring new customers and establishing new materials and products requires considerable technical, operational and financial effort.

The reporting segment Composites – Fibers & Materials (CFM) aims to grow in the automotive, aerospace and wind industries. For CFM, we see growth opportunities, especially in those areas where customers need a combination of lightweight materials and high strength. Special projects were started in the automotive industry through our joint ventures with BMW (SGL ACF) and in a joint venture with Benteler. We also believe we can generate more sales revenue in the future in aerospace applications as well. The future holds considerable growth opportunities here as a result of the need to reduce weight and the significant cost savings of industrial carbon fiber, for example, for non-structural materials and components.

Since 2008, major investments have been made to expand carbon fiber capacities worldwide. However, in many markets the industrial use of carbon fibers and composites in place of other materials like steel, aluminum or fiberglass is still relatively new and the technology will continue to mature in the coming years. Currently, composite components cannot yet be manufactured at competitive costs for many applications. Automobile manufactures may be driven to invest more in carbon fiber technology as a result of state aid through subsidies or tax benefits to further drive carbon reduction, as well as fuel consumption restrictions and regulations resulting from new safety standards. However, any forecasts on the growth of carbon fibers and composites are subject to risk.

In the reporting segment Graphite Materials & Systems (GMS), we see above average growth potential, especially in the LED, semiconductor and solar industries as well as for our anode materials for the lithium-ion battery industry. The market research institute Transparency Market Research forecasts annual growth of more than 10% in these areas. The automotive industry is also expected to face a radical change toward electric cars as a result of the high emissions of diesel vehicles and increasing driving restrictions in cities. However, there is also the risk that the market for electric vehicles will not grow in accordance with current expectations.

If our target markets do not develop as dynamically as expected, it could have a negative impact on our results of operations, financial position and net assets.

### **Opportunities and risks from price and capacity development (RC: medium)**

Most of the industries in which SGL operates are highly competitive, which in some cases results in high price pressure and/or surplus capacities.

The economic competitiveness of carbon fiber products is currently shaped by the recent price stabilization as well as slightly rising commercial demand as a result of the Boeing 787, Airbus A350 and the BMW i series. Risks may result from lower growth as a result of delays in the expected rise in demand and further capacity expansion by competitors.

In the reporting segment GMS, the graphite specialties business is experiencing short-term demand fluctuations and surplus capacities. Business with the solar, semiconductor and LED industry saw a strong revival at the end of 2015. Exchange rates and oil price developments cause short-term risks with regard to the impact on earnings of individual products and customer industries as well as within different regions. In Process Technology, we see intense competition for few major projects.

In the medium to long term, we see very good growth opportunities for GMS because our products and solutions serve global megatrends such as energy efficiency, digitalization and mobility.

### **Opportunities and risks from global and regional economic developments (RC: medium)**

As a global company, worldwide economic development has a significant impact on results of operations, financial position and net assets. However, while the macroeconomic environment is currently characterized by an upturn in the global economy, a high level of uncertainty remains, which could slow the global economy noticeably. Major risk factors include the unclear course of the new government in the USA, a rising trend in protectionism around the world and the political challenges in Europe, such as Brexit and the financial problems of individual euro states. Escalating tensions in the Middle East and Africa also generate uncertainty.

Terrorist activities and disease epidemics could have negative effects on future economic development. By closely observing the market and economy, we are able to take the necessary steps in the short term and can minimize – at least temporarily – the risks that could potentially have an impact on our

business. In addition, sales risks are partly offset by the wide diversification of our product range, our global presence and the numerous customer industries we supply. However, drops in demand, sluggish growth in individual customer industries or cyclical market fluctuations could have a negative impact on our business. A swift end to these crises would create, among others, additional sales revenue and earnings potential for our Company.

### **Opportunities and risks from the strategic realignment in SGL (RC: medium)**

The successful and timely implementation of the cost reduction program will have a significant impact on our future financial performance, including project CORE started in September 2016. The programs comprise many different measures, and we cannot completely control how quickly the objectives in each case are achieved. Therefore, we cannot rule out that some measures may experience delays and that the necessary financial resources go beyond the planned appropriation.

On October 20, 2016, SGL Group signed an agreement to sell the graphite electrodes business to Showa Denko in Japan. A risk may arise if the closing, which is expected in mid-2017, is not completed on time or involves strict legal conditions.

The CFL/CE business (remaining part of the former business unit PP) will be sold separately. Risks exist with regard to the achievable sale price and the time of the disposal. An offer that is considered too low could delay the sale past the expected timeframe or reduce the financial resources available to lower SGL Group's net financial debt. This would mean the Company would not be able to meet the targeted improvement in balance sheet KPIs as planned. By contrast, higher proceeds from the sale would provide the opportunity to improve the Company's liquidity and financing situation even more.

### **Opportunities and risks from value adjustments on goodwill and property, plant and equipment (RC: medium)**

If reporting segments CFM and GMS do not perform as foreseen in the growth initiatives, there is a medium-term risk related to an impairment loss or amortization/depreciation on the reported residual carrying amounts. A medium-term improvement in the business trend in reporting segment CFM may lead to a future reversal of the impairment loss on fixed assets related to the past value adjustments.



**Tax and legal risks (RC: medium)**

Changes in tax or legal provisions in individual countries in which we operate may lead to a higher tax expense and higher tax payments and have an impact on our recognized deferred tax assets. Any corporate structuring and transfer pricing implemented is subject in part to complex tax regulations that could be interpreted differently. A potential additional tax exposure cannot be ruled out conclusively until after a final review by the tax authorities. Constantly increasing requirements regarding the documentation of internal transfer pricing entails the risk of additional tax expense. In the case of legal disputes, we recognize provisions based on the probability of occurrence as well as external legal opinions. However, the actual amounts may differ from our estimates and have a considerable negative impact on our results of operations, financial position and net assets. Tax risks may also arise in connection with the PP business separation process and plant closures.

**Risks in IT (RC: medium)**

In order to appropriately account for the growing importance of IT security, SGL Group operates a risk-based Information Security Management System (ISMS) based on the globally recognized ISO 27001:2013 standard as part of a group-wide initiative.

Special attention is being given to further increase the safety awareness of all employees who handle sensitive information on a daily basis. To achieve this, we will use ongoing global information security campaigns on topics such as data classification, authorized access to company IT and protection against payment fraud.

As part of our IT control systems, established control processes are updated on a regular basis in order to effectively prevent unauthorized access to systems and data and detect attacks early. To ensure that all business processes are handled securely, the information technology in use is checked on an ongoing basis and further developed to remain state of the art. SGL Group has an integrated and standardized group-wide IT infrastructure. Global processes and IT security that adapts to threats protect us from the loss or manipulation of data as well as unexpected downtime.

Despite the measures described above, risks associated with our IT systems and IT infrastructure remain.

**Opportunities and risks in the raw material and energy markets (RC: medium)**

We employ structured procurement concepts as well as medium and long-term framework agreements to balance out volatility in energy markets and price fluctuations in our principal raw materials. Significant excess demand in the market may result in considerable, unanticipated price increases and supply bottlenecks. Delivery delays and bottlenecks could have a negative impact on our businesses. To offset this risk, we have been able to develop appropriate strategic concepts with our main suppliers based on business relationships built up over many years. Price fluctuations in important raw materials and energy resources could also have both a positive and negative impact on our financial performance if, for example, we pass on raw material price declines through corresponding sales price decreases or not. In addition to volatile commodity and oil prices, political developments in particular in important procurement regions can have an adverse effect on the supply of individual raw materials that are difficult to substitute.

Extensive studies are sometimes necessary for substances or products affected by the registration, assessment, and licensing requirements prescribed by the EU legislation on chemicals (REACH). Continued developments in legislation as well as the effects of cost intensive testing and registration procedures at European production facilities cannot currently be completely quantified. Depending on how individual material is classified by the EU in the future, we may incur significant additional costs to register, use, and store such materials, which could have a negative impact on our earnings. Any ban on the hazardous materials used in production could mean, in the medium term, that we are no longer able to continue our manufacturing processes in their current form. This could have a medium-term impact on our financial position and financial performance.

As a company using a substantial amount of energy, our sites in Germany were partially exempted from the cost allocation under the German Renewable Energy Sources Act (EEG). Our business operations could be negatively influenced depending on whether or not we are granted such an exemption from the EEG cost allocation or if we are required to make a retrospective payment for the EEG cost allocation. Not achieving the legal requirements of certain energy allocations could result in additional costs.

Furthermore, the European Economic Area will make further efforts to drastically reduce the emissions of pollutants, which could increase energy prices and lead to higher investments.

### **Risks in production (RC: medium)**

SGL Group operates in a capital-intensive industrial sector that requires high investments to maintain and expand production facilities. Every new asset undergoes many startup and qualification processes in order to meet customer-specific requirements. Furthermore, the effort necessary to maintain the production network is likewise cost intensive. Production downtime at one or more sites could lead to delivery problems with regard to quantity and quality. Furthermore, there is a risk of higher quality costs than expected, especially driven by the steadily rising requirements of our customer in the high-tech sector. Delays and problems with planning and implementing the investments would also have a negative impact on our results of operations, financial position and net assets. Production downtime as a result of natural catastrophes, terror attacks, cybercrime or other external influences can also not be completely ruled out.

### **Risks in the financial position (RC: low)**

As a result of the capital increase in December 2016 and the availability of a syndicated credit line, which was renegotiated in December 2016, with an already available tranche of €50 million, the Company has sufficient liquidity. Furthermore, the syndicated credit line also includes an additional tranche of over €100 million, which can be used exclusively to refinance the 2018 convertible bond. The prerequisite for its use is the completion of the graphite electrodes business sale and early redemption of the corporate bond due in 2021. Based on the available cash funds and the maturity structure of our financial liabilities, we do not currently see any financing risks.

The financing agreements of SGL Group contain contractually agreed covenants that regulate compliance with specific financial ratios during the terms of the agreements. Compliance with the covenants of the financing agreements is centrally monitored and controlled along with other financial risks. If some of the outlined business risks materialize in fiscal year 2017, it is possible that we might not be able to fully achieve the relevant financial ratios in the following quarters if business development declines considerably. However, we must note that we have not yet drawn on the syndicated credit line.

We ensure that any peaks in cash requirements are covered at all times by maintaining a strict liquidity policy with rolling liquidity and financial planning based on current estimates of operating profit and cash flow in the business units that are provided to the Chief Financial Officer on a monthly basis.

Global economic developments in our customer industries also routinely influence the creditworthiness of our customers. This situation entails default risks that we deal with by means of effective receivables management. This includes regularly reviewing the credit standing and payment patterns of our customers and establishing group-wide credit limits according to credit management guidelines. Bank guarantees and credit insurance also limit any possible default risks. Other financial risks arise from changes in exchange rates; we hedge these risks by means of derivative financial instruments. All our activities in connection with these derivatives are guided by the overriding principle of risk minimization. In addition to separating the trading and control functions, we also carry out regular risk analyses and assessments in this area.

In consideration of the covenants in our financing agreements, we allocate investments in cash and cash equivalents predominantly to institutions in our circle of core banks. Our investment decisions in this regard are guided by a number of factors, in particular a balanced distribution of funds to avoid the risk of clumping as well as the systemic importance and the ratings of the individual institutes.

### **Opportunities and risks from obligations for pensions and health benefits (RC: low)**

Changes to the present value of the defined benefit obligation in our defined benefit and defined contribution pension plans as well as the decline in plan assets in our pension obligations affect the funded status of our pension plans. A deviation in the actual developments with regard to the underlying parameters could have a negative impact on actuarial pension obligations. In particular, the development of plan assets in the calculation of interest is a significant factor affecting the pension obligations. Fluctuations in these parameters could further increase our pension provisions and have a negative impact on our equity. By contrast, rising interest rates could lead to an increase in the calculated interest and therefore have a positive effect on our equity situation.

Modified conditions for investing plan assets in our pension funds can also influence the market values accordingly. The

market interest rate, life expectancy of plan participants, inflation rate, pension adjustments, legal provisions, etc. play a significant role in this. These factors could substantially influence the current level of allocations to these funds as well as the pension obligations currently accounted for in the form of provisions and the resulting pension payments. We cannot completely rule out that such developments could have a negative impact on the financial performance as well as the ongoing earnings situation.

#### **Risks from compliance and regulatory issues (RC: low)**

Our compliance management system reduces the risk of legal violations on all levels, in particular with regard to antitrust and corruption-related violations. The SGL compliance program comprises our Code of Business Conduct and Ethics, whistleblower policy, global antitrust compliance policy, gifts and entertainment policy as well as a business partner compliance program and a code for subcontractors and suppliers. We continuously adjust our policies and processes to comply with new legal conditions and changed business processes. Furthermore, our central compliance department conducted a targeted Compliance Risk Assessment together with business unit managers in the past fiscal year. It identified and re-assessed existing compliance risks and reviewed the appropriateness of the existing compliance program. Our compliance program also includes systematic and regular employee training. Further information on the compliance management system can be found in the Corporate Governance and Compliance Report on pages 28 – 34.

As an energy-intensive industrial company, risks to our financial performance arise from energy and climate protection regulations if we cannot pass the full extent of the additional costs on to customers in international competition.

Regulatory risks also result from potential changes to the legal environment in countries in which we do business or have customers. Examples include new or more stringent import and export restrictions, a tightening of price controls, exchange restrictions, customs regulations, and protectionist trade restrictions. In addition to sales revenue and profitability risks, we may also be subject to penalties, sanctions, and damage to our reputation. We take precautions with established export control policies and obtain appropriate export permits.

Local authorities may impose legal claims and requirements relating to the environment on SGL Group after the plants are closed.

#### **Opportunities and risks associated with country-specific issues (RC: low)**

Due to the international nature of our business, we are confronted with a wide variety of uncertainties, the future development of which could have a negative impact on our results of operations, financial position and net assets. Particularly noteworthy are the risks of political and economic changes in our markets, the difficulties surrounding enforcement of contracts and recovery of outstanding receivables in foreign legal systems, compliance with trade law including export control law and technology transfer law in different countries as well as the difficulties surrounding global enforcement of patent protection of our products. The economic and political developments in the European Union, especially with regard to high debt in some EU member states, could significantly influence demand in our customer industries. Our business may also be negatively affected by a potential trend toward protectionism and any higher customs duties that may result – as a consequence of the political development in the USA and a “hard” Brexit. Likewise, the unstable political situation in the Middle East and Africa could potentially have a negative impact.

#### **Opportunities and risks from exchange rate fluctuations (RC: low)**

Our key financial indicators are influenced by exchange rate fluctuations arising from our global business activities. By optimizing operating cash inflows and outflows in a particular foreign currency, we reduce our transaction-related currency risk. To cover any other currency risk above this level, we enter into currency hedges using derivative financial instruments. In the case of unhedged transactions, depreciations of the U.S. dollar and the Japanese yen as well as an appreciation of the Polish zloty against the euro would have a negative impact on our earnings. In general, a weaker euro would have a positive effect on our competitiveness and future business development. Translation risks are not hedged.

#### **Opportunities and risks from technology (RC: low)**

To remain competitive, we must have state-of-the-art products and production processes, and we must develop new products and manufacturing technologies on an ongoing basis. We take a number of approaches to minimize the accompanying

technological risks, including rigorous project evaluation and prioritization. Decisions on the continuation of individual projects are linked to predefined milestones. All in all, our results also depend on our ability to keep a constant eye on market trends and make adjustments accordingly as well as regularly optimize our product manufacturing costs based on competitor benchmarking. Not achieving this goal could have a negative impact on our results of operations, financial position and net assets.

We protect our intellectual property as needed through patents, trademarks and copyrights. Internally, we limit access to specific user groups. Despite these efforts, unauthorized access to our intellectual property cannot be completely ruled out. The loss of intellectual property and thus the loss of competitive advantage could have adverse effects on our business situation.

By expanding our technical expertise with applications and processes, and by developing innovative materials and products, we are meeting the growing demands of our customers. A clear innovation strategy, effective processes and methods, and involvement in collaborative ventures and corporate networks are an important basis for the future success of SGL Group. In order to develop the technologies of the future, such as lightweight construction with carbon fibers and materials for the production of lithium ion batteries for e-mobility, in a timely manner and in accordance with market requirements, we promote the formation of corporate networks along the entire value chain. Examples of such networks are the Carbon Composites (CCeV) and the MAI Carbon cluster of excellence, and also the lithium-ion battery expertise network KLiB.

In order to ensure the long-term success of our innovation strategies, we systematically track megatrends and technology trends and use this analysis to define strategic fields for our future research and development. 3-D printing with carbon materials is an example of one such field.

In our business unit Composites – Fibers & Materials, we are expanding on our strong core competencies along the entire value chain, from the raw material precursor to fibers to composites, resulting in a myriad of opportunities and growth prospects. In this way, we are expanding our existing value chain by systematically developing new textile-based processes. Together with our collaborative partners, SGL Group is also

developing practical solutions in multi-material design based on innovative structural composites, which have very significant potential for application in automotive engineering. The investments in the new Lightweight and Application Center (LAC) at the Meitingen site also put us in the position to respond with greater purpose to customer demand. LAC will enable the development of processes and products as well as the production of prototypes and small series.

Innovations also offer a variety of opportunities with respect to our graphite-based products. Our particular focus in this regard is on optimizing processes and using more cost-effective manufacturing procedures in order to further strengthen SGL Group's competitiveness.

#### **Risk transfer via insurance protection (RC: low)**

SGL Group has global insurance coverage for its major business risks, which has been developed together with the Company's insurers. Under these policies, the risk after predefined deductibles is transferred to the relevant insurer. We address the risk of defaulting insurers by routinely distributing our risk among several insurance companies. To protect our employees and the environment, as well as our buildings, plants and machinery, we continuously make improvements to our preventive measures and routinely train the employees responsible for carrying out these measures. Coordinated visits to our facilities around the world ensure that the identified preventive and security measures designed to reduce risk are implemented. SGL Group allocates appropriate capital expenditures to minimize risk at all sites. However, a risk remains that the insurance coverage may be insufficient in individual cases or that the insurance protection is dropped.

#### **Opportunities and risks from disposals, acquisitions and capital expenditures (RC: low)**

All acquisition and capital expenditure decisions entail extensive risks due to the large amount of funds required and the long-term capital commitment. Therefore, SGL Group makes great efforts to minimize all related risks during the preparation and implementation of these decisions. This is carried out through due diligence contracts with external consulting firms as well as efficient project management and control. Nevertheless, it is not possible to guarantee that each acquired business will be integrated promptly and successfully and that such businesses will enjoy growth in the future. Furthermore, SGL Group is involved in joint ventures in order to drive collaborative developments and businesses. Over time

the business interests of individual partners may develop differently, making it necessary to establish a new foundation for the partnership. This harbors both opportunities and risks. In addition, acquisitions may lead to a significant increase in goodwill and other non-current assets. Write-offs on these assets as a result of unforeseen business developments may also have a negative impact on our earnings. Furthermore, increased capital expenditure could have negative effects on liquidity.

When disposing of businesses or parts of businesses, we use the same high standards as in new business acquisitions. However, risks arise related to the proceeds from the sale that can be achieved and realized, which may deviate from original expectations.

The disposal of HITCO's aerostructures business also continues to present risks, particularly regarding the quality of products manufactured up to the closing date of December 18, 2015. The sale of the carbon fiber production site in Evanston harbors risks related to the expected completion of the transaction in the spring of 2017.

#### **Opportunities and risks in human resources (RC: low)**

Our employees and executives constitute a key pillar of SGL Group's success. The competition for highly qualified executives, scientists, and engineers is very intense. In order to achieve our strategic goals, we have to hire and retain highly qualified personnel. The loss of important experts based on the initiated changes within the Group could have a negative impact on the results of operations, financial position and net assets of SGL Group.

#### **Overall risk and opportunity assessment of SGL Group**

The overall assessment of the above risks and opportunities is mainly the result of the planned participation in markets that are not yet growing and competition risks in connection with price and volume trends for both sales and procurement. In addition, a high level of uncertainty exists related to the global and regional economic developments. These risks could also adversely affect the value of our balance sheet assets and may require related write-offs in the medium term. A ban in the medium term on the hazardous materials used in production will have a negative impact on the group's costs and capital expenditure. In contrast, internal production processes are much less subject to risk. Closing the transaction of the graphite electrodes business and the planned sale of the

CFL/CE business harbor both risks and opportunities to strengthen the capital structure and give CFM and GMS the basis for solid growth.

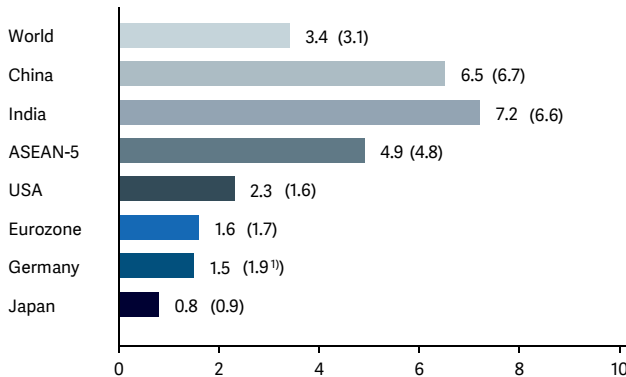
In summary, we do not currently see any substantial financial risks that impact SGL Group as a whole. On the basis of information currently available, it is our opinion that no individual material risks exist – neither presently nor in the foreseeable future – that could jeopardize the business as a going concern. Even if the individual risks are viewed on an aggregate basis, they do not threaten SGL Group as a going concern.

# Outlook

## Overall economic trend

The global economy is set to improve according to the unanimous predictions of economists. Although growth in China is flattening out, the world economy will be fueled in 2017 by other emerging economies that are benefitting from the recovery in oil and commodities prices. The U.S. will act as another growth driver. The International Monetary Fund (IMF) projects global economic growth of 3.4% in 2017, with the established economies growing by 1.9% and the emerging and developing economies by 4.5%. However, the predicted upswing is susceptible to disruption due to the considerable risk of the global economy registering a notable slowdown. Risk factors include diverging monetary policies, the unclear direction of the new U.S. administration, growing global protectionism, and the immense political challenges in Europe.

**Gross domestic product in 2017 (2016) at a glance**  
Real change year-on-year in %



Source: IMF, World Economic Outlook (Update) from January 2017

<sup>1)</sup> German Federal Statistical Office

## Restrained growth of the global economy

The IMF is forecasting an upturn in growth of 2.3% in the U.S. in 2017. The upswing is broadening there, as investment activity is increasing, including in the energy sector, which had recently seen a downturn. The fiscal and structural policies are also expected to provide stimuli. Growth will only be moderate in the euro zone, however, despite the depreciation of the euro and improved export markets. Private consumption will remain strong but lose some of its momentum, whereas investments will be gradually increasing. Many uncertainties stand in the way of an economic upturn: Brexit, the upcoming elections in important EU countries, and the still unsolved financing problems of some euro states and the Italian banks.

After the growth surge seen in Germany's economy in the previous year, a lower growth rate is likely in 2017 (IWF: +1.5%). The underlying economic trend is robust, however. China is continuing its economic transformation in support of domestic demand and high-tech development. Growth there continues to slow, with the IMF expecting growth of 6.5% in China in 2017. In contrast, India is on a dynamic growth path, but still affected by its cash reforms. In the ASEAN-5 countries, growth is barely advancing, while Russia (+1.1%) and Brazil (+0.2%) are still emerging from recession.

## Industry trends Continuing operations

### Market segment mobility

#### Automotive industry: intensified emission controls and technological advances drive lightweight construction and e-mobility

The market researchers of LMC Automotive predict continued but slower growth for 2017. Accordingly, the production of light vehicles should increase by about 2.3% worldwide. The German automobile industry association (Verband der Automobilindustrie, VDA) expects growth to flatten out to 2% with respect to the global sales of passenger cars and light vehicles, with +5% growth in China and stagnant growth in the U.S. and Western Europe. More stringent emission laws and improvements to range, comfort and manufacturing of e-cars are fueling the trend towards electrical cars and lightweight construction. New suppliers like Tesla and BYD are becoming increasingly well established. According to the VDA, German automotive manufacturers hope to more than triple the current range of electrical cars to almost 100 models by 2020. In a recent forecast concerning carbon fibers for automotive and industrial applications, IHS industry experts outlined growth of almost 9% p.a. by 2020. In addition, volume should then multiply beginning in the mid-2020s as a result of new concepts for the mass market, with a long-term target figure in the several 100 billion US dollar range.

#### Aerospace: opportunities for carbon fibers in structural and cabin components

Carbon fibers are an established material in lightweight construction for the aviation industry. In this sector, IHS market experts expect growth of 9% p.a. until 2020. The drivers for that growth are the Boeing 787 and the Airbus A350 XWB and in the military field the F-35 Lightning II. Carbon fibers are also being used on a large scale for the Boeing 777. These aircraft models so



far only certify and use special fiber qualities that are not in SGL Group's product portfolio. In the future, however, there will be additional applications for our industrial carbon fibers in the aviation sector, such as with non-structural cabin components. The driving forces behind these trends are both the growing pressure to reduce component weight and the significant cost advantages of industrial carbon fibers. New opportunities may open up here, particularly where the modernization of existing aircraft models and fleets is concerned.

### Market segment energy

#### Lithium ion batteries: production of e-cars and local energy storage units to increase multifold

The global market for lithium ion batteries will grow by 11.6% p.a. to an estimated USD 77.4 billion by 2024 (according to Transparency Market Research). Due to the already high penetration of smartphones, Technavio expects the largest sub-market – consumer electronics – to only show a moderate increase in demand growth by 2019. Gartner anticipates growth of 1.5% for mobile devices in 2017. In contrast, the automotive industry is undergoing a massive shift toward electric vehicles. The diesel exhaust issue, increasing driving restrictions in major cities (including Paris and Beijing), and medium-term plans to ban combustion engines (Norway) are all fueling this trend. Battery production has already been picking up noticeably in the short term since production activities of the Tesla Gigafactory started in the beginning of 2017. Other manufacturers are also investing considerably in expanding capacities for battery production, particularly in Asia. Lithium ion battery production (2015: 70 GWh) is expected to quadruple already by 2020, driven by the need for electric cars. In addition, demand for local energy storage units is expanding rapidly in the power supply sector. Technavio is even expecting annualized market growth of 26% for local energy storage over the years 2014 to 2019.

#### Wind industry set for robust growth by 2020 and beyond

Wind energy will continue to expand, and industry associations expect the world climate summit held in Paris in 2015 to provide additional impetus in the future. Uncertainty still remains, however, regarding the future climate policy in the U.S. So far, only 15 countries dominate the market, with a share of about 90% of installed wind capacities. In addition to the traditional volume markets of China, the U.S., Germany, India and Spain, Brazil and various European countries are also playing a major role. Other countries will surely be added in the

future. In addition to upgrading and replacing old installations on land (repowering), large offshore projects are also in the works. For 2017, the Global Wind Energy Council (GWEC) expects global expansion of 68 GW. According to the GWEC's baseline scenario, by 2020 repowering will allow for the new installation of 79 GW on average per year. Accordingly, total installed capacity would reach 797 GW by the year 2020 (+11% p.a.). By 2030, GWEC is expecting capacity to have doubled. As carbon fibers are in some instances being used in the production of rotor blades, the outlook for our wind business is positive.

#### Solar/polysilicon: continued overcapacities, demand for photovoltaics to stagnate in 2017

Demand for photovoltaics (PV) is by far the most dominant factor in the global polysilicon market. After the unexpected significant growth impetus seen during the previous year, the market is expected to undergo a temporary correction in 2017. The underlying, strongly increasing demand, however, will persist. In concrete terms, IHS is anticipating global market growth of only about 3% to 79 GW of newly installed capacity in 2017, with a stronger market upturn not expected until 2019. In contrast, GTM Research is even expecting the market to shrink by 7% to 69 GW in 2017, but also that it will already begin to recover in 2018. As a result of high capital expenditure preceding demand, overcapacities of 18-35% currently exist both for polysilicon and over the entire PV value chain (according to EnergyTrend), which will only be absorbed during the course of 2018. As a result, conditions for suppliers currently remain tense, although prospects remain positive for the long term.

### Market segment digitization

#### Semiconductors / polysilicon: moderate growth expected for all product groups and regions

According to the industry association World Semiconductor Trade Statistics (WSTS), semiconductors, the second end market for polysilicon, will grow moderately in 2017 after two years of stagnation. Accordingly, sector sales will increase by 3.3% to about USD 346 billion in 2017. Growth is expected in all product groups and regions.

#### LED: ongoing strong growth – penetration rate to increase to 52% in 2017

TrendForce (LEDinside) estimates that the global market volume of LED lamps sold will grow by approximately 12% to a good USD 33 billion in 2017. Conventional lighting sources are

rapidly being substituted by modern, energy-saving, environmentally friendly LED lamps. In 2016, the LED market share was the highest in Europe at 26%, followed by North America and China. For 2017, industry experts predict that the global penetration rate will increase to an average of 52% of market volume. A key driver is public lighting, which is being converted to LEDs as a result of government investments or requirements particularly in metropolitan areas in Asia (e.g. China, India). Other sectors are also contributing to this dynamic growth, however, such as private households, offices, trade and industry. The market researchers at Technavio anticipate average growth of about 20% p.a. for the LED module market during the years 2017 to 2021.

#### **Market segment chemicals: flat growth rate due to structural setbacks and high risks**

For 2017, the German Chemicals Industry Association (Verband der Chemischen Industrie, VCI) continues to predict growth of 3.5% in global chemicals and pharmaceuticals production. In other words, there is little impetus to generate noticeable growth in industrial production. According to the VCI, current setbacks include weak growth in emerging markets and concerns regarding stability in Europe. Standing out positively against other markets, however, chemicals production in the U.S. should grow by 2.0% after the stagnation seen in the previous year. Nevertheless, in important Asian markets the pace of expansion is weakening – to 6.5% in China and to 1.5% in South Korea. For India, stable growth of only 2.5% is expected. In both Japan and Russia, the VCI expects weak growth of 1%. It is similarly skeptical about the situation in Europe, where it continues to anticipate production growth of only 0.5% in Germany and 1.5% in the EU as a whole. Oil prices, which are a key input factor, will rise, but will remain favorably priced in the long term. In light of these conditions, investment confidence in the global chemicals industry will likely remain restrained in 2017. However, general industry trends are only of partial importance to SGL Group, as we occupy a small niche that is characterized by project business in specific segments.

#### **Discontinued operations**

##### **Steel industry: Chinese overcapacities continue to have an impact – electric steel remains under pressure**

The World Steel Association (WSA) anticipates a small increase of 0.5% in global demand for steel, to 1.51 billion tons in 2017 (+1.1% in industrialized countries, and +0.4% in emerging/developing countries). In the Americas and Europe, demand should increase as a result of high investment and robust

construction industries. In the Middle East and Asia, however, demand will remain restrained. Outside of China, total growth of 2.6% is likely. Within China, however, which will represent about 43% of global demand in 2017, growth will shrink to 2.0% according to the WSA. As long as China does not reduce its overcapacities in a noticeable and sustainable manner, market pressure will remain in place as a result of cheap steel exports from China to other regions. Global supply will continue to exceed demand in 2017, meaning that no sustainable turnaround for electric steel is likely for the time being.

##### **Aluminum industry conditions improve slightly despite little demand for investment outside of China**

Long-term drivers for aluminum demand are weight and CO<sub>2</sub> reduction. For 2017, industry experts from MetalMiner expect growth stimuli to include tax-subsidized higher car sales in China and the new US government's announcement regarding considerable investments in infrastructure. Global demand for aluminum will thus increase at a rate of at least 4% p.a., and higher price quotations are also expected for 2017. As a result of a marked increase in production costs in China, MetalMiner only anticipates limited capacity increases there, which should ease the overall market somewhat. In light of the current global surplus, however, incentive for investment outside of China should remain low.

#### **Overall assessment of the Group's anticipated performance by Company management**

The comments in our Outlook are based on our two operating reporting segments: Composites – Fibers & Materials (CFM) and Graphite Materials & Systems (GMS). In addition, we also have a third reporting segment T&I and Corporate, in which central functions are consolidated (for information on our organizational and reporting structure, please refer to the Management Report starting on page 42). The former reporting segment Performance Products (PP) was reclassified under discontinued operations as of June 30, 2016. PP's graphite electrodes business was sold on October 20, 2016 to the Japanese company Showa Denko (closing anticipated mid 2017). The remaining business with cathodes, furnace linings and carbon electrodes (CFL/CE) will likely be divested during the course of 2017 in a separate disposal process.

The Group outlook and the outlook for our primary segments are based on the aforementioned expectations relating to the general performance of the economy and industry trends. Should the geopolitical and/or sovereign debt crises escalate

further, negative effects on our forecast of the Group's financial performance and financial position cannot be ruled out. For portions of our reporting segment GMS, and particularly for CFM, performance will also depend on our customers' major projects. If performance differs from our projections, this could impact the Group either positively or negatively.

Our projections are also based on certain exchange rates. On the basis of projected net positions, we have hedged relevant currency pairs in a scope of up to 80% with the aim of safeguarding our income from exchange rate fluctuations during 2017. Irrespective of this, changes in net positions (e.g. due to sales trends that differ from our projections) and further upheavals in our most important currencies would influence our earnings forecast, which is based on the prevailing currency exchange rates at the time this Management Report was prepared. Distortions in the prices of essential raw materials can also influence our earnings forecast.

The following table provides an overview of relevant financial Group targets and the respective outlook for 2017:

#### Group financial targets

€m	Actuals 2016	Outlook 2017 <sup>1)</sup>
Sales revenue <sup>2)</sup>	769.8	Slight increase
EBIT <sup>2)</sup>	20.7	Increase more than proportional to sales
ROCE <sup>2)</sup>	2.5%	Slight improvement
EBITDA <sup>2)</sup>	69.9	Increase more than proportional to sales
ROCE <sup>2)</sup>	8.4%	Slight improvement
Result from continuing operations	-36.0	Close to prior year level

<sup>1)</sup> "Slight" indicates a variation of up to 10%; "significant" indicates a variation of more than 10%

<sup>2)</sup> Target figures are in each case based on continuing operations before non-recurring charges

#### Group performance

We expect Group sales to increase slightly in 2017. Expected volume growth and the implementation of initial CORE measures should allow Group EBITDA and Group EBIT (both before non-recurring charges) to increase more than proportionately to sales.

The anticipated operational improvement will likely not be reflected in the Group consolidated net result from continuing operations, mainly because of the positive one-off effects realized through the sale of the Evanston site (USA) in the previous year and the planned early redemption of our corporate bond (early prepayment penalty) during the current year, which will increase the expenses in the financial result. As a result, we anticipate a net loss from continuing operations in the mid-double-digit million euro range.

The result from discontinued operations, and thus the Group result, will be characterized both by the anticipated slight improvement to the operational business of our former reporting segment PP and by the proceeds from the ongoing sale of CFL/CE.

#### Business trend in the reporting segments

	KPI	Actuals as basis for comparison	Outlook <sup>1)</sup>
CFM	Sales revenue	317.4	Slight increase
	EBIT before non-recurring charges	20.1	Close to prior year level
GMS	Sales revenue	444.1	Slight increase
	EBIT before non-recurring charges	27.8	Significant increase
T&I and Corporate	EBIT before non-recurring charges	-27.2	Slight deterioration <sup>2)</sup>

<sup>1)</sup> "Slight" indicates a variation of up to 10%; "significant" indicates a variation of more than 10%

<sup>2)</sup> The prior year benefited from a one-time positive effect from a Malaysian land sale. Adjusted for this effect, EBIT should be approx. on prior year level

In our reporting segment Composites – Fibers & Materials (CFM), we expect a slight increase in sales revenue, which will mainly be driven by higher demand for carbon fibers in industrial applications. We also anticipate slight increases in sales revenues from the automotive industry and in the textile fibers market segment. In contrast, sales revenue from the aviation industry will likely decrease, as the previous year was characterized by higher invoicing in HITCO's materials business. We expect EBIT in this reporting segment to only remain on the level of the previous year in 2017, mainly due to the preparatory efforts in our new Lightweight and Applications Center (LAC), which is designed to develop future business with the automotive and aviation industries, as well as higher depreciation and amortization as a result of converting a precursor line. We anticipate that these developments will offset the positive effects resulting from

higher capacity utilization. In addition, EBIT in 2016 also contains a positive effect resulting from high invoicing in HITCO's materials business.

We also expect a slight increase in sales in our reporting segment Graphite Materials & Systems (GMS), mainly in the LED and chemicals market segments, as well as in the industrial business in North America. In contrast to the restrained market growth anticipated for 2017, we are expecting a noticeable increase in sales with our customers in the solar industry, thanks to our product portfolio which is geared to that dynamic market, and also due to our improved competitiveness and regional positioning. We are also expecting strong growth in volume demand in our lithium ion battery business. The anticipated marked increase in EBIT is based on higher capacity utilization in almost all of our business activities, as well as on cost savings. As a result, it should be possible to approximately achieve our target ROCE (ratio of EBITDA to capital employed) of 15%.

EBIT in our reporting segment Corporate and T&I benefited from the positive one-off effect generated by a land sale in Malaysia in the year under review. Consequently, the reported EBIT will deteriorate slightly in 2017. After adjusting for those proceeds, EBIT should be approximately at the level of the previous year. The discontinuation of services previously provided to our GE and CFL/CE businesses, which are currently being sold, should be compensated for by the cost savings generated by project CORE.

### **Expected financial position**

The Group's financing requirements are determined by the strategic business plans of our operating business units, which are reviewed annually based on the new projections. In December 2016, we carried out a successful rights issue that generated net proceeds of about €173 million. Previously, we had sold our business with graphite electrodes to the Japanese company Showa Denko on October 20, 2016, for an enterprise value of €350 million. After deducting associated liabilities, we expect the closing in mid 2017 to generate a cash inflow of at least €200 million, depending on the corresponding figures on the balance sheets at closing. During 2017, the sale of our CFL/CE activities should then follow. In addition, we also have access to a new syndicated credit line, which remains undrawn.

As a result, we have more than sufficient means to cover our operational financing requirements, as well as to call our

€250 million corporate bond (including the required prepayment penalty) and our €240 million convertible bond that is due in January 2018.

Based on these assumptions, our net financial debt should be considerably lower at the end of 2017 than it was at the end of 2016.

### **2017 capital expenditure nearing the level of depreciation and amortization**

After limiting our capital expenditure in the previous year due to the weak financial situation, capital expenditure will be increased again somewhat during the current year, although it still will not exceed the level of depreciation and amortization. In our reporting segment CFM, the continued expansion of our Lightweight and Applications Center (LAC) remains the focus of our capital expenditure. In our reporting segment GMS, we are focusing our capital expenditure on maintenance measures, the expansion of coating capacities for the LED industry, the expansion of production capacities for our anode materials for the lithium-ion battery industry, and minor capacity expansions for sectors such as the solar industry.

### **Dividend performance**

Due to the accumulated loss reported by the parent company SGL Carbon SE in fiscal 2016, the Company had no capacity to distribute dividends. However, we are working with the utmost priority on making our Company sustainably profitable again. Only then will the payment of earnings-related dividends be possible.

# Remuneration Report

---

## Remuneration for the Board of Management in fiscal year 2016

The remuneration system applicable to members of the Board of Management was revised as of January 1, 2014 as part of the Supervisory Board's review of Board of Management remuneration. As a general rule, the individual agreements for Board members are identical. In some cases, however, deviations have been agreed on with respect to retirement benefits and the maximum total remuneration. Those differences take into account the respective Board member's situation as of the date on which the remuneration system was revised. The following objectives were considered in particular when restructuring the system in order to fulfill the regulatory requirements:

- Harmonization of the remuneration systems for Board members
- Reduction in complexity
- Focus on sustained effectiveness of remuneration systems.

The Annual General Meeting of SGL Carbon SE approved the new remuneration system on April 30, 2014 with a majority of 99.64% of votes cast.

### Structure of Board of Management remuneration

The remuneration paid to the members of the Board of Management includes performance independent salary and noncash payments as well as retirement benefit obligations and performance-related (variable) components.

The performance independent components include a fixed annual salary (basic remuneration) as well as fringe benefits and an annual contribution to retirement benefits. The basic remuneration is paid in twelve equal installments at the end of

each month. Dr. Koehler receives €630,000, Dr. Majerus €465,000, and Dr. Wingefeld €465,000 per year. The fringe benefits primarily comprise the use of a company car, including use of the chauffeur pool, and health insurance supplements. Membership in the Group accident insurance plan and D&O insurance with a deductible as specified by the German Stock Corporation Act (AktG) and the German Corporate Governance Code (DCGK) is also included.

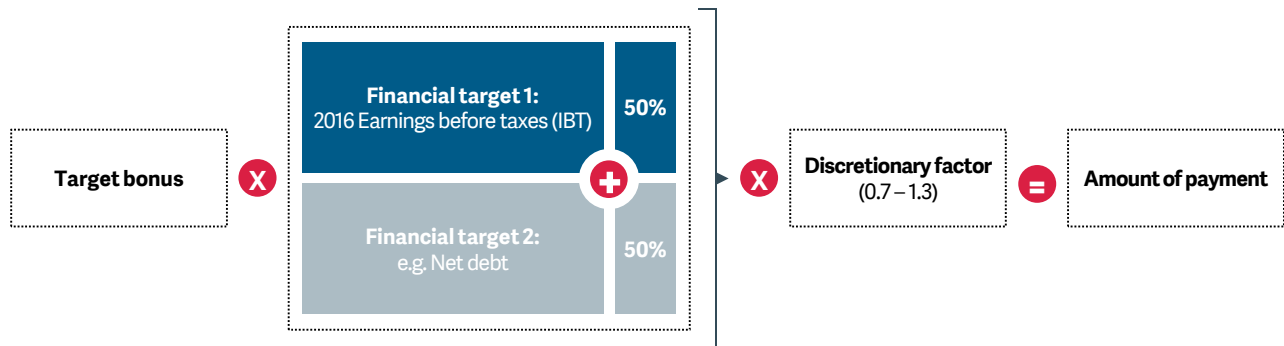
The performance-related components comprise the annual variable remuneration (SGL Carbon Bonus Plan) and a multiyear variable remuneration component (SGL Carbon Long Term Incentive Plan – LTI).

### SGL Carbon Bonus Plan

The annual variable remuneration for the members of the Board of Management is measured on the basis of a target bonus defined individually for each Board member (Dr. Koehler: €420,000 p.a.; Dr. Majerus: €350,000 p.a.; Dr. Wingefeld: €350,000 p.a.). The amount paid out depends on financial and individual performance targets being reached during the fiscal year.

As a general rule, the Supervisory Board sets two financial performance targets per year when determining the annual variable remuneration. The target values may change from year to year, and each is weighted at 50%. Depending on the target, the achievement level can range from 0% to 200%. The Supervisory Board sets the minimum and maximum targets.

In order to determine the annual variable remuneration, the figure resulting from the financial performance targets is multiplied by a discretionary performance factor of between 0.7 and 1.3 (see graph).



The Supervisory Board determines the discretionary performance factor using the individual level of achievement of the various personal targets set at the start of the year for each Board member.

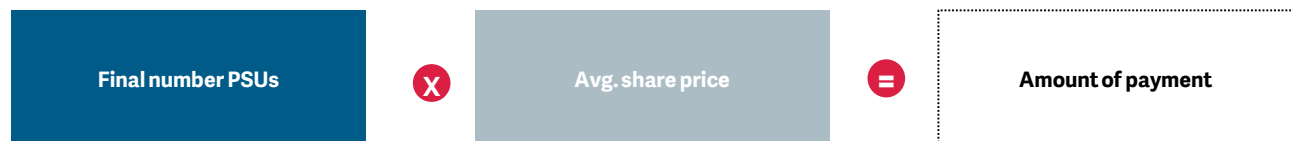
The payout is capped at 200% of the target bonus.

### **SGL Carbon long-term incentive plan**

Members of the Board of Management are entitled to multi-year variable remuneration in the form of a Long-Term Incentive Plan (LTI). The LTI is intended to honor sustained, long-term growth of the company, which is mapped using the multi-year ROCE (EBIT) trend (performance target) and the share price. One tranche of the plan is granted each year. The Supervisory Board sets the target ROCE (EBIT), including the relevant minimum and maximum thresholds, for a period of up to four years.

Upon granting, an allocation amount is set for each Board member in euros (Dr. Köhler: €700,000 p.a.; Dr. Majerus: €545,000 p.a.; Dr. Wingefeld €545,000 p.a.). Those amounts are used to calculate the preliminary number of virtual shares (performance share units, or PSUs) every year. The number of preliminary PSUs is calculated at the start of the corresponding performance period by dividing the allocation amounts by the fair value per share for the PSU. The fair value per share is calculated by an independent third party.

After a period of either three or four years, the degree of ROCE target attainment is identified. No payment is made unless the minimum ROCE target is reached. The final number of PSUs is limited and can equal between 0% and 150% of the preliminary number of PSUs. The potential payout amount is indicated by the final number of PSUs multiplied by the rounded share price during the last 60 trading days of the performance period. The total amount to be paid out is capped at 200% of the allocation amount on the date granted. Payouts are made in cash.



### **Shareholding requirements**

Members of the Board of Management are required to permanently hold a fixed quantity of shares in SGL Carbon SE for the duration of their term on the Board. For the CEO, the number of shares to be held corresponds to his fixed annual salary. For the other members of the Board of Management, the number of shares to be held corresponds to 85% of their

fixed annual salaries. The number of shares is calculated on the basis of the rounded share price at the beginning of the performance period. The number of shares to be held must be built up successively over four years, unless the Board of Management member already fulfills the shareholding requirement.



The Supervisory Board is entitled to redefine the number of shares to be held when the Board of Management is reappointed in line with the method described.

### Maximum total remuneration

The remuneration system also places a cap on the amount of the annual gross remuneration that could theoretically be paid to the members of the Board of Management (including contributions to the company pension plan) in consideration of all of the remuneration components. The maximum amount of the annual remuneration is €3,600,000 for Dr. Koehler and €3,100,000 for both Dr. Majerus and Dr. Wingefeld.

### Benefits after leaving the Board

If a member's appointment to the Board of Management is terminated prematurely – whether by mutual consent, revocation, resignation or by termination as a result of company law proceedings in accordance with the Transformation Act (UmwG) – the Board member receives a maximum compensation of two years' remuneration as set forth in the German Corporate Governance Code. If the remaining term of the Board member's employment contract is less than two years, the compensation is reduced on a pro-rata basis. The amount of the annual remuneration to be taken as a basis is determined by the total amount of the fixed salary and the variable remuneration components based on a target attainment of 100% and excluding non-cash compensation and other fringe benefits for the last full fiscal year prior to the end of the Board member's service agreement. No agreements have been entered into to pay benefits if a Board member's contract is terminated prematurely due to a change of control.

Board members are as a rule subject to a one-year ban on competition after their contracts end. As compensation, the company pays the members of the Board of Management a non-competition compensation of 50% of their annual remuneration for the duration of the non-compete clause. The amount of the annual remuneration to be taken as a basis is determined by the total amount of the fixed salary and the variable remuneration components based on a target attainment of 100% and excluding non-cash compensation and other fringe benefits for the last full fiscal year prior to the end of the Board member's service agreement. Any other income received by the Board member is offset against the non-competition compensation.

Dr. Wingefeld was granted a compensation totaling €1,395,000 – most of which will be paid out in 2017 – in connection with the mutually agreed termination of his position as Chief Technology Officer as of December 31, 2016. The compensation includes a non-competition compensation for the period until March 2018. Regarding post employment benefits the necessary pension provisions as of December 31, 2016 were fully accrued for Dr. Wingefeld. This resulted in an additional retirement benefit expense of €545,381 in fiscal year 2016.

### Remuneration for the Board of Management in accordance with the German Corporate Governance Code

Since fiscal year 2014, the German Corporate Governance Code as amended on June 24, 2014 has required the presentation of a detailed breakdown of the remuneration paid to each member of the Board of Management. In order to fulfill the requirements of the German Corporate Governance Code, the presentation of the remuneration paid to the members of SGL Carbon SE's Board of Management in fiscal 2016 includes:

- all of the benefits extended, including fringe benefits and the maximum and minimum remuneration that can be reached
- the amount of fixed remuneration and variable remuneration received for each fiscal year
- expenses for retirement benefits

The remuneration data is included in the benefits table and the allocations table pursuant to the German Corporate Governance Code.

### Total remuneration for the Board of Management (benefits granted)

Total target remuneration for the members of the Board of Management in fiscal year 2016 (based on benefits granted) was €5,737,415 (2015: €5,642,042). Of the total remuneration, €1,560,000 (2015: €1,560,000) was attributable to fixed remuneration, €98,226 to non-cash benefits (2015: €102,131), €1,120,000 to the one-year variable remuneration (2015: €1,120,000), €1,790,000 to the multi-year variable remuneration (2015: €1,790,000), and €1,169,189 to retirement benefits (2015: €1,069,911). The members of the Board of Management were granted PSUs from the LTI as their multi-year variable remuneration. There were no allocations from the discontinued SAR/MSP and LTCl plans in either fiscal 2015 or 2016.

The LTI tranche granted in fiscal year 2016 was divided for Dr. Köhler and Dr. Wingefeld: 25% of the PSUs granted were

measured over a three-year period (2016-2018), while 75% of the PSUs were based on a four-year performance period (2016-2019).

In 2015, the breakdown was 50%/50%. The PSUs granted to Dr. Majerus are based on a four-year performance period only.

The following remuneration was extended to the active members of the Board of Management in the 2016 reporting year (individualized presentation):

Benefits granted (€)	Dr. Jürgen Köhler Chief Executive Officer				Dr. Michael Majerus Chief Financial Officer			
	2015	2016	Min.	Max.	2015	2016	Min.	Max.
Fixed remuneration	630,000	630,000	630,000	630,000	465,000	465,000	465,000	465,000
Fringe benefits	38,702	38,079	38,079	38,079	20,315	24,321	24,321	24,321
<b>Total</b>	<b>668,702</b>	<b>668,079</b>	<b>668,079</b>	<b>668,079</b>	<b>485,315</b>	<b>489,321</b>	<b>489,321</b>	<b>489,321</b>
Annual variable remuneration	420,000	420,000	0	840,000	350,000	350,000	0	700,000
Multi-year variable remuneration <sup>1)</sup>	700,000	700,000	0	2,800,000	545,000	545,000	0	2,180,000
LTI 2015–2017	350,000		0	700,000	0	0	0	0
LTI 2015–2018	350,000		0	700,000	545,000		0	1,090,000
LTI 2016–2018		175,000	0	350,000	0	0	0	0
LTI 2016–2019		525,000	0	1,050,000	0	545,000	0	1,090,000
<b>Total</b>	<b>1,788,702</b>	<b>1,788,079</b>	<b>668,079</b>	<b>4,308,079</b>	<b>1,380,315</b>	<b>1,384,321</b>	<b>489,321</b>	<b>3,369,321</b>
Retirement benefits	12,787	127,372	127,372	127,372	161,990	154,272	154,272	154,272
<b>Total remuneration (German Corporate Governance Code)</b>	<b>1,801,489</b>	<b>1,915,451</b>	<b>795,451</b>	<b>3,600,000</b>	<b>1,542,305</b>	<b>1,538,593</b>	<b>643,593</b>	<b>3,100,000</b>

Benefits granted (€)	Dr. Gerd Wingefeld Chief Technology Officer (till Dec. 31, 2016)			
	2015	2016	Min.	Max.
Fixed remuneration	465,000	465,000	465,000	465,000
Fringe benefits	43,114	35,826	35,826	35,826
<b>Total</b>	<b>508,114</b>	<b>500,826</b>	<b>500,826</b>	<b>500,826</b>
Annual variable remuneration	350,000	350,000	0	700,000
Multi-year variable remuneration <sup>1)</sup>	545,000	545,000	0	2,180,000
LTI 2015–2017	272,500		0	545,000
LTI 2015–2018	272,500		0	545,000
LTI 2016–2018		136,250	0	272,500
LTI 2016–2019		408,750	0	817,500
<b>Total</b>	<b>1,403,114</b>	<b>1,395,826</b>	<b>500,826</b>	<b>3,380,826</b>
Retirement benefits	895,134	887,545	887,545	887,545
<b>Total remuneration (German Corporate Governance Code)</b>	<b>2,298,248</b>	<b>2,283,371</b>	<b>1,388,371</b>	<b>3,100,000</b>

<sup>1)</sup> The figures related to the multi-year variable remuneration reported for fiscal years 2016 and 2015 correspond to the allotment values in the event of a target achievement of 100%.

### Total remuneration for the Board of Management in 2016 (cash allocations)

The cash allocations for the Board of Management in fiscal year 2016 totaled €4,651,223 (2015: €3,981,291). Of the total allocation, €1,560,000 (2015: €1,560,000) was attributable to fixed remuneration, €98,226 to non-cash compensation (2015: €102,131), €1,823,808 to one-year variable remuneration (2015: €1,135,365), €0 to multi-year variable remuneration (2015: €113,884), and €1,169,189 (2015: €1,069,911) to retirement benefit expenses.

The following table of currently active Board of Management members shows the effective allocations in the respective calendar year, broken down into fixed remuneration, fringe benefits, one-year variable remuneration, multi-year remuneration – broken down again into individual plans – and retirement benefit expenses.

Cash method (€)	Dr. Jürgen Köhler Chief Executive Officer		Dr. Gerd Wingefeld Chief Technology Officer (till Dec. 31, 2016)		Dr. Michael Majerus Chief Financial Officer	
	2016	2015	2016	2015	2016	2015
Fixed remuneration	630,000	630,000	465,000	465,000	465,000	465,000
Fringe benefits	38,079	38,702	35,826	43,114	24,321	20,315
<b>Total</b>	<b>668,079</b>	<b>668,702</b>	<b>500,826</b>	<b>508,114</b>	<b>489,321</b>	<b>485,315</b>
Annual variable remuneration <sup>1)</sup>	683,928	433,440	569,940	340,725	569,940	361,200
Multi-year variable remuneration	0	9,800	0	104,084	0	0
MSP-Match 2015	0	9,800		104,084	0	0
<b>Total</b>	<b>1,352,007</b>	<b>1,111,942</b>	<b>1,070,766</b>	<b>952,923</b>	<b>1,059,261</b>	<b>846,515</b>
Retirement benefits	127,372	12,787	887,545	895,134	154,272	161,990
<b>Total remuneration</b>	<b>1,479,379</b>	<b>1,124,729</b>	<b>1,958,311</b>	<b>1,848,057</b>	<b>1,213,533</b>	<b>1,008,505</b>

<sup>1)</sup> The amount paid for the annual variable remuneration in fiscal year 2016 will not be determined until the Supervisory Board meeting on March 17, 2017. The value reported here represents a preliminary payment taking into consideration a discretionary performance factor of 1.0. The value for 2015 corresponds to the payment in 2016 made for fiscal year 2015

### Additional disclosures on share-based payment instruments in fiscal year 2016

The remuneration system for the Board of Management was restructured in 2014 as described above. As a result, no new LTICs, MSPs or SARs have been issued for the members of the Board of Management. Those plans were replaced by the LTI.

The following table shows the status of the plans being phased out:

SARs	Balance as of Dec. 31, 2015		Forfeited in 2016	Balance as of Dec. 31, 2016	
	Number	Weighted base price		Number	Weighted base price
Dr. Köhler	46,000	31.46	0	46,000	31.46
Dr. Wingefeld	112,500	29.59	0	112,500	29.59

The SARs existing as of December 31, 2016 were not exercisable.

The table below shows the performance share units (PSUs) granted from the LTI in 2015 and 2016. Based on the results

posted by SGL Group in 2015 and 2016 and the performance of ROCE, it is expected that only the targets relating to the LTI plans granted in 2016 will be met at the end of the three or four year performance period.

	Tranche	Allocation value €	Price € <sup>1)</sup>	No. of PSUs	Performance 0% – 150% <sup>2)</sup>	Fair value € <sup>3)</sup>
Dr. Köhler	LTI 2014–2016	525,000	19.55	31,393	- %	-
	LTI 2014–2017	175,000	19.55	10,465	- %	-
	LTI 2015–2017	350,000	14.01	27,484	- %	-
	LTI 2015–2018	350,000	14.01	27,484	- %	-
	LTI 2016–2018	175,000	12.26	15,703	27.0%	39,502
	LTI 2016–2019	525,000	12.26	47,110	73.7%	323,405
Dr. Wingefeld	LTI 2014–2016	408,750	19.55	24,442	- %	-
	LTI 2014–2017	136,250	19.55	8,148	- %	-
	LTI 2015–2017	272,500	14.01	21,398	- %	-
	LTI 2015–2018	272,500	14.01	21,398	- %	-
	LTI 2016–2018	136,250	12.26	12,227	27.0%	30,758
	LTI 2016–2019	408,750	12.26	36,679	73.7%	251,797
Dr. Majerus	LTI 2014–2017	476,875	19.55	28,515	- %	-
	LTI 2015–2018	545,000	14.01	42,796	- %	-
	LTI 2016–2019	545,000	12.26	48,906	73.7%	335,734
<b>Total</b>		<b>5,301,875</b>		<b>404,147</b>	<b>26.0%</b>	<b>981,195</b>

<sup>1)</sup> Fair value on grant date after dilution

<sup>2)</sup> Estimated attainment

<sup>3)</sup> Number of PSUs weighted against the performance achieved and an average share price of €9.32 for the last 60 trading days of 2016

### Company retirement benefits

New appointments to the Board of Management receive company retirement benefits in the form of a defined contribution plan. The plan includes retirement benefits upon reaching the statutory retirement age and in the event of invalidity or death. Board members who have reached the age of 62 are entitled to early payout.

SGL Carbon SE pays a contribution into a benefits account for each member of the Board of Management for the duration of their employment and for each past service year. The benefit account is interest bearing until benefits start being paid out, at which time any extra interest generated due to the investments in the benefit account having earned interest at a higher rate than the applicable guaranteed interest rate for the life insurance sector is credited to the benefit account (surplus). In the event of invalidity or death prior to the benefits falling due, the benefits account is credited with contributions up to the age of 60; however, the replenishment is limited to a maximum of ten contribution payments. The payout is made

as a one-time payment or, upon application, in ten annual installments.

Regarding Dr. Köhler, €2,289,940 was paid into a re-insurance policy in 2014 in order to settle vested, non-forfeitable benefit obligations as well as the majority of benefit obligations vesting prior to June 2016.

The new pension system took effect for Dr. Majerus in July 2014.

The previous system still applies to Dr. Wingefeld. Under the old system, the amount of the post-employment benefit commitment and the respective pension benefit depends on the number of terms of appointment as well as the number of years of service on the Board of Management and is stated as a percentage of the last fixed monthly salary. The entitlement for Dr. Wingefeld is equivalent to 70% of his last fixed monthly salary. His pension benefit entitlement has reached the maximum entitlement of 70%.

Active members of the Board of Management as of Dec. 31, 16	Present value of defined benefit obligation		Service costs	
	2016	2015	2016	2015
€ thousand				
Dr. Köhler	2,552	2,393	127	13
Dr. Majerus	391	240	155	162
Dr. Wingefeld	8,937	7,281	888	895
<b>Total</b>	<b>11,880</b>	<b>9,914</b>	<b>1,170</b>	<b>1,070</b>

The total remuneration paid to former members of the Board of Management, executive management, and their surviving dependents, amounted to €1.7 million in fiscal 2016 (2015: €4.3 million). In 2015, €2.6 million was paid out in connection with the exercise of a lump-sum option (*Kapitalwahlrecht*). Provisions of €51.4 million (2015: €49.2 million) were recognized in 2016 to cover pension obligations to former members of executive management and their surviving dependents.

### Supervisory Board remuneration

In addition to the reimbursement of out-of-pocket expenses, each member of the Supervisory Board receives fixed remuneration of €50 thousand per year, payable after the end of a fiscal year. The Chairman of the Supervisory Board receives two-and-a-half times that amount, and the Deputy Chairman one-and-a half times that amount. Each member of the Personnel Committee, the Governance Committee, the Ethics Committee, the Strategy Committee, and the Technology

Committee receives €2 thousand for each meeting attended, and each member of the Audit Committee receives €3 thousand for each meeting attended. The chairmen of the Personnel, Governance, Ethics, Strategy, and Technology committees receive €3 thousand per meeting, and the Chairman of the Audit Committee receives €6 thousand per meeting. In addition, the company pays an attendance fee of €400 for each meeting attended by the members of the Supervisory Board.

€ thousand	Board member since	Age as of the date of the release of the 2016 Annual Report	Period of service (appointed up to)	Remuneration		Total
				Basic remuneration	Additional remuneration	
Susanne Klatten (Chairwoman)	2009 <sup>1)</sup>	54	GM 2020	125.0	13.0	138.0
Dr. Ing. Hubert H. Lienhard (Deputy Chairman)	1996	66	GM 2018	75.0	10.0	85.0
Helmut Jodl (Deputy Chairman)	2008	55	GM 2018	75.0	10.0	85.0
Dr. Christine Bortenlänger	2013	50	GM 2018	50.0	19.0	69.0
Dr. Daniel Camus	2008 <sup>2,4)</sup>	64	GM 2018	50.0	14.0	64.0
Ana Cristina Ferreira Cruz	2013	53	GM 2018	50.0	4.0	54.0
Georg Denoke	2015 <sup>3)</sup>	52	GM 2020	50.0	22.0	72.0
Edwin Eichler	2010	59	GM 2020	50.0	4.0	54.0
Michael Leppek	2013	46	GM 2018	50.0	10.0	60.0
Marcin Rzemirski	2013	56	GM 2018	50.0	4.0	54.0
Markus Stettberger	2013	45	GM 2018	50.0	13.0	63.0
Hans-Werner Zorn (until April 1, 2016)	2013	62	GM 2018	12.5	5.6	18.1
Dieter Züllighofen (since April 1, 2016)	2016	50	GM 2018	37.6	4.4	42.0
<b>Total</b>				<b>725.1</b>	<b>133.0</b>	<b>858.1</b>

<sup>1)</sup> Chairwoman of the Personnel Committee

<sup>2)</sup> Chairman of the Strategy/Technology Committee

<sup>3)</sup> Chairman of the Audit Committee

<sup>4)</sup> Chairman of the Governance & Ethics Committee



# Disclosures pursuant to Sections 289 (4), 315 (4), as well as Sections 289a and 315 (5) of the German Commercial Code (HGB)

---

The following outlines the disclosures required in accordance with Sections 289 (4) and 315 (4) of the HGB:

## Composition of subscribed capital

As of December 31, 2016, the issued capital of the Company was €313,194,183.68, divided into 122,341,478 no-par-value bearer shares, each with a notional value of €2.56 (see **Note 22** of the notes to the consolidated financial statements).

## Restrictions on voting rights and the transfer of shares

The SGL shares issued to plan participants in connection with the individual employee participation programs of SGL Group are subject to a certain extent to a one-year lock-up period, with a two-year lock-up period for LTCI plan (see **Note 30**). Moreover, the members of the Company's Board of Management are obligated to permanently hold a fixed quantity of shares in SGL Carbon SE during their membership on the Board, with the Chairman of the Board of Management holding an amount equal in value to one year's fixed salary and the other Board of Management members holding an amount equal in value to 85% of their annual fixed salaries. Otherwise, no restrictions exist with respect to voting rights or the transfer of shares. This does not affect mandatory statutory provisions, however, particularly those in accordance with Section 71b of the German Stock Corporation Act (AktG), which prohibits voting rights with respect to the Company's own shares, as well as the voting rights prohibition in cases of conflicts of interest in accordance with Section 136 (1) of the AktG.

## Direct or indirect interests in the Company's capital

The Company has been informed of the following holdings of direct or indirect shares in its capital exceeding 10% of voting rights: (i) SKion GmbH, Bad Homburg, with a holding of approximately 28.55% at year-end 2016 by way of voting rights notifications in accordance with Sections 21 et seq. of the German Securities Trading Act (WpHG) and information on own-account trading, and (ii) Bayerische Motoren Werke Aktiengesellschaft (BMW AG), Munich, last reported a holding of approximately 18.26% in the context of the capital increase in 2016. The holding in SKion GmbH can be attributed to Susanne Klatten, Germany, who thus indirectly held approximately 28.55% of the voting rights in SGL Carbon SE at year-end 2016.

## Holders of shares with special rights

The Company has not issued any shares with special rights conferring controlling authority over the Company.

## Type of voting rights control in the case of employee shareholders

There are no voting rights control provisions for employees having an interest in the Company's issued capital.

## Statutory regulations and provisions in the Articles of Incorporation concerning the appointment and dismissal of members of the Board of Management and amendments to the Articles of Incorporation

The statutory provisions of Article 39 of the SE Regulation, Section 16 of the Act implementing the SE Regulation and Sections 84 and 85 of the German Stock Corporation Act as well as Section 6 of the Company's Articles of Incorporation apply to the appointment and dismissal of members of the Board of Management. These provisions stipulate that members of the Board of Management are appointed and dismissed by the Supervisory Board. Board of Management members can be appointed for a maximum term of five years, with reappointment permitted. The Supervisory Board may dismiss a Board of Management member if good cause exists. Good cause includes, but is not limited to, gross negligence of Board of Management duties or a vote of no confidence at the Annual General Meeting. The Supervisory Board decides on appointments and dismissals at its own due discretion.

Changes to the Articles of Incorporation are decided by adoption of a resolution at the Annual General Meeting. Under Section 17 (4) of the Articles of Incorporation, such decisions require a simple majority of the votes cast on the resolution, provided at least half of the issued capital is represented; the foregoing does not apply if a higher majority, including a higher capital majority, is prescribed by law.

## Authority of the Board of Management to issue and buy back shares

Subject to the consent of the Supervisory Board, the Board of Management is authorized to issue new shares from conditional capital (see Section 3 (7), (9), (11), (12) and (14) of the Articles of Incorporation as well as **Note 22** of the notes to the financial statements).

## Significant agreements subject to the condition of a change in control following a takeover bid

The corporate bond issued by the Company in the amount of €250 million and maturing in 2021 entitles investors to demand early repayment of their notes in return for payment of 101% of the principal amount, provided (a) all or nearly all of the assets

of SGL Carbon SE and its Group companies are transferred, (b) SGL Carbon SE is in the process of liquidation or wind-up, (c) a single individual acquires, either directly or indirectly, more than 35% of the voting shares in SGL Carbon SE or (d) SGL Carbon SE is merged with a company and the previous owners of the voting shares in SGL Carbon SE no longer hold the majority of the Company's voting shares after the transaction.

Each of the convertible bonds issued by the Company (due in 2018 and 2020) entitles the bondholders to repayment of their outstanding notes at the principal amount in the event of a change in control, provided the bondholders declare such intention prior to or on the reference date to be determined by the Company; such reference date may not be fewer than 40 or more than 60 calendar days after the change in control. Alternatively, the notes may be converted into shares on or before the reference date, which could result in a better conversion ratio for bondholders based on the staggered conversion price with respect to the residual terms to maturity of the convertible bond in question. For the purposes of the two convertible bonds, a change in control exists if one or more individuals acquires control over the Company, with control being (a) direct or indirect ownership of more than 30% of the voting shares or (b) in the case of an acquisition offer, when the shares controlled by the bidder or individuals cooperating with the bidder plus the shares with regard to which the acquisition offer has been accepted exceed 50% of the voting rights in SGL Carbon SE and the acquisition offer becomes unconditional.

Pursuant to the joint venture agreement between SGL Group and BMW AG establishing SGL ACF, if one of the parties to the joint venture undergoes a change in control (i.e. if a third party directly or indirectly acquires 50% or more of the voting rights in a party to the joint venture, or 25% of the voting rights if such third party is a competitor of the other party to the joint venture), the other party to the joint venture is entitled to purchase the shares belonging to the party to the joint venture affected by the change in control or to tender its shares in the joint venture at market value to the party to the joint venture affected by the change in control.

#### **Compensation agreements with the Board of Management and employees in the event of a takeover bid**

No compensation agreements exist with the Board of Management or employees in the event of a takeover bid.

#### **Corporate Governance declaration according to Sections 289a, 315 (5) of the HGB**

As required by Section 289a and 315 (5) of the HGB, we have published a corporate governance declaration on our website at [www.sglgroup.com](http://www.sglgroup.com) under Investor Relations/Corporate Governance.

Wiesbaden, March 2, 2017

SGL Carbon SE

The Board of Management of SGL Group

**Dr. Jürgen Köhler      Dr. Michael Majerus**



# Consolidated Financial Statements

---

<b>Consolidated Income Statement</b>	<b>106</b>
<b>Consolidated Statement of Comprehensive Income</b>	<b>107</b>
<b>Consolidated Balance Sheet</b>	<b>108</b>
<b>Consolidated Cash Flow Statement</b>	<b>110</b>
<b>Consolidated Statement of Changes in Equity</b>	<b>112</b>
<b>Notes to the Consolidated Financial Statements</b>	<b>114</b>
1. General information	114
2. Summary of significant accounting policies	114
3. Accounting pronouncements required to be adopted in the future	120
4. Sales revenue, functional costs	121
5. Other operating income and expenses	123
6. Investments accounted for At-Equity	123
7. Restructuring expenses	124
8. Reversal of impairment losses	124
9. Net financing result	125
10. Income tax expense	125
11. Result from discontinued operations	126
12. Earnings per share	127
13. Intangible assets	129
14. Property, plant and equipment	131
15. Other non-current assets	132
16. Inventories	132
17. Trade receivables	132
18. Other receivables and other assets	133
19. Liquidity	133
20. Assets held for sale/Liabilities in connection with assets held for sale	134
21. Deferred taxes	134
22. Equity	136
23. Provisions for pensions and similar employee benefits	139
24. Other provisions	145
25. Liabilities	146
26. Contingent liabilities and other financial obligations	149
27. Related-party transactions	151
28. Additional disclosures on financial instruments	153
29. Segment reporting	159
30. Management and employee participation plans	162
31. Audit fees and services provided by the auditors	166
32. List of shareholdings pursuant to Section 313 (2) of the German Commercial Code (HGB)	167
33. Declaration of Conformity with the German Corporate Governance Code	170
34. Events after the balance sheet date	170

# Consolidated Income Statement

for the period from January 1 to December 31

€m	Note	2016	2015 <sup>1)</sup>
<b>Sales revenue</b>	<b>4, 29</b>	<b>769.8</b>	<b>789.5</b>
Cost of sales		-632.9	-649.4
<b>Gross profit</b>		<b>136.9</b>	<b>140.1</b>
Selling expenses		-78.9	-75.3
Research and development costs	4	-30.3	-29.7
General and administrative expenses	4	-47.4	-45.4
Other operating income	5	42.4	43.2
Other operating expenses	5	-9.1	-19.7
Result from investments accounted for At-Equity	6	7.1	0.5
Restructuring expenses	7	-9.8	-6.8
Reversal of impairment losses	8	12.8	0.0
<b>Operating profit/loss</b>		<b>23.7</b>	<b>6.9</b>
Interest income	9	1.1	0.7
Interest expense	9	-48.3	-46.2
Other financing result	9	-3.7	-6.8
<b>Result from continuing operations before income taxes</b>		<b>-27.2</b>	<b>-45.4</b>
Income tax expense	10	-6.8	-22.1
<b>Result from continuing operations</b>		<b>-34.0</b>	<b>-67.5</b>
Result from discontinued operations, net of income taxes	11	-75.7	-225.8
<b>Net result for the year</b>		<b>-109.7</b>	<b>-293.3</b>
Thereof attributable to:			
Non-controlling interests		2.0	1.7
Consolidated net result (attributable to the shareholders of the parent company)		-111.7	-295.0
Earnings per share in basic and diluted (in €)	12	-1.19	-3.22
Earnings per share continuing operations, basic and diluted (in €)		-0.38	-0.75

<sup>1)</sup>Prior year comparatives adjusted, see **Note 1** to Consolidated Financial Statements

# Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31

€m	Note	2016	2015
<b>Net result for the year</b>		<b>-109.7</b>	<b>-293.3</b>
<b>Items that may be reclassified subsequently to profit or loss</b>			
Changes in the fair value of securities available for sale <sup>1)</sup>		0.0	0.5
Cash flow hedges <sup>2)</sup>		1.4	0.2
Currency translation		-12.7	-23.8
<b>Items that will not be reclassified to profit and loss</b>			
Actuarial gains/losses on pensions and similar obligations <sup>3)</sup>	23	-9.3	3.6
<b>Other comprehensive income</b>		<b>-20.6</b>	<b>-19.5</b>
<b>Comprehensive income</b>		<b>-130.3</b>	<b>-312.8</b>
Thereof attributable to:			
Non-controlling interests		1.8	2.1
Consolidated net result (attributable to the shareholders of the parent company)		<b>-132.1</b>	<b>-314.9</b>

<sup>1)</sup> Includes tax effects of €0.5 million (2015: €0.0 million)

<sup>2)</sup> Includes tax effects of minus €1.0 million (2015: €0.4 million) in the first quarter

<sup>3)</sup> Includes tax effects of €2.0 million (2015: minus €1.8 million)



# Consolidated Balance Sheet

As of December 31

ASSETS €m	Note	Dec. 31, 16	Dec. 31, 15
<b>Non-current assets</b>			
Goodwill	13	23.3	22.9
Other intangible assets	13	17.3	20.8
Property, plant and equipment	14	493.0	789.6
Investments accounted for At-Equity	6	39.5	35.0
Other non-current assets	15	6.4	8.3
Deferred tax assets	21	56.7	63.0
		<b>636.2</b>	<b>939.6</b>
<b>Current assets</b>			
Inventories	16	268.9	463.7
Trade receivables	17	89.2	149.5
Other receivables and other assets	18	34.7	37.8
Liquidity	19	329.5	250.8
<i>Time deposits</i>		<i>5.0</i>	<i>14.0</i>
<i>Cash and cash equivalents</i>		<i>324.5</i>	<i>236.8</i>
		<b>722.3</b>	<b>901.8</b>
<b>Assets held for sale</b>	<b>20</b>	<b>540.7</b>	<b>14.7</b>
<b>Total assets</b>		<b>1,899.2</b>	<b>1,856.1</b>

EQUITY AND LIABILITIES €m			
	Note	Dec. 31, 16	Dec. 31, 15
<b>Equity</b>			
Issued capital	22	313.2	235.0
Capital reserves	22	1,032.7	937.7
Accumulated losses		-1,014.1	-883.4
<b>Equity attributable to the shareholders of the parent company</b>		<b>331.8</b>	<b>289.3</b>
Non-controlling interests		16.1	16.5
<b>Total Equity</b>		<b>347.9</b>	<b>305.8</b>
<b>Non-current liabilities</b>			
Provisions for pensions and similar employee benefits	23	306.0	380.2
Other provisions	24	35.9	30.1
Interest-bearing loans	25	748.8	742.2
Other liabilities	25	36.7	52.3
		<b>1,127.4</b>	<b>1,204.8</b>
<b>Current liabilities</b>			
Other provisions	24	84.3	125.5
Current portion of interest-bearing loans	25	3.1	2.6
Trade payables	25	103.9	162.9
Other liabilities	25	46.0	54.5
		<b>237.3</b>	<b>345.5</b>
<b>Liabilities in connection with assets held for sale</b>	<b>20</b>	<b>186.6</b>	<b>0.0</b>
<b>Total equity and liabilities</b>		<b>1,899.2</b>	<b>1,856.1</b>

# Consolidated Cash Flow Statement

for the period from January 1 to December 31

€m	Note	2016	2015 <sup>1)</sup>
<b>Cash flow from operating activities</b>			
Result from continuing operations before income taxes		-27.2	-45.4
Adjustments to reconcile the result from continuing operations to cash flow from operating activities:			
Interest expense (net)		47.2	45.5
Result from the disposal of property, plant and equipment		-3.8	-5.6
Depreciation/amortization expense		49.2	50.2
Reversal of impairment losses	8	-12.8	0.0
Restructuring expenses	7	9.8	6.8
Result from investments accounted for At-Equity	6	-7.1	-0.5
Amortization of refinancing costs		4.4	3.2
Interests received		1.1	1.0
Interests paid		-32.4	-31.9
Income taxes paid	10	-5.2	-3.9
Changes in provisions, net		-5.8	-11.6
Changes in working capital			
Inventories		-9.7	-24.4
Trade receivables		-14.9	6.4
Trade payables		7.3	-4.1
Payments resulting from the early settlement of US dollar hedges		0.0	-34.5
Changes in other operating assets/liabilities		-16.3	-17.6
<b>Cash flow from operating activities - continuing operations</b>		<b>-16.2</b>	<b>-66.4</b>
Cash flow from operating activities - discontinued operations		1.8	26.7
<b>Cash flow from operating activities - continuing and discontinued operations</b>		<b>-14.4</b>	<b>-39.7</b>

€m	Note	2016	2015 <sup>1)</sup>
<b>Cash flow from investing activities</b>			
Payments to purchase intangible assets and property, plant and equipment		-34.6	-44.4
Proceeds from the sale of intangible assets and property, plant and equipment		0.7	3.7
Dividend payments from investments accounted for At-Equity		9.0	12.0
Payments for capital contributions concerning investments accounted for At-Equity and investments in other financial assets		-7.0	-4.2
<b>Cash flow from investing activities - continuing operations</b>		<b>-31.9</b>	<b>-32.9</b>
Changes in time deposits		9.0	26.5
<b>Cash flow from investing activities and cash management activities - continuing operations</b>		<b>-22.9</b>	<b>-6.4</b>
Cash flow from investing activities and cash management activities - discontinued operations		-34.7	-53.5
<b>Cash flow from investing activities and cash management activities - continuing and discontinued operations</b>		<b>-57.6</b>	<b>-59.9</b>
<b>Cash flow from financing activities</b>			
Proceeds from the issuance of financial liabilities		6.3	305.0
Repayment of financial liabilities		-12.2	-270.7
Proceeds from the capital increase	22	180.4	0.0
Transaction costs related to the capital increase	22	-7.1	0.0
Payments in connection with financing activities		-3.7	-4.2
Other financing activities		-0.5	-1.4
<b>Cash flow from financing activities - continuing operations</b>		<b>163.2</b>	<b>28.7</b>
Cash flow from financing activities - discontinued operations		0.0	0.0
<b>Cash flow from financing activities - continuing and discontinued operations</b>		<b>163.2</b>	<b>28.7</b>
Effect of foreign exchange rate changes		0.0	0.7
<b>Net change in cash and cash equivalents</b>		<b>91.2</b>	<b>-70.2</b>
Cash and cash equivalents at beginning of year		236.8	307.0
Cash and cash equivalents at end of year		328.0	236.8
Time deposits at end of year		5.0	14.0
Total liquidity		333.0	250.8
Less: Cash and cash equivalents of discontinued operations at end of year		3.5	
<b>Liquidity</b>	<b>19</b>	<b>329.5</b>	<b>250.8</b>

<sup>1)</sup>Prior year comparatives adjusted, see **Note 1** to Consolidated Financial Statements

# Consolidated Statement of Changes in Equity

for the period from January 1 to December 31

	Equity attributable		
€m	Issued capital	Capital reserves	Accumulated profit/loss
Balance at Jan. 1, 15	234.0	914.4	-554.0
Net result for the year			-295.0
Other comprehensive income			3.6
<b>Comprehensive income</b>			<b>-291.4</b>
Dividends			
Capital increase from share-based payment plans	1.0	5.2	
Equity component of convertible bonds <sup>1)</sup>		18.1	
Other changes in equity <sup>2)</sup>			12.3
<b>Balance at Dec. 31, 15</b>	<b>235.0</b>	<b>937.7</b>	<b>-833.1</b>
Balance at Jan. 1, 2016	235.0	937.7	-833.1
Net result for the year			-111.7
Other comprehensive income			-9.3
<b>Comprehensive income</b>			<b>-121.0</b>
Dividends			
Capital increase from share-based payment plans	1.4	-1.5	
Capital increase <sup>3)</sup>	76.8	96.5	
Other changes in equity <sup>2)</sup>			1.4
<b>Balance at Dec. 31, 16</b>	<b>313.2</b>	<b>1,032.7</b>	<b>-952.7</b>

<sup>1)</sup> After deduction of transaction costs of €0.4 million and effects of €1.3 million in connection with the redemption of the 2009/2016 convertible bond, see **Note 25**

<sup>2)</sup> In particular in connection with non-controlling interests in partnerships, see **Note 25**

<sup>3)</sup> After deduction of transaction costs of €7.1 million, see **Note 22**

to the shareholders of the parent company							Total equity
Accumulated losses							
Accumulated other comprehensive income							
	Currency translation	Cash flow hedges (net)	Results from the mark-to-market valuation of securities	Accumulated losses	Equity attributable to the shareholders of the parent company	Non-controlling interests	
	-26.4	-0.5	0.1	-580.8	567.6	17.1	584.7
				-295.0	-295.0	1.7	-293.3
	-24.2	0.2	0.5	-19.9	-19.9	0.4	-19.5
	-24.2	0.2	0.5	-314.9	-314.9	2.1	-312.8
				0.0	0.0	-1.4	-1.4
				0.0	6.2		6.2
				0.0	18.1		18.1
				12.3	12.3	-1.3	11.0
	-50.6	-0.3	0.6	-883.4	289.3	16.5	305.8
	-50.6	-0.3	0.6	-883.4	289.3	16.5	305.8
				-111.7	-111.7	2.0	-109.7
	-12.5	1.4	0.0	-20.4	-20.4	-0.2	-20.6
	-12.5	1.4	0.0	-132.1	-132.1	1.8	-130.3
				0.0	0.0	-0.5	-0.5
				0.0	-0.1		-0.1
				0.0	173.3		173.3
				1.4	1.4	-1.7	-0.3
	-63.1	1.1	0.6	-1,014.1	331.8	16.1	347.9



# Notes to the Consolidated Financial Statements

---

## 1. General information

SGL Carbon SE, with registered offices at Söhnleinstrasse 8, Wiesbaden (Germany), together with its subsidiaries (the Company or SGL Group), is a global manufacturer of products and solutions based on carbon fibers and specialty graphites. SGL Group has prepared its consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU), and the additional provisions pursuant to Section 315a (1) of the German Commercial Code (Handelsgesetzbuch, HGB). The consolidated financial statements for the period ended December 31, 2016 were authorized for issue by the Board of Management on March 2, 2017.

The consolidated financial statements are generally prepared on the basis of historical cost, unless otherwise stated in **Note 2** "Summary of significant accounting policies." The consolidated financial statements were prepared in euros (€) and are presented in millions of euros (€ million), rounded to the nearest €0.1 million unless otherwise indicated. The accounting policies applied correspond to those applied for fiscal 2015, with the exception of the following matters.

### Presentation of the result from investments accounted for At-Equity within EBIT

The investments accounted At-Equity are activities in the carbon fiber value chain. Therefore, the result from investments accounted for At-Equity, which previously was reported below EBIT, is allocated to the CFM reporting segment and reported within EBIT as from financial year 2016. The changed presentation of the result from investments accounted for At-Equity within the operating profit reflects the operating character of the investments accounted for At-Equity. Prior year figures for the income statement are reported on a comparable basis.

### Presentation of the business unit PP as discontinued operations

In the year under review, the legal carve-out and independence of the business unit PP was successfully completed and a resolution was passed to sell and discontinue the businesses pertaining to this business unit. Accordingly, the expenses and income as well as cash flows attributable to this business unit are presented as discontinued operations in the income statement and the cash flow statement, respectively, for all periods presented. The corresponding prior-year disclosures in

the notes to the consolidated financial statements were presented on a comparable basis to the extent practicable.

## 2. Summary of significant accounting policies

The consolidated financial statements are prepared on the basis of the following principles of consolidation, accounting and valuation. In particular cases, it is required to make estimates and assumptions that may affect the reported amounts of assets and liabilities as well as of income and expenses. Such estimates and assumptions can change over time and may have a significant impact on SGL Group's financial position and performance. The accounting principles used by SGL Group that are sensitive to estimates are set out in this Note (e.g. joint operations, impairment tests as well as provisions for pensions and similar employee benefits) and also, in particular, in **Notes 20, 21, 23 and 24**.

### Consolidation principles

The consolidated financial statements include SGL Carbon SE and its subsidiaries over which SGL Group exercises control. SGL Group controls a company if it has the power over the investee. In addition, SGL Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those through its power over the investee. As of December 31, 2016, the scope of consolidation included 19 German (2015: 19) and 50 (2015: 46) foreign subsidiaries in addition to SGL Carbon SE. Four (2015: five) jointly controlled companies and two (2015: two) associates were accounted for At-Equity. Two (2015: two) joint arrangements were classified as joint operations. The list of companies included in the consolidated financial statements as well as the full list of shares held by SGL Group in accordance with Section 313 (2) HGB can be found in **Note 32**. Five foreign companies were newly included in the consolidated financial statements. Two foreign companies without operating activities, including one jointly controlled entity, were disposed of. The effects of these changes in the scope of consolidation on the consolidated financial statements of SGL Group were not material.

### Associates and joint ventures

Associates are companies where SGL Group can exercise a significant influence over financial and operating policies. Joint ventures are companies where SGL Group and another party exercise joint control. Joint control exists when the decisions about the relevant activities require unanimous consent of the parties sharing control. Interests in joint ventures and

associates are included in the consolidated financial statements At-Equity. The share of SGL Group in the profit or loss of the joint venture or associate is recognized in the consolidated income statement, and its share of movements in equity that have not been recognized in the associate's profit or loss is recognized directly in equity. The accumulated changes after the acquisition date result in an increase or a decrease of the carrying amount of the joint venture or associate. If the losses incurred by a joint venture or associate that are attributable to SGL Group correspond to or exceed the value of the interest in such company, no further shares in losses are recognized, unless SGL Group has entered into obligations or made payments for the companies. Moreover, SGL Group reviews as of each reporting date whether there is objective evidence that impairment has occurred regarding the net investment. Impairment losses are recognized in profit or loss.

### **Joint operations**

A joint operation is a joint arrangement whereby the parties have rights to the assets, and obligations for the liabilities, relating to the arrangement.

SGL Group, as joint operator, recognizes assets and liabilities that are controlled by SGL Group in relation to its interest in a joint operation, and also its share of any assets held jointly or of any liabilities incurred jointly. In addition, SGL Group recognizes sales revenue from the sale of its share in the output, including any related expenses, and also its share of the revenue arising from the joint operation and the jointly controlled expenses (proportional consolidation). The following two companies were classified as joint operations: SGL Automotive Carbon Fibers, Moses Lake, Washington (USA) and SGL Automotive Carbon Fibers GmbH & Co. KG, Munich, (Germany), which, together with BMW Group, are operated to produce carbon fibers and carbon fiber fabrics. SGL Group holds a 51% stake in each company and controls the companies jointly with BMW. The companies sell their products directly to the partners and have no external financing sources. Therefore, the companies were consolidated on a proportional basis as joint operations within the meaning of IFRS II. Within the context of applying the IFRS II rules, the assessment of the facts and circumstances that indicate that the parties have rights to substantially all the economic benefits from the joint arrangement is of particular significance. In addition, this assessment may include estimates regarding the interpretation of jointly determined objectives of the collaboration that are

necessary to determine the degree of dependence of the joint arrangement from the parties.

### **Foreign currency translation**

#### **Translation of items denominated in foreign currency**

In the financial statements of the individual consolidated companies, amounts receivable and payable denominated in foreign currency are translated at the year-end middle rates, irrespective of whether they are hedged. The exchange differences arising from the revaluation of items denominated in foreign currency are recognized in the income statement as other operating expense and/or other operating income.

#### **Translation of financial statements prepared in foreign currency**

Separate financial statements denominated in foreign currencies for companies included in the scope of consolidation are translated on the basis of the functional currency concept (IAS 21) in accordance with the modified closing rate method. From a financial, commercial, and organizational perspective, all subsidiaries operate their respective businesses independently, and the functional currency is therefore identical to their respective local currency. As a consequence, balance sheet items are translated at the year-end closing rate and income statement items at the average rates for the year. Currency translation differences are reported as a separate item of equity. Translation differences on non-current intercompany receivables are treated as net investments in foreign operations and recognized directly in equity.

### **Income and expenses**

Income for the fiscal year is recognized when realized; expenses as incurred. Sales revenue is recognized upon transfer of risk, which is generally upon delivery of a product or rendering of services, net of any cash or volume discounts and rebates. SGL Group grants its customers cash discounts for early payment of outstanding amounts. SGL Group also grants customers volume discounts based on quantities purchased over a specific period. These volume discounts are recognized as a reduction in sales revenue. Operating expenses are recognized when a product is delivered, a service is used, or the expense is incurred. Interest income is allocated to the periods in which it is earned and interest expense to the periods in which it is incurred. Dividends are generally recognized at the time of distribution. Advertising and sales promotion expenses as well as other customer-related expenses are recognized as incurred.

Provisions for estimated product warranty obligations are recognized upon sale of the product concerned.

### Earnings per share

Basic earnings per share are calculated by dividing the result from continuing operations, the result from discontinued operations, and the net result for the year after tax – each of which is attributable to the shareholders of the parent company – by the weighted average number of shares outstanding during the fiscal year. Diluted earnings per share take into account all potentially dilutive convertible bonds and share-based payment plans, assuming conversion or exercise.

### Goodwill

Goodwill is not amortized, but must be tested for impairment annually, or whenever events or changes in circumstances indicate that it might be impaired. The impairment test involves allocating the goodwill to the group of cash generating units (CGU), which represent the lowest level within the organization at which goodwill is monitored for the purposes of internal management and control. At SGL Group, the CGUs are represented one level below the segment. An impairment loss is recognized if the carrying amount of the cash-generating unit to which the goodwill has been allocated is less than the recoverable amount. At SGL Group, impairment tests are performed in accordance with the procedure described in the section entitled “Impairment tests of property, plant and equipment and other intangible assets.”

### Property, plant and equipment and other intangible assets

Items of property, plant and equipment as well as other intangible assets used in the business operations for more than one year are measured at cost less straight-line depreciation and any impairment losses. The same applies to investment properties, which comprise properties held by the Company to generate rental income and/or for capital appreciation and which are not used in production or for administrative purposes. The reported fair values for investment properties are determined using expert opinions (corresponds to Level 3 of the fair value hierarchy of IFRS 13). If items of depreciable property, plant and equipment comprise significant identifiable components, each with a different useful life, these components are treated as separate assets and depreciated over their respective useful lives. Investment grants for the purchase or construction of items of property, plant and equipment result in a decrease of the recognized cost of the respective assets. Other

grants or subsidies received are recognized over the contractual life or the foreseeable useful life of the asset.

The following useful lives are used throughout the SGL Group as the basis for calculating depreciation on property, plant and equipment:

Property, plant and equipment - useful lives	
Buildings	10 to 40 years
Plant and machinery	4 to 25 years
Other equipment	3 to 15 years
Office furniture and equipment	3 to 15 years

Other intangible assets are amortized on a straight-line basis over a useful life of up to twelve years.

### Leases

Leases are classified either as finance leases or as operating leases. Leases in which substantially all the risks and rewards associated with the use of the leased asset for a consideration are transferred to SGL Group as the lessee are classified as finance leases. In such cases, SGL Group recognizes the leased asset on its balance sheet at the lower of fair value and the present value of the minimum lease payments and then depreciates the asset over the shorter of the asset's estimated useful life or the lease term (if there is no reasonable certainty that SGL will obtain ownership by the end of the lease term). At the same time, SGL recognizes a corresponding liability, which is measured at amortized cost using the effective interest method. In the case of leases in which SGL Group is the lessee and the lessor retains the risks and rewards with respect to the leased asset (operating leases), SGL Group does not recognize the asset on its balance sheet, but allocates the lease payments as an expense on a straight-line basis over the lease term.

### Impairment tests of property, plant and equipment and other intangible assets

SGL Group assesses at each balance sheet date whether there are indications that its intangible assets and its property, plant and equipment are impaired. If such an indication is identified, the recoverable amount is estimated and compared with the carrying amount in order to quantify the extent of any impairment loss. The recoverable amount is the higher of fair value less costs to sell (net selling price) or value in use, with the value in use being determined first. If this amount is higher

than the carrying amount, the net selling price will not be calculated. SGL Group determines these amounts using measurement methods based on discounted future cash flows, corresponding to level 3 of the fair value hierarchy of IFRS 13. If an asset does not generate cash flows that are largely independent of those generated by other assets, the impairment test is not conducted on the level of the individual asset, but instead on the level of the CGU to which the asset belongs.

The discounted cash flows are themselves based on five-year projections for the individual CGUs that have been prepared using a bottom-up approach and that have been analyzed and approved by the Board of Management of SGL Group. Those projections are based on internal expectations and assumptions that have been checked against external data and adjusted where necessary. For each year and each CGU, the projection includes budgeted unit sales, sales revenue, and cost planning together with the associated forecasts of operating profit and cash flows. Sales revenue and profit trends are projected at the product or product group level based on the expected market, economic, and competitive trends for the subsequent five years and then aggregated at CGU level. For the purpose of determining the terminal value, the steady state is either determined on the basis of the last forecast year or derived by means of further analyses. The resulting future cash flows are then extrapolated using individual growth rates. The estimated future cash flows are discounted to their present value using a discount rate reflecting current market expectations for interest rates and the specific risks related to the asset or the CGU. The most significant assumptions on which the determination of the recoverable amount is based include estimated cash flows (especially sales and margin trends), growth rates, and weighted average cost of capital. These assumptions and the underlying methodology may have a significant impact on each amount and, ultimately, on the amount of any impairment loss applied to the asset. As soon as there is any evidence that the reasons for impairment have ceased to exist, SGL Group determines whether a full or partial reversal of an impairment loss is required.

#### **Discontinued operations and non-current assets held for sale**

Discontinued operations are reported as soon as a component of an entity comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity, is classified as held for

sale or has been disposed of and the business activity (1) represents a separate major line of business and (2) is part of a single coordinated plan to dispose of or discontinue a separate major line of business. In case of an intended sale, assets and liabilities of discontinued operations (disposal groups) are reported separately in the balance sheet in the line items "Assets held for sale" and "Liabilities in connection with assets held for sale." Earnings from discontinued operations are reported in the consolidated income statement separately from expenses and income from continuing operations in the line items "Result from discontinued operations, net of income taxes"; prior year figures are reported on a comparable basis. In the consolidated cash flow statement, cash flows from discontinued operations are presented separately from cash flows from continuing operations; prior year figures are reported on a comparable basis. An individual non-current asset is classified as held for sale if its carrying amount will be recovered principally through a sales transaction rather than through continuing use. The asset is shown in the balance sheet separately in the line item "Assets held for sale."

Non-current assets held for sale as well as disposal groups are recognized at the lower of the carrying amount and the fair value less costs to sell; they are no longer subject to depreciation/amortization.

#### **Financial instruments**

A financial instrument in accordance with IAS 32 is a contractually agreed right or a contractually agreed obligation which results in an inflow or outflow of financial assets and in the issue of equity instruments. This includes primary, i.e. non-derivative, financial instruments such as trade receivables and payables, securities and financial assets, borrowings, and other financial liabilities. It also includes derivative financial instruments that are used to hedge against risk arising from changes in exchange rates and interest rates.

Financial instruments are grouped into the following main IAS 39 measurement categories and IFRS 7 classes. The classes to be established in accordance with IFRS 7 comprise the measurement categories presented here. Moreover, finance lease liabilities as well as derivatives with a hedge relationship are part of the IFRS 7 classes. **(1) Loans and receivables.** Loans and receivables are measured at amortized cost less impairment losses. Impairment losses on trade receivables are recognized in allowance accounts. Non-current non-interest-bearing receivables or low-interest-bearing receivables are

discounted to the present value. At SGL Group, this category mainly includes cash and cash equivalents, time deposits as well as trade receivables; **(2) Financial liabilities measured at amortized cost.** At SGL Group, this category primarily includes financial liabilities, trade payables as well as non-derivative current and non-current other liabilities; **(3) Available-for-sale financial assets.** This category includes non-derivative financial assets that are not allocated to one of the other categories. At SGL Group, this category includes securities that are held at foreign subsidiaries to cover pension entitlements. They are recognized at fair value. Fair value changes are recognized in equity and recognized in the income statement when the financial asset is derecognized. SGL Group does not make use of the categories of *held-to-maturity investments* or *financial assets/liabilities held for trading* or the use of this category does not have any material consequences on the consolidated financial statements. In addition, SGL Group has not elected to make use of the option to designate financial assets or liabilities as at fair value through profit or loss at inception (fair value option). There were no reclassifications between these categories. Financial instruments are recognized as soon as SGL Group enters into a contract for the financial instrument. Financial instruments are initially reported at fair value. Transaction costs directly attributable to the acquisition or issue of financial instruments are only recognized in determining the carrying amount. The subsequent measurement of financial assets and liabilities depends on the category of the instrument concerned. Financial assets are derecognized when the contractual rights to cash flows from the financial asset in question expire or have been extinguished. Financial liabilities are derecognized when the liability has been repaid, i.e. when all financial obligations specified in the agreement have been settled, canceled definitively or have expired. The difference between the carrying amount of the liability settled and the consideration paid is recognized in profit or loss. A purchase or sale of financial assets at market conditions is recognized as of the settlement date.

### Hybrid financial instruments

Financial instruments that contain both a debt and an equity component are classified in separate balance sheet items according to their character. Convertible bonds are examples of instruments treated as such. The fair value of the share conversion rights is recognized separately in capital reserves at the date the bond is issued and therefore deducted from the bond liability. The fair values of conversion rights from bonds

with below-market interest rates are calculated based on the present value of the difference between the coupon rate and the market interest rate. The interest expense for the debt component is calculated over the term of the bond based on the market interest rate at the date of the issue for a comparable bond without a conversion right. The difference between the deemed interest and the coupon rate accrued over the term increases the carrying amount of the bond liability. The issuing costs of the convertible bond are deducted directly from the carrying amount of the debt component and the equity component in the same proportion.

### Derivative financial instruments

In accordance with IAS 39, all derivative financial instruments are recognized in the balance sheet at their fair value. Financial instruments are recognized as soon as SGL Group enters into a contract for a financial instrument. The financial instruments are recognized as of the date on which the relevant transaction is entered into. The Company determines upon inception of a derivative whether it will be used as a cash flow hedge. Cash flow hedges are used to hedge against fluctuations in future cash flows resulting from highly probable forecast transactions. Individual derivatives do not fulfill the hedge accounting criteria stipulated by IAS 39, although in substance, they represent a hedge. Changes in the fair value of derivatives are recognized as follows:

1. **Cash flow hedges:** The effective portion of the changes in the fair value of derivatives used as cash flow hedges is recognized directly in accumulated other comprehensive income. Amounts recognized in this item are transferred to the income statement when the hedged item is taken to income. The ineffective portion of the fair value changes of the hedge must be recognized in income.
2. **Hedges of a net investment in a foreign operation:** In the case of a hedge of a net investment in a foreign operation, the effective portion of the gains or losses from the changes in value of the hedging instrument is recognized directly in equity. The ineffective portion is recognized in the income statement. If the investment is disposed of, the measurement gains or losses of the hedging instrument recognized in equity are transferred to the income statement.
3. **Stand-alone derivatives (no hedging relationship):** Changes in the fair value of derivatives that do not meet

the hedge accounting criteria are recognized in the income statement in accordance with the procedure used for financial instruments in the held-for-trading category and, therefore, must be accounted for at fair value through profit or loss. The settlement date is used as the date for first-time recognition if the trade date and the settlement date are not the same. See **Note 28** for further information on financial instruments.

### **Inventories**

Inventories are carried at acquisition or conversion cost using the weighted average cost method. Where required, the lower net realizable value is recognized. The net realizable value is determined using the estimated selling prices less costs to complete and costs to sell as well as other factors relevant for sales. In addition to directly attributable costs, the cost of conversion also includes an appropriate portion of material and production overheads. Directly attributable costs primarily comprise labor costs (including pensions), write-downs, and directly attributable cost of materials. Borrowing costs are not capitalized. Impairment losses are recognized as cost of sales.

### **Liquidity**

Liquidity is comprised of cash and cash equivalents as well as time deposits. Cash and cash equivalents consist of cash funds and bank balances with an original maturity of less than three months. Bank balances with an original maturity of more than three months are reported as time deposits.

### **Deferred taxes**

In accordance with IAS 12, deferred tax assets and liabilities are recognized for temporary differences between the tax base and the carrying amount in the IFRS consolidated balance sheet as well as for tax loss carryforwards, including tax write-downs carried forward, for interest carryforwards and tax credits carried forward. Deferred tax assets are taken into account only to the extent that it is probable that the relevant tax benefits can be utilized. The calculation of deferred taxes is based on those tax rates applicable as of the balance sheet date or expected to apply as of the date on which the tax benefits are utilized. SGL Group uses tax rates that have been enacted through national tax laws of the respective local tax jurisdiction or for which the legislative process is substantively completed. Changes in deferred taxes recognized in the balance sheet mainly lead to deferred tax expense or deferred tax income. However, in the event items resulting in a change in deferred taxes are recognized directly in equity, the change in

deferred taxes is also recorded directly in equity. Deferred tax assets and liabilities are netted if the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred taxes refer to income taxes of the same taxable entity levied by the same tax authority.

### **Accumulated other comprehensive income (Consolidated Statement of Changes in Equity)**

Accumulated other comprehensive income includes currency translation differences as well as unrealized gains or losses from the mark-to-market valuation of available-for-sale securities (classified as financial assets available for sale) and of financial derivatives used as cash flow hedges or as a hedge of a net investment in a foreign operation, with the gains or losses being recognized outside profit or loss as a component of other comprehensive income in accordance with IAS 39. In addition, actuarial gains and losses from defined benefit plans are recognized directly in equity as accumulated profit/loss in the year in which they occur and in the full amount. Accordingly, deferred taxes recognized in connection with the above-mentioned items are also recorded directly in equity.

### **Provisions for pensions and similar employee benefits**

SGL Group's pension obligations include both defined benefit and defined contribution pension plans. Provisions for pensions and other post-employment benefits in connection with defined benefit plans are determined using the projected unit credit method. This method takes into account known annuities and vested pension rights as of the balance sheet date as well as future expected salary and pension increases. If the benefit entitlements are funded through plan assets, SGL Group offsets the fair value of plan assets with the present value of the defined benefit obligation (DBO) and reports the net amount so determined in the provisions for pensions and similar employee benefits.

The DBO is determined on the balance sheet date using the respective interest rate for first-grade corporate bonds of a similar term. The assumptions used for the calculation of the DBO as of last year's balance sheet date apply for the determination of current service cost as well as the interest income and interest expenses in the following fiscal year. Net interest income or expense for a fiscal year is calculated by multiplying the discount rate applicable for the relevant fiscal year with the net asset or the net liability as of last year's balance sheet date and is recognized in net financing costs. Actuarial gains and losses arising from experience adjustments



and changes to actuarial assumptions are recognized in other comprehensive income (accumulated profit/loss) in the period in which they occur, together with related deferred taxes.

Actuarial valuations are based on material assumptions, such as assumptions on discount rates, expected salary and pension increases as well as mortality rates. The discount rates used are determined on the basis of returns achieved at the end of the reporting period for high-quality corporate bonds with a corresponding term and currency. The underlying assumptions may differ from actual development due to changing market, economic and social conditions. Payments made under defined contribution plans are expensed as incurred.

### Other provisions

Other provisions are recognized when there is a present obligation towards third parties as a result of past events, when it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Non-current provisions are discounted using market interest rates applicable to corresponding maturities. The accounting treatment and recognition of provisions for obligations in connection with incentive plans for management and employees is described in **Note 30**.

SGL Group recognizes tax provisions as soon as such an obligation is deemed probable and the amount of the obligation can be reasonably estimated. Expected tax refunds are not offset but recognized as a separate asset to the extent that these do not refer to the same tax type for the same fiscal year.

Product warranty provisions are expensed at the time of recognition as costs of sale. The amount of the provision is established on a case-by-case basis. In the context of the measurement of provisions, SGL Group takes into account experience related to the actual warranty expense incurred in the past as well as technical information concerning product deficiencies discovered in the design and test phases. Provisions for restructuring measures are recognized when a detailed formal restructuring plan has been adopted and has been communicated to the parties concerned. Provisions for expected losses from onerous contracts are recognized when the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. Provisions are based on management judgment with

regard to amount and probability of future utilization. Significant estimates and assumptions are required for the calculation of provisions related to material asset retirement obligations, closures, restructuring, and personnel measures.

### Financial liabilities

SGL Group measures financial liabilities (with the exception of derivative financial instruments) at amortized cost using the effective interest method. Shares in subsidiaries held by non-SGL Group shareholders that may be returned to the Company in return for payment of the market price (minority interests in partnerships) represent puttable instruments in accordance with IAS 32 and are therefore classified by the SGL Group as debt and are also reported as financial liabilities. In the context of accounting for non-controlling interests, SGL Group assumes that, as a result of specific arrangements, the repayment of the financial instrument cannot be influenced by the SGL Group, for which reason the financial instrument must be classified as a financial liability (IAS 32). The fair value of the non-controlling interest is derived from the cost of the majority interest as of the date of acquisition. This corresponds to the value at which a non-controlling shareholder may redeem its shareholding in return for cash in the amount of its relevant share in equity. The changes in the value of financial liabilities resulting from remeasurement at fair value are recognized directly in equity as an equity transaction in accordance with IFRS 10.23 (i.e. as a transaction with owners acting in their capacity as owners) by adjusting the item "equity attributable to the shareholders of the parent company." This is based on applying the provisions related to a change in the proportion of ownership interests held in a subsidiary that does not result in a loss of control. The fair value is normally determined by SGL Group using the discounted cash flow method, which is based on the future cash flow projections prepared within the framework of corporate planning.

### 3. Accounting pronouncements required to be adopted in the future

The financial reporting standards issued by the IASB listed below are not yet effective and have not yet been adopted by SGL Group.

The IASB published IFRS 9 Financial Instruments in July 2014. IFRS 9 introduces a single approach for the classification and measurement of financial assets. Classification and measurement are based on the contractual cash flow

characteristics and the business model for managing the financial assets. In addition, IFRS 9 introduces a new impairment model based on expected credit losses. IFRS 9 also includes new rules for the application of hedge accounting that aim to improve the presentation of risk management activities, above all in view of the management of non-financial risks. The new standard is required to be applied for fiscal years beginning on or after January 1, 2018. Earlier application is permitted. SGL Group is currently evaluating which impact the application of IFRS 9 will have on the Company's consolidated financial statements.

In May 2014, the IASB issued IFRS 15 Revenue from Contracts with Customers. The new standard stipulates that the recognition of sales revenue must depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Sales revenue is recognized when the customer obtains control of the related goods or services. IFRS 15 also includes disclosure requirements in relation to existing performance surpluses or performance obligations. These are assets and liabilities from customer contracts that arise depending on the relationship between the Company's performance and the customer's payment. In addition, IFRS 15 requires the disclosure of a number of quantitative and qualitative information to enable users of consolidated financial statements to understand the nature, amount, timing, and uncertainty of sales revenue and cash flows arising from contracts with customers. IFRS 15 replaces IAS 11 Construction Contracts and IAS 18 Revenue as well as the related interpretations. The standard is required to be applied for fiscal years beginning on or after January 1, 2018. Earlier application is permitted. SGL Group will apply the standard for the fiscal year beginning on January 1, 2018. Due to the fact that the detailed analyses regarding the impact of IFRS 15 have not been completed, a decision about the specific method intended to be used for transition will be made only during the fiscal year 2017. Based on the results of the analyses conducted, it is expected that the total amount of revenue recognized for a customer contract based on current knowledge will change to a limited extent, such as in connection with variable remuneration and certain performance conditions. In addition, SGL Group does expect that there will be changes in the statement of financial position (for example through separate items for contract assets and contract liabilities) or additional quantitative and qualitative disclosures in the notes.

In January 2016, the IASB issued IFRS 16 "Leases," which is the new standard for accounting for lease agreements. The new standard introduces an accounting model for lessees, that no longer makes a distinction between finance leases and operating leases. In the future, a distinction will no longer be made between leasing an asset and purchasing an asset using funds from loans. In accordance with IFRS 16, the lessee recognizes a right-of-use asset as well as a lease liability upon lease inception. IFRS 16 will result in an increase in property, plant and equipment recognized in the consolidated balance sheet and also an increase in financial liabilities. In the income statement, the lessee must recognize leases in the future as capital expenditure rather than operating expense. All else remaining equal, this results in lower operating expenses and higher amortization, depreciation and interest expenses and therefore an improvement in EBITDA. IFRS 16 replaces IAS 17 as well as the related interpretations and is required to be applied for the first time for fiscal years beginning on or after January 1, 2019. Earlier application is permitted provided IFRS 15 "Revenue from Contracts with Customers" is applied at the same time. Within the framework of a project already initiated to introduce IFRS 16, the analysis of the impact from the new standard is expected to be completed during fiscal years 2017/2018. A reliable estimate of the quantitative effects is not possible prior to the completion of the project.

Moreover, the IASB has published a number of other pronouncements that are required to be applied for periods beginning on or after January 1, 2017. These additional pronouncements have no significant influence on the presentation of the consolidated financial statements of SGL Group.

#### **4. Sales revenue, functional costs**

The breakdown of sales revenues by segment, intersegmental revenues, and the regional distribution of sales revenue are presented in **Note 29** "Segment reporting."

The future competitiveness of SGL Group is safeguarded through sustained development of new products, applications, and processes. This is also reflected in the SGL Group's research and development costs, which remained high at €30.3 million (2015: €29.7 million). Broken down by business segment, research and development costs were as follows: €9.0 million (2015: €8.9 million) in the reporting segment Graphite Materials & Systems (GMS), and €9.9 million (2015: €10.2 million) in the

reporting segment Composites – Fibers & Materials (CFM). Research and development costs on a corporate level amounted to €11.4 million (2015: €10.6 million).

General and administrative expenses grew by 4% compared to the prior year. The increase principally resulted from higher IT costs and external services as well as expenses for management incentive plans.

Additional disclosures based on the nature-of-expense method are provided below:

€m	2016	2015
Wages and salaries (including bonus)	-235.9	-227.2
Social security contributions, post-employment and other employee benefit costs (thereof for pensions: 2016 minus €18.2 million; 2015: minus €17.0 million)	-65.1	-62.8
<b>Total</b>	<b>-301.0</b>	<b>-290.0</b>

The item “wages and salaries” includes personnel measures for the project CORE totaling €8.6 million. For further information on CORE, please refer to **Note 7**. In the prior year, an amount of €3.1 million was recorded for the Bonn 2020 project in personnel expenses.

### Depreciation and amortization

At €49.2 million, amortization and depreciation on intangible assets and property, plant and equipment were almost at the prior-year level (2015: €50.2 million). Amortization of intangible assets amounted to €4.3 million (2015: €4.1 million) and related primarily to capitalized development costs, process know-how, and SAP software specifically customized to SGL Group requirements. Depreciation of property, plant and equipment totaled €44.9 million in 2016 (2015: €46.1 million).

Personnel expenses, depreciation and amortization expense are included in all functional costs, such as the cost of sales, selling expenses, research and development costs, and general and administrative expenses.

### Number of employees

As of the end of fiscal year 2016, the number of SGL Group employees had decreased substantially compared with the prior year, especially in the area of administration. This development was caused by personnel measures conducted in

connection with restructuring programs. This was offset by a slight increase in the number of employees in the reporting segment CFM which was a result of the transfer of T&I employees in the new Lightweight and Application Center (LAC) at our site in Meitingen.

The tables below provide an overview of the number of employees by reporting segment and region:

Headcount	Dec. 31, 16	Dec. 31, 15	Change
Graphite Materials & Systems	2,496	2,504	-0.3%
Composites - Fibers & Materials	1,183	1,148	3.0%
T&I and Corporate	263	433	-39.3%
<b>Total continuing operations</b>	<b>3,942</b>	<b>4,085</b>	<b>-3.5%</b>
Discontinued operations (PP)	1,442	1,573	-8.3%
<b>Total SGL Group</b>	<b>5,384</b>	<b>5,658</b>	<b>-4.8%</b>

Headcount	31. Dec. 16	31. Dec. 15
Germany	1,789	1,796
Europe excluding Germany	1,014	1,061
North America	711	747
Asia	428	481
<b>Total continuing operations</b>	<b>3,942</b>	<b>4,085</b>
Discontinued operations (PP)	1,442	1,573
<b>Total SGL Group</b>	<b>5,384</b>	<b>5,658</b>

The average number of employees in the individual functional areas was as follows:

Headcount	2016	2015
Production and auxiliary plants	2,942	2,991
Sales and marketing	279	281
Research and development	95	112
Administration, other functions	629	762
<b>Total continuing operations</b>	<b>3,945</b>	<b>4,146</b>
Discontinued operations (PP)	1,511	1,592
<b>Total SGL Group</b>	<b>5,456</b>	<b>5,738</b>

## 5. Other operating income and expenses

### Other operating income

€m	2016	2015
Costs allocated to investments accounted for At-Equity	7.5	8.7
Currency hedges/exchange-rate gains	5.8	3.2
Gains on the sale of intangible assets and property, plant and equipment	4.2	5.9
Grants received	3.7	3.4
Insurance compensations	0.3	2.7
Miscellaneous other operating income	20.9	19.3
<b>Total</b>	<b>42.4</b>	<b>43.2</b>

Costs allocations refer to services provided (in particular site-specific services such as IT, administration, and maintenance) and are charged based on service level agreements. Miscellaneous other operating income includes income of €14.5 million (2015: €18.7 million) and mainly represents compensation for fulfilling contractual delivery and performance obligations.

### Other operating expenses

€m	2016	2015
Currency hedges/exchange-rate losses	-8.1	-6.5
Losses on the sale of non-current assets	-0.4	-0.3
Other operating expenses	-0.6	-12.9
<b>Total</b>	<b>-9.1</b>	<b>-19.7</b>

Currency transaction gains and losses arising from the measurement of receivables and liabilities denominated in a currency other than the functional currency of the reporting entity at the closing rate are presented in their gross amounts under other income or other expense, as are allocated gains and losses from derivative currency hedges.

In addition, miscellaneous other operating income and miscellaneous other operating expenses included a number of insignificant individual transactions carried out by the 70 (2015: 66) fully consolidated companies.

## 6. Investments accounted for At-Equity

### Result from investments accounted for At-Equity

€m	2016	2015
Share in the net result of the year	7.2	4.6
<i>Thereof joint ventures</i>	<i>6.6</i>	<i>4.1</i>
<i>Thereof associates</i>	<i>0.6</i>	<i>0.5</i>
Other adjustments affecting profit or loss <sup>1)</sup>	-0.1	-4.1
<i>Thereof joint ventures</i>	<i>-0.1</i>	<i>-4.1</i>
<b>Result from investments accounted for At-Equity</b>	<b>7.1</b>	<b>0.5</b>

<sup>1)</sup> Prior year figure includes payments made to a joint venture in liquidation and obligations incurred towards this company and an impairment loss recognized to account for the lower value of an investment

€m	Dec. 31, 16	Dec. 31, 15
Interests in joint ventures	34.7	31.3
Interests in associates	4.8	3.7
<b>Carrying amount</b>	<b>39.5</b>	<b>35.0</b>

### Joint Ventures

As of the end of the year under review and the previous year, SGL Group held interests in two significant joint ventures: Brembo SGL Carbon Ceramic Brakes S.p. A., Stezzano, Italy, and Benteler SGL GmbH & Co. KG, Paderborn, Germany. The joint venture with Brembo develops and produces carbon ceramic brake discs primarily for sport cars and premium class vehicles, and Benteler primarily develops and produces fiber reinforced plastic components for the automotive industry. The table below provides summarized financial information for both joint ventures, as reported in their respective financial statements. It also shows the reconciliation of the summarized financial information to the carrying amount of SGL Group's share in both joint ventures.

€m	2016	2015
<b>Ownership interest</b>	<b>50.0%</b>	<b>50.0%</b>
<b>Income statement</b>		
Sales revenue (100%)	184.2	181.9
Operating profit/loss	22.3	16.0
Net financing result	-1.4	0.9
Net result for the year (100%)	11.2	8.9
Share of SGL Group in the net result for the year (50%)	5.6	4.4

	Dec. 31, 16	Dec. 31, 15
<b>Balance sheet</b>		
Non-current assets	75.7	73.7
Current assets	72.5	71.7
<i>Thereof cash and cash equivalents</i>	36.0	24.3
Non-current liabilities	34.9	43.3
<i>Thereof financial debt</i>	28.4	35.4
Current liabilities	46.5	42.2
<i>Thereof financial debt</i>	7.3	10.5
<b>Net assets (100%)</b>	<b>66.8</b>	<b>59.9</b>
Share of SGL Group in net assets (50%)	33.4	30.0
Goodwill/customer base	3.9	3.9
Accumulated impairment losses	-2.6	-2.6
<b>Carrying amount of material joint ventures</b>	<b>34.7</b>	<b>31.3</b>

SGL Group also holds interests in a number of joint ventures and associates that are not material when taken separately. The following table is a breakdown of the carrying amounts and the share in profit/loss of the companies that are not material on an individual basis:

€m	2016	2015
<b>Joint ventures</b>		
Carrying amount of interests in joint ventures	0.0	0.0
Share in the net result of the year <sup>1)</sup>	1.0	-1.8
<b>Associates</b>		
Carrying amount of interests in associates	4.8	3.7
Share in net result for the year	0.6	0.5

<sup>1)</sup> Prior year figure includes payments made to a joint venture in liquidation and obligations incurred towards this company

## 7. Restructuring expenses

€m	2016	2015
Expenses for initiated restructuring measures	-9.8	-6.8
<b>Total</b>	<b>-9.8</b>	<b>-6.8</b>

In September 2016, project CORE (COrporate REstructuring) was launched. The project CORE is intended to focus the “new” SGL Group on growth. This transformation process primarily has the objective that the business units CFM and GMS concentrate on the development, production and marketing of their products and solutions, while all administrative tasks are bundled in the corporate functions. In this context, the Company's administrative structures are simultaneously adjusted to the smaller SGL Group that results from the sale of the former business unit PP. The restructuring expenses incurred in the reporting year mainly refer to personnel measures conducted under project CORE. In the prior year, the measures terminated in the reporting year in connection with the cost savings program SGL2015 as well as the project Bonn 2020 were reported in this item.

## 8. Reversal of impairment losses

€m	2016	2015
Reversal of impairment losses of property, plant and equipment	12.8	0.0
<b>Total</b>	<b>12.8</b>	<b>0.0</b>

SGL Group focuses its carbon fiber production on the sites in Moses Lake (USA) and Muir of Ord (Scotland) in order to increase further the efficiency of its production network. Consequently, SGL Group decided to sell its carbon fiber production site in Evanston (USA) with approximately 50 employees to Mitsubishi Rayon Carbon Fibers & Composites Inc., a U.S. subsidiary of Mitsubishi Rayon Corporation (MRC). A corresponding agreement was signed at the end of December 2016. The transaction is expected to be closed in the second quarter 2017. The reversal of the impairment loss represents an adjustment to the fair value less costs to sell.

## 9. Net financing result

€m	2016	2015
<b>Interest in other securities, other interest and similar income</b>	<b>1.1</b>	<b>0.7</b>
Interest on financial liabilities and other interest expense <sup>1)</sup>	-32.2	-29.7
Interest component of additions to provisions for pensions	-8.0	-6.9
Imputed interest convertible bonds <sup>1)</sup>	-8.1	-9.6
<b>Interest expense</b>	<b>-48.3</b>	<b>-46.2</b>
<b>Interest expense</b>	<b>-47.2</b>	<b>-45.5</b>
Amortization of refinancing costs <sup>1)</sup>	-4.4	-3.2
Foreign currency valuation of intercompany loans	1.7	0.4
Other financial income	-1.0	-4.0
<b>Other financing result</b>	<b>-3.7</b>	<b>-6.8</b>
<b>Net financing result</b>	<b>-50.9</b>	<b>-52.3</b>
<sup>1)</sup> Total interest expense from financial instruments	-44.7	-42.5

Interest expense in particular included the cash interest component (coupon) of the corporate bond (interest rate: 4.875%) and the two convertible bonds (2015/2020: interest rate of 3.5%; 2012/2018: interest rate of 2.75%). The non-cash imputed interest on the convertible bonds is established by approximation of the below-market coupon with the comparable market interest rate at the time the convertible bonds are issued.

The deterioration of the net interest expense compared to the prior year is due to higher interest expenses (€+0.7 million) of the 2015/2020 convertible bond issued in fiscal year 2015 (coupon of 3.5%; principal amount of €167 million), which replaced the 2009/2016 convertible bond (coupon of 3.5%; principal amount of €135 million). Moreover, net interest expense for pensions increased by €1.1 million, mainly due to the interest-driven increase of the present value of the defined benefit obligation. The other financing result included a negative one-time effect in the amount of €4.0 million from the repurchase of the 2009/2016 convertible bond.

## 10. Income tax expense

The corporate income tax rate of 15% (2015: 15%) is used as the basis for determining the income tax rate in Germany.

Moreover, a solidarity surcharge of 5.5% (2015: 5.5%) is added to the corporate income tax rate. German corporations are also subject to trade tax. The trade tax rate depends on the municipality in which a business operation is located. The average trade tax rate of the companies was 14.0% in 2016 (2015: 13.7%). This results in a total tax rate in Germany of 29.8% for current taxes and for deferred taxes (2015: 29.5%). The income tax rate for foreign companies was between 16.5% and 37.9% (2015: between 16.5% and 37.9%).

The breakdown of tax expense from continuing operations is as follows:

€m	2016	2015
<b>Current income tax expense</b>		
Germany	-1.8	-2.1
Other countries	-4.7	-3.2
<b>Deferred tax expense</b>		
Germany	0.6	2.8
Other countries	-0.9	-19.6
<b>Total</b>	<b>-6.8</b>	<b>-22.1</b>

In the fiscal year 2016, the tax expense decreased to €6.8 million (2015: €22.1 million) based on a loss before tax of €27.2 million (2015: loss before tax of €45.4 million). Income tax expenses were incurred from current taxation at domestic and foreign companies in the amount of €6.5 million (2015: €5.3 million). Taxes included in the tax expenses for prior years amounted to €1.3 million (2015: minus €0.9 million).

The SGL Group's reported tax expense differs from the SGL Group's anticipated tax expense (calculated on the basis of an expected tax rate of 29.8%) as follows:



€m	2016	2015
<b>Result from continuing operations before income taxes</b>	<b>-27.2</b>	<b>-45.4</b>
<b>Result from continuing operations before income taxes</b>	<b>-50.5</b>	<b>-235.4</b>
<b>Consolidated net result for the year before income taxes</b>	<b>-77.7</b>	<b>-280.8</b>
<b>Expected tax income at 29.8% (2015: 29.5%)</b>	<b>23.3</b>	<b>82.8</b>
Increase/decrease in income tax charge from:		
Income adjustments	-5.4	-7.9
Change in expected tax rate	2.4	2.5
Change in loss carry forwards and valuation allowances on deferred taxes	-42.9	-91.2
Tax effect on investments accounted for At-Equity	2.8	1.0
Tax rate changes	-0.9	0.0
Tax from prior periods	-13.1	2.6
Other	1.8	-2.4
<b>Effective tax expense</b>	<b>-32.0</b>	<b>-12.6</b>
Thereof:		
<i>Tax expense from continuing operations</i>	<i>-6.8</i>	<i>-22.1</i>
<i>Tax expense attributable to discontinued operations (2015: tax income)</i>	<i>-25.2</i>	<i>9.6</i>

The income adjustments relate primarily to non-deductible operating expenses and adjustments for the purpose of calculating German trade tax. The reduction to reflect the differing tax rate primarily takes account of the effects of withholding taxes and local taxes as well as taxation differences between Germany and other countries as a result of varying income tax rates. The changes in tax loss carryforwards and valuation allowances for deferred taxes take into account write-downs of deferred tax assets on loss carryforwards based on their future usability, with such write-downs being recognized in profit or loss. Valuation allowances amounting to €20.6 million and €5.0 million refer mainly to deferred taxes on loss carryforwards due to lower earnings expectations in Germany and Malaysia, respectively, as well as unrecognized deferred taxes on impairment losses due to the measurement of assets of disposal groups at fair value less costs to sell in the amount of €5.4 million. During the year

under review, the actual tax expense was reduced by €2.4 million by taking into account previously unrecognized tax losses. The prior-period taxes largely relate to the recognition of deferred tax liabilities at a subsidiary in Spain. As a result of the change in tax regulations, SGL Group now expects that the reversal of co-called outside basis differences in Spain can no longer be controlled by the parent company, which increases the tax expense in the reporting period by €11.5 million.

## 11. Result from discontinued operations

Earnings generated by PP were reported in the income statement as discontinued operations for all of the periods presented. Discontinued operations further comprise certain additional items in connection with the business activity Aerostructures (AS, HITCO) which was sold in December 2015. In 2016, follow-up costs from the sale of HITCO in the amount of €1.2 million had a negative effect on the result from discontinued operations. The business units classified as discontinued operations are recognized at the lower of their carrying amount and the fair value less costs to sell. The fair value of the GE business activities was determined on the basis of the agreement signed on October 20, 2016 on the sale of our graphite electrodes (GE) business to the Japanese company Showa Denko (corresponding to Level 1 of the fair value hierarchy pursuant to IFRS 13). Both contracting parties agreed on an enterprise value of €350 million (cash and debt free). The final net cash proceeds are subject to the usual deductions of debt-like items (above all provisions for pensions and for restructuring) which are derived from the balance sheet as of the closing date. Closing is expected to occur in mid-2017. Taking into account the expected cash outflows from the GE activities due to the continuation of the business until the closing date, impairment losses were therefore recognized in relation to the assets of GE in the amount of €18.0 million, including transaction costs.

In the prior year, SGL Group completed the sale of the subsidiary HITCO's business activities of manufacturing composite structural parts for commercial and military aerostructures. Overall, the agreement resulted in a negative sales price of USD 47 million (including repayment of customer advance payments as well as costs for various services for the acquirer's benefit). In fiscal 2015, this led to impairment losses and a loss on disposal totaling €65.5 million.

**Result from discontinued operations**

€m	2016	2015
Total revenue from discontinued operations	419.7	601.3
Total expenses from discontinued operations	-452.2	-771.2
<b>Result from operating activities of discontinued operations before income taxes</b>	<b>-32.5</b>	<b>-169.9</b>
Attributable tax expense/income	-25.2	9.6
<b>Result from operating activities of discontinued operations after income taxes</b>	<b>-57.7</b>	<b>-160.3</b>
Impairment losses arising in the measurement of assets included in the disposal group at fair value less cost to sell <sup>1)</sup>	-18.0	-65.5
<b>Result from discontinued operations<sup>2)</sup></b>	<b>-75.7</b>	<b>-225.8</b>
<b>Earnings per share - discontinued operations, basic and diluted (in €)</b>	<b>-0.81</b>	<b>-2.46</b>

<sup>1)</sup> 2015: Impairment losses and loss on disposal of discontinued operations (HITCO)

<sup>2)</sup> Attributable to the shareholders of the parent company

The cash flows from discontinued operations are shown separately in the consolidated cash flow statement.

## 12. Earnings per share

Earnings per share are calculated by dividing the net result for the year attributable to the shareholders of SGL Group by the average number of outstanding shares during the year under review.

The calculation of diluted earnings per share assumes that outstanding debt securities (convertible bonds) will be converted to shares or other contracts for the issue of common shares such as stock appreciation rights are exercised.

The table below details the calculation of earnings per share for fiscal years 2016 and 2015:

**Reconciliation between basic to diluted earnings per share**

€m	Overall potentially dilutive financial instruments 2016	Dilutive financial instruments used for the calculation - continuing operations 2016	Share of net result attributable to the shareholders of the parent company 2016	Share of net result attributable to the shareholders of the parent company 2015
<b>Numerator for basic earnings per share (share of net result attributable to the shareholders of the parent company)</b>	<b>-111.7</b>	<b>-36.0</b>	<b>-111.7</b>	<b>-295.0</b>
plus: increase of the income by the interest costs of the convertible bonds	15.7	0.0	0.0	0.0
<b>Numerator for diluted earnings</b>	<b>-96.0</b>	<b>-36.0</b>	<b>-111.7</b>	<b>-295.0</b>
<b>Number of shares</b>				
<b>Denominator for basic earnings per share (weighted average number of shares)</b>	<b>93,715,729</b>	<b>93,715,729</b>	<b>93,715,729</b>	<b>91,660,613</b>
Potentially dilutive securities (weighted average, in each case)				
Convertible bond 2015/2020 (see <b>Note 25</b> )	9,781,400	0	0	0
Convertible bond 2012/2018 (see <b>Note 25</b> )	6,398,858	0	0	0
Stock Appreciation Rights (see <b>Note 30</b> )	0	0	0	1,466
<b>Denominator for potentially diluted earnings per share</b>	<b>109,895,987</b>	<b>0</b>	<b>0</b>	<b>91,662,079</b>
<b>Thereof to be included for dilution (adjusted weighted average)</b>		<b>93,715,729</b>	<b>93,715,729</b>	<b>91,662,079</b>
Basic earnings per share (€)		-0.38	-1.19	-3.22
Diluted earnings per share (€)		-0.38	-1.19	-3.22

As of December 31, 2016, the 2012/2018, and 2015/2020 convertible bonds and the Stock Appreciation Rights were still outstanding. As a result of the loss-making situation, potentially dilutive financial instruments were not taken into account in the calculation of diluted earnings per share since these instruments would not have a dilutive effect. For the same

reason, the consolidated net result is not adjusted by the interest cost for convertible bonds. In the future, these instruments may become fully dilutive.

**13. Intangible assets**

€m	Industrial rights, software and similar rights	Customer relationships	Capitalized development costs	Goodwill	<b>Total</b>
<b>Historical costs</b>					
Balance at Jan. 1, 16	66.1	2.7	16.4	48.5	133.7
Reclassification to the balance sheet item assets held for sale	-4.2	0.0	0.0	0.0	-4.2
Foreign currency translation	0.3	0.0	0.0	0.4	0.7
Additions	1.0	0.0	0.0	0.0	1.0
Disposals	-0.4	0.0	0.0	0.0	-0.4
<b>Balance at Dec. 31, 16</b>	<b>62.8</b>	<b>2.7</b>	<b>16.4</b>	<b>48.9</b>	<b>130.8</b>
<b>Accumulated amortization and depreciation/impairment losses</b>					
Balance at Jan. 1, 16	54.1	1.9	8.4	25.6	90.0
Reclassification to the balance sheet item assets held for sale	-4.0	0.0	0.0	0.0	-4.0
Foreign currency translation	0.2	0.0	0.0	0.0	0.2
Additions	2.4	0.5	1.4	0.0	4.3
Disposals	-0.3	0.0	0.0	0.0	-0.3
<b>Balance at Dec. 31, 16</b>	<b>52.4</b>	<b>2.4</b>	<b>9.8</b>	<b>25.6</b>	<b>90.2</b>
<b>Net carrying amount as of Dec. 31, 16</b>	<b>10.4</b>	<b>0.3</b>	<b>6.6</b>	<b>23.3</b>	<b>40.6</b>
<b>Historical costs</b>					
Balance at Jan. 1, 15	64.9	2.6	16.1	46.7	130.3
Foreign currency translation	1.0	0.0	0.0	1.8	2.8
Additions	0.9	0.1	0.3	0.0	1.3
Disposals	-0.7	0.0	0.0	0.0	-0.7
<b>Balance at Dec. 31, 15</b>	<b>66.1</b>	<b>2.7</b>	<b>16.4</b>	<b>48.5</b>	<b>133.7</b>
<b>Accumulated amortization and depreciation/impairment losses</b>					
Balance at Jan. 1, 15	52.0	1.3	6.1	25.6	85.0
Foreign currency translation	0.6	0.0	0.0	0.0	0.6
Additions	2.2	0.6	1.3	0.0	4.1
Impairment losses	0.0	0.0	1.0	0.0	1.0
Disposals	-0.7	0.0	0.0	0.0	-0.7
<b>Balance at Dec. 31, 15</b>	<b>54.1</b>	<b>1.9</b>	<b>8.4</b>	<b>25.6</b>	<b>90.0</b>
<b>Net carrying amount as of Dec. 31, 15</b>	<b>12.0</b>	<b>0.8</b>	<b>8.0</b>	<b>22.9</b>	<b>43.7</b>

Industrial rights, software and similar rights mainly comprise purchased and internally developed IT software.

The following table shows the most significant assumptions used to determine the value in use in the impairment test as of September 30 of CGUs to which goodwill has been allocated:

€m	Recognized goodwill	Discount rate after tax	Long-term growth rate
<b>Sep. 30, 16</b>			
Graphite Specialties	20.4	7.6%	1.0%
Process Technology	1.9	7.6%	1.0%
<b>Sep. 30, 15</b>			
Graphite Specialties	20.5	7.2%	1.0%
Process Technology	1.9	7.2%	1.0%

No requirement to recognize an impairment loss was identified for the two CGUs analyzed, i.e. the CGUs' recoverable amount determined on the basis of the value in use was estimated to be higher than their carrying amount.

The value in use is mainly determined on the basis of the terminal value, which is especially sensitive to changes in the above-mentioned assumptions regarding level of sales and return on sales, long-term growth rates, and discount rates. The discount factors reflect the current market assessment of the specific risks of each individual CGU and are based on the weighted average cost of capital of the CGU. Graphite Specialties has the highest recognized goodwill. While the recoverable amount (value-in-use) of this CGU currently exceeds its carrying amount considerably, this excess would be reduced to zero in case of a combination of a change in the discount rate (plus 1 percentage point) and a simultaneous reduction of the cash flows in the terminal value by 25.4 percentage points.

**14. Property, plant and equipment**

€m	Land, land rights and buildings	Plant and machinery	Office furniture and equipment	Assets under construction	Investment properties	<b>Total</b>
<b>Historical costs</b>						
Balance at Jan. 1, 16	549.6	1,702.7	77.1	85.0	19.8	2,434.2
Reclassification to the balance sheet item assets held for sale	-161.8	-683.8	-21.7	-44.4	0.0	-911.7
Foreign currency translation	-0.9	-9.4	-0.3	-0.4	0.0	-11.0
Reclassifications	0.9	8.0	0.7	-9.6	0.0	0.0
Additions	8.5	8.7	2.8	13.6	0.0	33.6
Disposals	-1.0	-8.2	-1.1	-0.4	0.0	-10.7
<b>Balance at Dec. 31, 16</b>	<b>395.3</b>	<b>1,018.0</b>	<b>57.5</b>	<b>43.8</b>	<b>19.8</b>	<b>1,534.4</b>
<b>Accumulated amortization and depreciation/impairment losses</b>						
Balance at Jan. 1, 16	312.0	1,256.3	67.1	3.0	6.2	1,644.6
Reclassification to the balance sheet item assets held for sale	-79.2	-517.5	-19.4	-1.3	0.0	-617.4
Foreign currency translation	-0.8	-8.0	-0.1	0.0	0.0	-8.9
Additions	8.0	33.9	2.4	0.0	0.6	44.9
Reversal of impairment losses	-6.4	-6.4	0.0	0.0	0.0	-12.8
Disposals	-0.7	-7.2	-1.1	0.0	0.0	-9.0
<b>Balance at Dec. 31, 16</b>	<b>232.9</b>	<b>751.1</b>	<b>48.9</b>	<b>1.7</b>	<b>6.8</b>	<b>1,041.4</b>
<b>Net carrying amount as of Dec. 31, 16</b>	<b>162.4</b>	<b>266.9</b>	<b>8.6</b>	<b>42.1</b>	<b>13.0</b>	<b>493.0</b>
<b>Historical costs</b>						
Balance at Jan. 1, 15	527.6	1,620.6	75.6	102.0	19.8	2,345.6
Foreign currency translation	4.1	25.6	0.6	4.5	0.0	34.8
Reclassifications	13.9	42.5	0.9	-53.3	-0.1	3.9
Additions	5.4	33.8	2.4	31.9	0.1	73.6
Disposals	-1.4	-19.8	-2.4	-0.1	0.0	-23.7
<b>Balance at Dec. 31, 15</b>	<b>549.6</b>	<b>1,702.7</b>	<b>77.1</b>	<b>85.0</b>	<b>19.8</b>	<b>2,434.2</b>
<b>Accumulated amortization and depreciation/impairment losses</b>						
Balance at Jan. 1, 15	266.7	1,112.2	65.5	1.8	5.5	1,451.7
Foreign currency translation	3.6	21.6	0.5	-0.1	0.0	25.6
Reclassifications	0.0	0.0	0.0	0.0	0.0	0.0
Additions	12.2	68.1	3.2	0.2	0.7	84.4
Impairment losses	30.3	73.6	0.2	1.1	0.0	105.2
Disposals	-0.8	-19.2	-2.3	0.0	0.0	-22.3
<b>Balance at Dec. 31, 15</b>	<b>312.0</b>	<b>1,256.3</b>	<b>67.1</b>	<b>3.0</b>	<b>6.2</b>	<b>1,644.6</b>
<b>Net carrying amount as of Dec. 31, 15</b>	<b>237.6</b>	<b>446.4</b>	<b>10.0</b>	<b>82.0</b>	<b>13.6</b>	<b>789.6</b>

Upon the fulfillment of the criteria of a classification of PP as held for sale and as a discontinued operation, the assets attributable to this business unit were reclassified into the balance sheet item "assets held for sale." In addition, the reclassification columns include property, plant and equipment of the carbon fiber production site in Evanston (USA) for which a sale agreement had been entered into at the end of the reporting year. The reversals of impairment losses reported in the year under review in the amount of €12.8 million reflect the measurement of Evanston at fair value less costs to sell. For more information, please refer to **Notes 8 and 20**.

The impairment loss reported in the table for 2015 in the amount of €105.2 million primarily refers to PP and accordingly the discontinued operations. Therefore, the amount is reported in the consolidated income statement as part of the result from discontinued operations for 2015. The total amount comprises impairment losses resulting from the event-driven impairment tests conducted in graphite electrodes (€77.9 million), the closure of a German graphite electrodes plant in Frankfurt-Griesheim (€26.1 million), and further measures to optimize locations (€1.2 million).

#### Investment properties

After the deconsolidation of Rotec as of December 2013, SGL Group retained those parts of land and buildings that were pooled within the real estate company SGL/A&R Real Estate Lemwerder GmbH. These properties continue to be leased out to Carbon Rotec (formerly Rotec) and reported as investment property in accordance with IAS 40 "Investment Property." The fair values of developed land and the land value of the expected development area totaled €19.2 million (December 31, 2016: €19.2 million) as of December 31, 2016 and are determined using the income capitalization approach (*Ertragswertverfahren*) pursuant to the German Real Estate Valuation Regulation (*Immobilienwertermittlungsverordnung*) and using an adjusted reference land value, respectively. The market-specific reference land value was adjusted to take into account the estimated term until full development (up to ten years, based on a discount rate of 9.5%); a risk discount of 30% was deducted from the resulting value.

Rental income from such land amounted to a total of €1.3 million in fiscal year 2016 (2015: €1.3 million). Expenses amounted to €0.8 million (2015: €1.3 million).

## 15. Other non-current assets

This item mainly comprises securities that are held at foreign subsidiaries to cover pension entitlements as well as a loan to Fisigen, an investment accounted for At-Equity.

## 16. Inventories

€m	Dec. 31, 16	Dec. 31, 15
Raw materials and supplies	76.2	142.1
Work in progress	103.7	208.1
Finished goods and merchandise	89.0	113.5
<b>Total</b>	<b>268.9</b>	<b>463.7</b>

In fiscal year 2016, cost of sales included a utilization of inventories in the amount of €588.8 million (2015: €597.2 million), which was recognized as an expense. The total carrying amount of inventories measured at net realizable value was €15.0 million as of December 31, 2016 (December 31, 2015: €27.5 million). Write-downs of inventories led to an increase in the overall cost of sales recognized by €6.0 million (2015: €10.3 million). Reversals of write-downs resulting from disposals in the amount of €2.8 million (2015: €6.7 million) reduced the cost of sales.

## 17. Trade receivables

€m	Dec. 31, 16	Dec. 31, 15
From customers	83.2	145.2
From investments accounted for At-Equity	6.0	4.3
<b>Trade receivables</b>	<b>89.2</b>	<b>149.5</b>

The following table shows the extent of the credit risk related to total receivables:



€m	Dec. 31, 16	Dec. 31, 15
<b>Trade receivables neither impaired nor overdue</b>	<b>76.1</b>	<b>113.3</b>
<b>Overdue trade receivables not impaired on an individual basis</b>		
less than 30 days	11.5	24.7
30 to 60 days	0.9	4.2
61 to 90 days	0.0	0.9
more than 90 days	0.6	3.6
<b>Total</b>	<b>13.0</b>	<b>33.4</b>
Receivables impaired on an individual basis (gross)	6.4	12.9
Less valuation allowances	-6.3	-10.1
<b>Trade receivables, net</b>	<b>89.2</b>	<b>149.5</b>

The majority of our trade receivables are paid by the contractually agreed upon due dates. As of the balance sheet date, receivables not subject to impairment amounted to €89.1 million (December 31, 2015: €146.7 million). The total valuation allowances on receivables amounted to €6.3 million as of the reporting date (December 31, 2015: €10.1 million). The valuation allowances were calculated on the basis of uniform SGL Group accounting policies and reflect the expected default risk based on the trend in customer sectors as well as the specific situation of the customer concerned. The calculation of valuation allowances on doubtful receivables involves our sales organization making estimates and assessments of the individual receivables on the basis of the creditworthiness of the respective customer, historical experience, and current economic trends as well as existing collateral in the form of credit insurance. The portfolio of receivables is subject to continuous quality monitoring as part of our credit management system. Further explanations can be found under "Credit Risk" in **Note 28**.

The following table shows the change in valuation allowances:

€m	2016	2015
Balance as of Jan. 1	10.1	8.0
Reclassification to the balance sheet item assets held for sale	-2.6	0.0
Additions recognized as expense	1.0	2.7
Reversals	-2.0	-0.4
Utilizations	0.1	-0.5
Exchange differences	-0.3	0.3
<b>Balance as of Dec. 31</b>	<b>6.3</b>	<b>10.1</b>

## 18. Other receivables and other assets

€m	Dec. 31, 16	Dec. 31, 15
Other tax claims	11.5	11.8
Income tax assets	2.1	2.8
Advance payments for leases and insurance premiums	4.2	5.5
Other receivables due from suppliers	3.9	8.1
Receivables due from employees	1.5	2.3
Positive fair values of financial instruments (currency rate derivatives)	3.5	0.2
Other assets	8.0	7.1
<b>Other receivables and other assets</b>	<b>34.7</b>	<b>37.8</b>

## 19. Liquidity

After the successful capital increase in fiscal year 2016 (see **Note 22**), the Company had liquidity totaling €329.5 million as of the balance sheet date (December 31, 2015: €250.8 million). As of the balance sheet date, liquidity consisted of cash and cash equivalents in the amount of €324.5 million and time deposits in the amount of €5.0 million with maturities of three to twelve months. In the previous year, liquidity in the amount of €250.8 million comprised time deposits in the amount of €14.0 million and cash and cash equivalents totaling €236.8 million with original maturities of more than three months. Excluding the proportionally consolidated joint venture SGL Automotive Carbon Fibers, liquidity amounted to €322.6 million (December 31, 2015: €240.9 million).

The breakdown of liquidity as of December 31, 2016 was as follows: 86% in euros (December 31, 2015: 86 %), 6% in US dollars (December 31, 2015: 8%), 3% in Japanese yen (December 31, 2015: 2%), and 5% in other currencies (December 31, 2015: 4%). As in the prior year, there was no significant amount of cash on hand as of the balance sheet date.

## 20. Assets held for sale/Liabilities in connection with assets held for sale

The assets and liabilities attributable to PP were presented overall as held for sale in the reporting period, with the exception of certain assets and liabilities in relation to the former production sites in Frankfurt-Griesheim (Germany) and Narni (Italy). In addition, the carbon fiber production site in Evanston (USA) as well as the land and buildings remaining at the SGL Group at the local production site after the sale of the activities of HITCO in December 2015 were presented as held for sale. A corresponding agreement was signed for the Evanston site at the end of December 2016 on the basis of which the valuation was conducted (corresponding to Level 1 of the fair value hierarchy of IFRS 13). Closing is expected to occur in the second quarter of 2017. In the context of the valuation of these land sites of HITCO, it was assumed that a potential interested party would take into consideration the fair market value of the land and buildings, net of the associated obligations, such as utilization of the facilities by the acquirer of the Aerostructures business without having to pay rent in the medium term. The fair market values of the land and buildings were calculated based on commissioned expert opinions (corresponding to Level 3 of the fair value hierarchy of IFRS 13).

The carrying amounts of the major classes of assets and liabilities were as follows (after taking into account impairment losses):

€m	Dec. 31, 16	Dec. 31, 15
Other intangible assets and property, plant and equipment	288.3	14.7
Inventories	142.3	0.0
Trade receivables	71.7	0.0
Other receivables and other assets	22.1	0.0
Deferred tax assets	12.8	0.0
Liquidity	3.5	0.0
<b>Assets held for sale</b>	<b>540.7</b>	<b>14.7</b>
Provisions for pensions and similar employee benefits	85.7	0.0
Other provisions	29.1	0.0
Trade payables	41.5	0.0
Deferred tax liabilities	25.4	0.0
Other liabilities	4.9	0.0
<b>Liabilities in connection with assets held for sale</b>	<b>186.6</b>	<b>0.0</b>

The provisions for pensions and similar employee benefits consist of the present value of the defined benefit obligation of €146.3 million, less the market value of plan assets of €60.6 million. The discount rate used was 1.6% for the German plans and 4.0% for the US plans. The share in accumulated other comprehensive income reclassified subsequently to profit or loss that is attributable to assets held for sale less liabilities amounts to minus €33.5 million.

## 21. Deferred taxes

Deferred tax assets primarily relate to deferred taxes arising from temporary differences between IFRS and the tax base as a result of differences in the measurement of provisions and fixed assets. Deferred tax liabilities are primarily the result of differences in depreciation and amortization methods between IFRS and tax regulations.

As of December 31, 2016, German unrecognized domestic tax loss carryforwards amounted to €440.1 million for corporate tax (December 31, 2015: €403.0 million), €280.9 million for trade tax (December 31, 2015: €239.6 million), and €33.6 million for interest carryforwards (December 31, 2015: €19.6 million). Unrecognized usable foreign tax loss carryforwards also existed primarily in the USA, amounting to USD 506.1 million for federal tax (December 31, 2015: USD 482.2 million), and in the UK, amounting to GBP 59.9 million (December 31, 2015:

GBP 67.2 million). Furthermore, as of December 31, 2016, there were unrecognized interest carryforwards and capital losses in the USA totaling USD 85.1 million (December 31, 2016: USD 36.0 million). According to current legislation, tax loss carryforwards in Germany and the UK can be carried forward for an unlimited period of time. In the U.S., the loss carryforwards will expire as of the year 2022.

The recognition of deferred tax assets is reviewed at each reporting date. If it is not probable that taxable profits will be available in the future that can be offset against future deductible measurement differences and unused tax losses, interest and tax credits, deferred tax assets are not recognized. SGL Group estimates the future probability of taxable profits for each entity or tax group based on experience concerning the respective profit and loss situation in recent years, and internal expectations regarding business and profit trends. Internal expectations about business and profit trends are derived from the five-year planning of each individual CGU, which was prepared using a bottom-up approach, and analyzed and approved by the Board of Management of the SGL Group. For further details concerning the five-year planning, please refer to **Note 2** above, under the heading "Impairment tests of property, plant and equipment and other intangible assets". Specific uncertainties are taken into account in tax planning for the recognition of deferred tax assets on loss carryforwards, interest carryforwards and tax credits by limiting the planning horizon to three years. Estimates concerning the future probability of taxable profits can change as a result of future developments. Deferred taxes in the amount of €3.3 million (December 31, 2015: €4.6 million) were recognized based on tax planning, of which €3.3 million (December 31, 2015: €4.6 million) referred to loss carryforwards. The tax group of SGL Carbon SE (mainly SGL Carbon SE and SGL Carbon GmbH) reported a series of losses in recent years. To that extent, deferred tax assets were recognized for deductible temporary differences in accordance with IAS 12.28, initially in the amount of the existing taxable temporary differences.

Furthermore, deferred tax assets were recognized in accordance with IAS 12.29 in the amount of €45.9 million since sufficient taxable profits are reasonably expected for the period in which the deductible temporary difference will reverse. In this context, it was taken into account that deferred tax assets for the SGL Carbon SE tax group are mainly based on temporary differences which are reversed only over the long term (in particular provisions for pensions and the heritable

building right). To that extent, only taxable profits to be generated over the long term that cannot be covered by detailed planning may be used. These long-term taxable profits are reasonably expected for the tax group of SGL Carbon SE. Deferred tax assets had to be recognized to that extent.

No deferred tax assets were recognized for the following items as of December 31, 2016 or December 31, 2015 due to uncertainty regarding their usability:

€m	Dec. 31, 16	Dec. 31, 15
Deductible temporary differences		
From impairment tests	51.8	120.0
From other recognition and measurement differences	95.3	7.7
From tax loss carry forwards and tax credits	1,497.2	1,394.3
<b>Total</b>	<b>1,644.3</b>	<b>1,522.0</b>

The deferred taxes have a term to maturity of more than one year.

Deferred tax assets and liabilities on a gross basis are derived as follows from loss carryforwards or differences between the tax base and the IFRS financial statements:

€m	Deferred tax assets Dec. 31, 2016	Deferred tax liabilities Dec. 31, 2016	Deferred tax assets Dec. 31, 2015	Deferred tax liabilities Dec. 31, 2015
Non-current assets	41.9	53.6	47.7	77.5
Inventories	5.1	2.7	6.8	3.2
Receivables/other assets	5.6	6.5	2.5	6.3
Provisions for pensions and similar employee benefits	94.9	20.7	84.5	6.5
Other provisions	13.0	0.6	13.0	1.5
Liabilities/other liabilities	5.3	0.2	4.2	4.1
From tax loss carry forwards, interest carry forwards and tax credits	349.7	0.0	333.7	0.0
Other	0.0	0.0	0.0	0.7
<b>Gross amount</b>	<b>515.5</b>	<b>84.3</b>	<b>492.4</b>	<b>99.8</b>
Valuation allowance	-375.7	0.0	-330.8	0.0
Netting	-83.1	-83.1	-98.6	-98.6
<b>Carrying amount</b>	<b>56.7</b>	<b>1.2</b>	<b>63.0</b>	<b>1.2</b>

Deferred tax assets and liabilities on a gross basis are offset if they relate to income taxes of the same taxable entity and the same type of tax.

Total changes affecting profit/loss in relation to continuing operations amounted to minus €0.3 million (2015: minus €16.8 million), of which €0.4 million (2015: €0.0 million) related to changes in deferred tax assets and liabilities arising from the origination and reversal of temporary differences between IFRS and the tax base, and minus €0.7 million (2015: minus €16.8 million) related to changes arising from write-downs of deferred tax assets from tax loss carryforwards, interest carryforwards and tax credits. Total changes affecting equity amounted to minus €6.0 million (2015: minus €1.9 million). This refers to both items recognized in equity, amongst other things, the increase of deferred tax assets recognized in equity in relation to the measurement difference for pension provisions resulting from the actuarial losses offset in equity as well as – with a compensating effect – reclassifications to discontinued operations.

In the reporting year, no deferred tax liabilities (2015: €4.1 million) would result from retained earnings at

foreign entities which will not be distributed in the foreseeable future.

## 22. Equity

### Issued capital

As of December 31, 2016, the Company's issued capital amounted to €313,194,183.68 (December 31, 2015: €235,024,645.12) and was divided into 122,341,478 (December 31, 2015: 91,806,502) no-par-value ordinary bearer shares, each with a notional value of €2.56. The shares are traded on various markets in Germany (including Frankfurt). As of December 31, 2016, the Company does not have any Authorized Capital.

Changes in the total amount of Authorized Capital compared with the balance as of December 31, 2015 refer to the reduction in Authorized Capital due to capital increases, while one component of Authorized Capital was terminated through passage of time. Moreover, the Company's Annual General Meeting on May 18, 2016, canceled Authorized Capital existing as of that date in an amount of €66,670.08 and created a new Authorized Capital 2016 in a volume of €25,600,000.00. The Authorized Capital 2016 was fully utilized in fiscal year 2016.

**Conditional capital**

The Annual General Meeting has approved conditional capital increases to service the share-based management incentive

plans (see **Note 30**) as well as to service convertible bonds (see **Note 25**).

**Conditional capital as of December 31, 2016**

Articles of association	Date of resolution	€/Number of shares	Capital increase via:	Disapplication of pre-emptive rights/execution of the capital increase
Section 3 (11)	30.04.2015	€25,600,000.00 = 10,000,000 shares	To be used for the 2015 convertible bond	Share capital increase will be executed if participants make use of their subscription rights.
Section 3 (7)	April, 30, 2004	€76,202.56 = 298,126 shares	SAR-Plan <sup>1)</sup> 2005–2009	Share capital increase will be executed if participants make use of their subscription rights.
Section 3 (12)	April 29, 2009	€4,875,517.44 = 1,904,499 shares	SAR-Plan <sup>1)</sup> 2010–2014	Share capital increase will be executed if participants make use of their subscription rights.
Section 3 (9)	May 18, 16	€ 25,600,000.00 = 10,000,000 shares	To fulfill subscription rights of convertible bonds/bonds with warrants to be issued based on the on the enabling resolution of the general meeting dated May 18, 2016	Convertible bonds/bonds with warrants not issued as of Dec. 31, 16, on the basis of which a capital increase could occur
Section 3 (14)	April 30, 2010	€ 20,480,000.00 = 8,000,000 shares	Conversion of convertible bond 2012	Share capital increase will be executed if participants make use of their subscription rights.

<sup>1)</sup> SAR Plan = Stock Appreciation Rights Plan, see **Note 30**

Compared with the balance as of December 31, 2015, conditional capital was rescinded pursuant to Section 3 (13) of the Articles of Incorporation as that conditional capital was intended to fulfill subscription rights from one of the Company's convertible bonds which was fully redeemed. Furthermore, the Annual General Meeting created new conditional capital pursuant to Section 3 (9).

**Increase in the Company's share capital**

Number of shares	2016	2015
Balance as of Jan. 1,	91,806,502	91,422,526
SAR Plan 2005–2009	0	134
New shares issued to employees for bonus entitlements	515,000	325,000
New shares issued to share plan participants	19,976	58,842
Capital increase	30,000,000	0
<b>Balance as of Dec. 31</b>	<b>122,341,478</b>	<b>91,806,502</b>

A total of 534,976 new shares were issued from the Company's authorized capital for the purpose of servicing bonus entitlements as well as entitlements of employees in relation to the 2014 Matching Share Plan (see **Note 30**). The new shares were issued at a price of €2.56 each, increasing issued capital to a total of €1,369,538.56. A total of 515,000 new shares were issued to employees of the Company at a price equivalent to the opening price in XETRA trading on March 16, 2016 in order to satisfy bonus entitlements in accordance with the terms of the agreed bonus arrangements. The 19,976 new shares for participants in the 2014 Matching Share Plan were issued to employees of SGL Group companies after the expiration of the holding period.

On December 15, 2016, the Company completed the capital increase from authorized capital in return for cash contributions. A total of 30,000,000 new no-par value bearer shares, each with a proportional share in the issued capital of €2.56, were issued; this led to net proceeds of €173.3 million (after costs of €7.1 million). The new shares were issued through subscription rights and carry full dividend entitlement for 2016.

A total of approximately 99.36% of the subscription rights were exercised, and 29,806,806 new shares were issued at a subscription price of €6.00 per share. The remaining 193,194 new shares (including fractional amounts excluded from the subscription right) were placed within the framework of stock market transactions at a weighted average price of around €8.072.

As of December 31, 2016, 70,501 (December 31, 2015: 77,905) treasury shares were held at a carrying amount of €180,482.56 (December 31, 2015: €199,436.80).

### Disclosures on capital management

In addition to ensuring liquidity, one of the primary objectives of capital management is to optimize financing structures on a continuous basis. In order to achieve this objective, various methods are used to reduce the cost of capital and improve the capital structure as well as to ensure effective risk management. Capital management includes both equity and debt components. Key financial figures include net financial debt, gearing (net financial debt/equity), and the equity ratio. Net financial debt is defined as borrowings at their principal amount less cash, cash equivalents, and time deposits.

The measures initiated in the reporting year include the capital increase in the amount of €173.3 million resolved by the Board of Management and successfully carried out as well as the newly agreed syndicated loan with an already available tranche amounting to €50.0 million. The measure initiated in the prior year include successful optimization of the maturity profile through the placement of a convertible bond in an aggregate principal amount of €167.0 million due in 2020 and the repurchase of the convertible bond due in 2016. There were no changes as regards the approach to capital management in the year under review.

The key figures developed as follows:

€m	Dec. 31, 16	Dec. 31, 15
Net financial debt	449.4	534.2
Equity attributable to the shareholders of the parent company	331.8	289.3
Gearing	1.35	1.85
Equity ratio	17.5%	15.6%

SGL Group pursues active debt management as one of its capital management tools. The SGL Group is under an obligation to comply with certain covenants with respect to our lenders and bondholders. Adherence to these covenants is monitored continuously. In addition, financial risks are continuously monitored and controlled using certain indicators and regular internal reports as part of internal risk management. These risks include, among other things, the internal financing framework for subsidiaries determined on the basis of their budget requirements and their utilization, the hedged currency exposure, the change in actual cash flows, the change in the fair value of the derivatives portfolio, and maintenance and utilization of guarantee credit lines.

Since 2004, SGL Group has commissioned rating agencies Moody's and Standard & Poor's (S&P) to prepare an issuer rating, which supports both private and institutional investors in evaluating the SGL Group's credit quality. At present, SGL Group has ratings of "CAAI" from Moody's and "CCC+" from Standard & Poor's. The corporate bond issued in 2013 has received a "B" grade rating from S&P. Moody's has given the corporate bond a "B3" rating.

### Change in control agreement

The corporate bond issued by the Company in the amount of €250 million and maturing in 2021 entitles investors to demand early repayment of their notes in return for payment of 101% of the principal amount, provided (a) all or nearly all of the assets of SGL Carbon SE and its Group companies are transferred, (b) SGL Carbon SE is in the process of liquidation or wind-up, (c) a single individual acquires, either directly or indirectly, more than 35% of the voting shares in SGL Carbon SE or (d) SGL Carbon SE is merged with a company and the previous owners of the voting shares in SGL Carbon SE no longer hold the majority of the Company's voting shares after the transaction.

Each of the convertible bonds issued by the Company (due in 2018 and 2020) entitles the bondholders to repayment of their outstanding notes at the principal amount in the event of a change in control, provided the bondholders declare such intention prior to or on the reference date to be determined by the Company; such reference date may not be fewer than 40 or more than 60 calendar days after the change in control. Alternatively, the notes may be converted into shares up to the reference date, which could result in a better conversion ratio for bondholders based on the staggered conversion price with respect to the residual terms to maturity of the convertible

bond in question. For the purposes of the two convertible bonds, a change in control exists if one or more individuals acquires control over the Company, with control being (a) direct or indirect ownership of more than 30% of the voting shares or (b) in the case of an acquisition offer, when the shares controlled by the bidder or individuals cooperating with the bidder plus the shares with regard to which the acquisition offer has been accepted exceed 50% of the voting rights in SGL Carbon SE and the acquisition offer becomes unconditional.

Pursuant to the joint venture agreement between SGL Group and BMW Group establishing SGL ACF, if one of the parties to the joint venture undergoes a change in control (i.e. if a third party directly or indirectly acquires 50% or more of the voting rights in a party to the joint venture, or 25% of the voting rights if such third party is a competitor of the other party to the joint venture), the other party to the joint venture is entitled to purchase the shares belonging to the party to the joint venture affected by the change in control or to tender its shares in the joint venture at market value.

### **Other**

In 2016, SGL Carbon SE, the parent company of SGL Group, reported a net loss for the year of €309.1 million in accordance with the German Commercial Code (HGB). Taking into account the loss brought forward in the amount of €747.6 million, the accumulated loss totaled €1,056.7 million. In accordance with the German Stock Corporation Act, dividends may only be paid out of the accumulated net profit reported by SGL Carbon SE in its annual financial statements prepared pursuant to the provisions of the German Commercial Code (HGB).

## **23. Provisions for pensions and similar employee benefits**

The employees of SGL Group worldwide benefit from various pension plans that provide retirement benefits for employees and their surviving dependents. These benefits are granted in accordance with the specific situations in the various countries. Some of the arrangements are linked to the level of employee remuneration, whereas others are based on fixed amounts that are based on employee ranking in terms of both salary classification and position within the Company hierarchy. Some arrangements also provide for future increases based on an inflation index.

### **Germany**

The various pension arrangements for the employees of SGL Group in Germany were standardized on April 1, 2000 and pooled in the legally independent pension fund for employees of Hoechst Group VVaG. In case of defined contribution plans for basic pension plans in relation to employees below the income threshold for contribution assessment, the Company pays contributions to pension insurance providers on the basis of statutory or contractual requirements. The Company generally has no further obligations other than to pay the contributions. The Hoechst VVaG pension fund (Penka I) is a defined benefit multi-employer plan in Germany. There is insufficient information available about this pension plan to allow the Company to classify it as a defined benefit plan because the plan assets cannot be allocated among the participating companies. The pension fund benefits are funded based on the demand coverage method (Bedarfsdeckungsverfahren). Accordingly, the employer contributions may fluctuate depending on the amount of capital gains of the fund. The contributions made by SGL Group to the pension fund (Penka I) in 2015 amount to 400% of the employee contributions. Owing to the continuing low interest rate level, the contribution rate for 2016 was increased to 500%. Effective April 1, 2009, the pension plan was closed to new beneficiaries and changed from a defined benefit plan to a defined contribution plan. The employer contributions remained constant at 230% of the employee contributions. All obligations were fulfilled by making contribution payments to Höchster Pensionskasse VVaG (Penka II). Effective January 1, 2013, the participants of Penka II in Germany were transferred to the new pension plan – "Altersversorgungplus (AV-plus)." The employee contributes 2.0% from pensionable gross remuneration as deferred compensation to AV-plus, while the employer contributes twice that amount in the form of a direct pension commitment which is covered by assets held in a trust vehicle (Contractual Trust Arrangement, CTA). Employees may contribute an additional amount of 1.0% to Penka II, in which case the matching employer's contribution to the direct pension commitment amounts to 100% of the employee's contribution. The employee acquires a direct entitlement to benefits from the pension fund upon making his contributions to the pension fund. The employer's payments under the direct pension commitment are subject to a guaranteed minimum return of 2.25% p. a. Any benefit payments (one-off disbursement or payment in form of an annuity) are determined based on the higher of guaranteed minimum return or the current individual value of assets. In addition, employees are able to participate in deferred compensation plans and similar models.



The direct pension commitment for the defined benefit plan for the senior management level (with income above the threshold for a contribution assessment as determined by the German government pension insurance plan (Deutsche Rentenversicherung) was closed to participants as of December 31, 2014 – with only a few exceptions that relate to partial retirement agreements as well as persons shortly before retirement – and was replaced by a defined contribution plan (ZVplus). The entitlements earned by the participants have been frozen and are no longer subject to indexation until benefits commence. Even if employees may no longer earn entitlements from legacy commitments, the Company is still exposed to actuarial risks such as longevity and pension indexation. In relation to the new defined contribution plan, the Company grants contributions at a defined rate based on pensionable income. The contributions are subject to a minimum interest rate, which is the maximum rate for life insurance policies plus one percentage point (until December 31, 2016: 2.25% p. a. in total; after January 1, 2017: 1.9% p. a.). In addition, the amounts are contributed as assets to a trust vehicle (Contractual Trust Arrangement, CTA). If an insured event occurs, any benefit payments (one-off disbursement or payment in form of an annuity) are determined based on the higher of guaranteed minimum return or the current individual value of assets.

## USA

The North American subsidiaries have country-specific pension plans which are largely covered by pension funds. The effective funding ratio for the U.S. pension plan as of December 31, 2016 amounts to 68.5% (December 31, 2015: 70.0%). This plan is subject to the legal and regulatory framework of the U.S. Employee Retirement Income Security Act (ERISA). In accordance with this framework, defined benefit plans have to ensure a minimum funding level in order to avoid a reduction of benefit payments. The current funding ratio pursuant to ERISA does not result in any obligations to pay further contributions. In addition, post-employment healthcare plans and an additional pension plan for senior managers, both of which are unfunded, exist in the USA.

In the U.S. pension fund, the plan assets are invested solely for the purpose of providing future pension benefits to the beneficiaries and minimizing the costs of administering the assets. SGL Group regularly reviews the assumptions on the expected return on plan assets of the North American, fund-financed pension plan. As part of the review, independent

actuaries calculate a range for expected long-term returns on total plan assets. Net interest is determined based on plan assets measured using the discount interest rate at the end of the previous year.

In 2016, the effective return on plan assets was plus 6.8% (2015: minus 2.3%) in the U.S., which is above the expected interest based on the discount rate of 4.25% as of December 31, 2015.

The investment policy of SGL Group is geared more heavily toward fixed-income bonds and bank balances as compared to assets from growth-oriented equities and interests in companies. As of December 31, 2016, 32.1% of the plan assets in the USA were invested in equities and interests in companies (December 31, 2015: 31.6%), 57.2% in fixed-interest securities (December 31, 2015: 56.8%), 8.2% in hedge funds (December 31, 2015: 10.4%), and 2.4% in bank deposits (December 31, 2015: 1.2%).

The future benefit obligations in relation to healthcare plans are calculated using actuarial methods based on prudent estimates of the relevant parameters. The calculation parameters may be influenced to a significant degree by the assumptions with respect to the increase in costs within the healthcare sector. In the year under review, the assumed rates of increase for medical costs (first/last/year) amounted to (7.56%/5.0%/2024) for beneficiaries of less than 65 years of age and (8.82%/5.0%/2024) for beneficiaries of more than 65 years of age. The assumed rates for 2015 were (7.3%/5.0%/2025) and (6.8%/5.0%/2023), respectively. An increase or decrease in the assumed growth rate for healthcare costs of 1 percentage point would have led to an increase (decline) in the present value of the defined benefit obligation of €0.2 million (minus €0.2 million) and an increase (decline) in the service and interest cost of €0.0 million (€0.0 million) as of the end of fiscal year 2016.

## Actuarial assumptions

In addition to biometrical bases for calculation and the current long-term market interest rate, this method takes into account particular assumptions with respect to future salary and pension increases.

The following parameters are applied in Germany and the USA, the countries with the most significant post-employment benefit obligations:

	German plans		US plans	
	2016	2015	2016	2015
Discount rate as of Dec. 31	1.80%	2.25%	4.00%	4.25%
Projected salary increase as of Dec. 31	2.25%	2.25%	3.00%	3.00%
Projected pension increase as of Dec. 31	1.50%	1.75%		
Expected return on plan assets in fiscal year	2.25%	2.00%	4.25%	4.00%
Duration (years)	17.3	14.5	14.2	13.1

The change in pension obligations relating to direct commitments and post-employment healthcare obligations, the change in plan assets and the financing status of the pension plans are described in the following table.

The funded status for 2016 was as follows:

€m	Germany 2016	USA 2016	Other 2016	Total 2016
Present value of the defined benefit obligation at beginning of year	318.5	176.8	27.2	522.5
Reclassification to the balance sheet item liabilities in connection with assets held for sale	-45.7	-76.1	-15.0	-136.8
Service cost	5.4	2.8	0.4	8.6
Interest cost	5.9	5.3	0.2	11.4
Actuarial gains (-)/losses (+)	3.6	4.8	0.7	9.1
Benefits paid	-8.1	-6.3	-1.6	-16.0
Plan amendments	0.7	0.1	0.0	0.8
Other changes	0.6	0.0	-0.3	0.3
Currency differences	0.0	3.4	0.1	3.5
<b>Present value of the defined benefit obligation at end of year <sup>1)</sup></b>	<b>280.9</b>	<b>110.8</b>	<b>11.7</b>	<b>403.4</b>
Fair value of plan assets at beginning of year	39.4	98.5	7.4	145.3
Reclassification to the balance sheet item liabilities in connection with assets held for sale	-1.3	-49.3	-7.6	-58.2
Actual return on plan assets	0.8	6.6	0.0	7.4
Employer contributions	3.7	6.5	0.0	10.2
Employee contributions	0.6	0.1	0.0	0.7
Benefits paid	-0.8	-6.3	0.0	-7.1
Currency differences	0.0	1.9	0.2	2.1
<b>Fair value of plan assets at end of year <sup>2)</sup></b>	<b>42.4</b>	<b>58.0</b>	<b>0.0</b>	<b>100.4</b>
<b>Funded status as of Dec. 31</b>	<b>238.5</b>	<b>52.8</b>	<b>11.7</b>	<b>303.0</b>
<b>Amount recognized</b>	<b>238.5</b>	<b>52.8</b>	<b>11.7</b>	<b>303.0</b>
Termination benefits	0.0	0.8	2.2	3.0
<b>Provisions for pensions and similar employee benefits</b>	<b>238.5</b>	<b>53.6</b>	<b>13.9</b>	<b>306.0</b>

<sup>1)</sup> Of which €9.2 million relate to post-retirement health care benefits

<sup>2)</sup> This item also includes assets of €3.7 million to cover pension entitlements recognized as other non-current assets

The funded status for 2015 was as follows:

€m	Germany 2015	USA 2015	Other 2015	<b>Total 2015</b>
Present value of the defined benefit obligation at beginning of year	326.2	163.0	34.5	523.7
Service cost	8.0	4.2	0.8	13.0
Interest cost	6.5	6.9	0.8	14.2
Actuarial gains (-)/losses (+)	-6.2	-8.3	0.4	-14.1
Benefits paid	-13.3	-8.1	-8.5	-29.9
Plan amendments	0.7	0.0	0.0	0.7
Other changes	-3.4	0.3	-0.3	-3.4
Currency differences	0.0	18.8	-0.5	18.3
<b>Present value of the defined benefit obligation at end of year <sup>1)</sup></b>	<b>318.5</b>	<b>176.8</b>	<b>27.2</b>	<b>522.5</b>
Fair value of plan assets at beginning of year	36.7	94.4	13.2	144.3
Actual return on plan assets	-1.5	-2.8	0.7	-3.6
Employer contributions	7.3	3.6	0.7	11.6
Employee contributions	0.4	0.3	0.0	0.7
Benefits paid	-3.5	-8.2	-6.6	-18.3
Currency differences	0.0	11.2	-0.6	10.6
<b>Fair value of plan assets at end of year <sup>2)</sup></b>	<b>39.4</b>	<b>98.5</b>	<b>7.4</b>	<b>145.3</b>
<b>Funded status as of Dec. 31</b>	<b>279.1</b>	<b>78.3</b>	<b>19.8</b>	<b>377.2</b>
<b>Amount recognized</b>	<b>279.1</b>	<b>78.3</b>	<b>19.8</b>	<b>377.2</b>
Termination benefits	0.0	0.8	2.2	3.0
<b>Provisions for pensions and similar employee benefits</b>	<b>279.1</b>	<b>79.1</b>	<b>22.0</b>	<b>380.2</b>

<sup>1)</sup> Of which €20.0 million relate to post-retirement health care benefits

<sup>2)</sup> This item also includes assets of €4.7 million to cover pension entitlements recognized as other non-current assets

The consolidated statement of comprehensive income includes the following amounts:

€m	Germany 2016	USA 2016	Other 2016	<b>Total 2016</b>	Total 2015
Actuarial gains (+)/losses (-) on pensions	-15.0	0.1	-1.1	-16.0	14.1
Actual return on plan assets	0.9	8.5	0.5	9.9	-3.6
Less expected return on plan assets	0.8	4.2	0.2	5.2	5.1
<b>Gains (+)/losses (-) for the reporting year (gross) recognized in equity</b>	<b>-14.9</b>	<b>4.4</b>	<b>-0.8</b>	<b>-11.3</b>	<b>5.4</b>
Tax effect	4.9	-2.9	0.0	2.0	-1.8
<b>Gains (+)/losses (-) for the reporting year (net) recognized in equity</b>	<b>-10.0</b>	<b>1.5</b>	<b>-0.8</b>	<b>-9.3</b>	<b>3.6</b>

The cumulative net amount of actuarial losses recognized in equity (accumulated profit/loss) was €182.2 million (2015: €172.9 million). The losses increased above all due to a decrease in the interest rate in Germany and the USA.

In fiscal year 2016, the following developments influenced the present value of the defined benefit obligation: increase by €20.6 million resulting from the decrease of the discount factor used for pension plans (2015: minus €18.1 million), decrease by €1.6 million as a result of taking into account new mortality tables in the USA (2015: minus €3.3 million) as well as increase by €9.8 million (2015: minus €7.0 million) in experience adjustments arising from differences between actuarial assumptions and actual outcome. A change in the discount factor, the salary trend, and the return on plan assets of plus 0.5 percentage points/minus 0.5 percentage points, respectively, would lead to a change in the present value of the defined benefit obligation of minus 7.3%/8.3% (discount factor), 4.7%/minus 4.5% (projected pension increase) and 0.1%/minus 0.1% (change in plan assets). An increase in longevity by 1 year would lead to a change in the present value of the defined benefit obligation of plus 2.4%.

Pension provisions with a maturity of less than one year amounted to approximately €13.5 million (December 31, 2015: €21.4 million).

SGL Group has pension and healthcare obligations in the amount of €94.4 million (December 31, 2015: €155.5 million) arising from fund-financed pension plans. Pension obligations arising from non-fund-financed pension plans amounted to €309.0 million (December 31, 2015: €367.0 million). The actual return on plan assets in 2016 amounted to a total of €7.4 million (2015: minus €3.6 million).

To cover the pension obligations to members of the Board of Management, the Company has entered into reinsurance policies with three large insurance companies. As of December 31, 2016, the asset value included in the pension provisions totaled €30.5 million (December 31, 2015: €29.7 million). The expected return corresponds to the discount rate for the pension obligations. In fiscal year 2016, one-time payments totaling €0.8 million were made to reinsurers (2015: €3.7 million). The benefits under the insurance policies have been pledged to the relevant members of the Board of Management. The pension expense for active members of the Board of Management is detailed in **Note 27**.

The breakdown of pension expenses for 2016 and 2015 is as follows:

€m	Germany 2016	USA 2016	Other 2016	Total 2016	Total 2015
Current service costs	5.4	2.8	0.4	8.6	13.0
Plan amendments	0.7	0.0	0.0	0.7	0.7
Curtailment/settlement gains	0.0	0.0	-0.4	-0.4	-1.2
<b>Service cost</b>	<b>6.1</b>	<b>2.8</b>	<b>0.0</b>	<b>8.9</b>	<b>12.5</b>
Interest cost	5.9	5.3	0.2	11.4	14.2
Expected return on plan assets	-0.7	-2.8	0.0	-3.5	-5.1
<b>Net interest expense</b>	<b>5.2</b>	<b>2.5</b>	<b>0.2</b>	<b>7.9</b>	<b>9.1</b>
<b>Pension expenses for defined benefit plans</b>	<b>11.3</b>	<b>5.3</b>	<b>0.2</b>	<b>16.8</b>	<b>21.6</b>
Pension expenses for defined contribution plans	6.3	0.0	0.0	6.3	6.5
Pension expenses for termination benefits	0.0	0.0	0.2	0.2	0.6
<b>Pension expenses</b>	<b>17.6</b>	<b>5.3</b>	<b>0.4</b>	<b>23.3</b>	<b>28.7</b>

The amounts recognized in profit or loss for the defined contribution plans in Germany totaled to €6.3 million (December 31, 2015: €6.5 million) in fiscal year 2016. Contributions to state plans of SGL Group amounted to €20.0 million in 2016 (December 31, 2015: €26.6 million). Employer contributions to plan assets and reinsurance policies in 2017 are estimated at €6.2 million (actual amount for 2015: €10.2 million). As of December 31, 2016, the anticipated future pension benefit payments by SGL Group to its former employees or their surviving dependents were as follows:

#### Pension payments to employees

Year	€m
2016	16.0
Payable in 2017	13.5
Payable in 2018	14.4
Payable in 2019	15.0
Payable in 2020	15.3
Due 2021	16.6
Payable in 2022–2026	92.9

**24. Other provisions**

€m	Taxes	Personnel expenses	Warranties, price reductions and guarantees	Restructuring	Other	Total
Balance at Jan. 1, 16	5.7	51.2	18.7	58.1	21.9	155.6
Reclassification to the balance sheet item liabilities in connection with assets held for sale	-1.5	-9.4	-4.4	-2.4	-2.0	-19.7
Utilizations	-4.2	-22.3	-3.7	-29.2	-9.7	-69.1
Releases	0.0	-1.6	-1.3	-0.1	-2.1	-5.1
Additions	4.2	27.4	1.0	18.4	7.3	58.3
Other changes/exchange differences	-0.1	0.3	0.3	-0.1	-0.2	0.2
<b>Balance at Dec. 31, 16</b>	<b>4.1</b>	<b>45.6</b>	<b>10.6</b>	<b>44.7</b>	<b>15.2</b>	<b>120.2</b>
<i>thereof with a maturity of up to one year</i>	<i>2.5</i>	<i>41.1</i>	<i>3.6</i>	<i>22.2</i>	<i>14.9</i>	<i>84.3</i>
<i>thereof with a maturity of more than one year</i>	<i>1.6</i>	<i>4.5</i>	<i>7.0</i>	<i>22.5</i>	<i>0.3</i>	<i>35.9</i>

Provisions for personnel expenses mainly comprise provisions for annual bonuses of €20.2 million (December 31, 2015: €19.3 million), provisions for anniversary benefits of €4.2 million (December 31, 2015: €7.4 million), provisions for partial retirement of €1.2 million (December 31, 2015: €1.2 million), and provisions for outstanding vacation days of €9.0 million (December 31, 2015: €8.5 million).

All warranties, price reductions and guarantees contain provisions for price reduction risks including bonuses, volume discounts, and other reductions in price. The restructuring provisions primarily relate to personnel measures, provisions for clean-up work and dismantling costs.

The item "Other" includes provisions for outstanding invoices in the amount of €6.7 million (December 31, 2015: €7.4 million). In addition, other provisions consist of various individual items of minor value from our 70 (December 31, 2015: 66) fully consolidated companies.

## 25. Liabilities

€m	Dec. 31, 16	Remaining term to maturity > 1 year	Dec. 31, 15	Remaining term to maturity > 1 year
<b>Interest-bearing loans</b>				
Corporate bonds	250.0	250.0	250.0	250.0
<i>Nominal value of convertible bonds</i>	407.0		407.0	
<i>Less IFRS equity component</i>	-20.5		-28.6	
Convertible bonds	386.5	386.5	378.4	378.4
Bank loans, overdrafts and other financial liabilities	125.4	122.3	128.0	125.4
Refinancing costs	-10.0	-10.0	-11.6	-11.6
	<b>751.9</b>	<b>748.8</b>	<b>744.8</b>	<b>742.2</b>
<b>Trade payables</b>	<b>103.9</b>	<b>0.0</b>	<b>162.9</b>	<b>0.0</b>
Other financial liabilities				
Derivative financial instruments	0.8	0.0	1.9	0.0
Finance lease liabilities	20.9	19.9	20.6	19.7
Miscellaneous other financial liabilities	26.8	15.5	45.1	31.4
	<b>48.5</b>	<b>35.4</b>	<b>67.6</b>	<b>51.1</b>
Income tax liabilities	0.5	0.0	1.4	0.0
Deferred tax liabilities	1.2	1.2	1.2	1.2
Miscellaneous other liabilities	32.5	0.1	36.6	0.0
<b>Other liabilities</b>	<b>82.7</b>	<b>36.7</b>	<b>106.8</b>	<b>52.3</b>
<b>Total</b>	<b>938.5</b>	<b>785.5</b>	<b>1,014.5</b>	<b>794.5</b>

### Interest-bearing loans

#### Corporate bond

The 7-year fixed-rate corporate bond issued by SGL Carbon SE 2013 has a principal amount of €250.0 million and was issued in denominations of €100,000. The corporate bond has a coupon of 4.875% p.a., payable semi-annually.

The issue price was 100% of the principal amount. In the case of a change in ownership of the Company, the investors are entitled to early redeem their corporate bonds and to demand repayment at a price of 101% of the principal amount plus accrued interest. Moreover, SGL Carbon SE has the right to repurchase the corporate bond from January 15, 2017 at any time and based on fixed terms and conditions.

The terms of the corporate bond also include normal market provisions with regard to financial covenants and financial restrictions. The corporate bond is admitted to trading in the Open Market of the Frankfurt Stock Exchange.

As of December 31, 2016, the market value of the listed corporate bond was €256.2 million (December 31, 2015: €247.7 million), which was derived from market rates as of December 31, and which corresponds to level 1 of the fair value hierarchy of IFRS 13.

#### Convertible bond

In 2015, the Company issued a new unsecured, unsubordinated convertible bond due in September 2020 in an aggregate principal amount of €167 million ("2015/2020 Convertible Bond"). The convertible bond was issued and will be redeemed upon maturity also at 100% of the principal amount. The convertible bonds were issued in denominations of €100,000 per bond. The current conversion price amounts to €17.1. The interest coupon is 3.5% p.a., payable semi-annually and retroactively on March 31 and September 30. Based on the current conversion price, full conversion would result in the issue of approximately 9.8 million shares. The proceeds from the 2015/2020 Convertible Bond were largely used to repurchase the unsecured, unsubordinated convertible bond issued in 2009 with an



original term to maturity until June 2016 and an original principal amount of €190.0 million ("2009/2016 Convertible Bond").

In 2012, SGL Carbon SE issued unsecured unsubordinated convertible bond due in January 2018 in a principal amount of €240.0 million. The convertible bond was issued and will be redeemed upon maturity at 100% of its principal amount. The convertible bonds were issued in denominations of €100,000 per bond. The coupon rate is 2.75% p.a. and is paid semi-annually. Based on the current conversion price, full conversion would result in the issue of approximately 6.4 million shares. The outstanding volume of the convertible bond as of December 31, 2016 was €240.0 million, unchanged from the prior year.

Accordingly, as of December 31, 2016, the Company had two outstanding convertible bonds. The terms of both convertible bonds provide for protection against dilution for investors. This ensures that the bonds' conversion prices are auto-

matically adjusted in the event of a rights issue or if dividends are paid by the Company. The adjusted conversion price reflects the dilutive effect per share.

The conversion prices of the convertible bonds changed as follows:

€	Conversion price as of Dec. 31, 16	Original conversion price per share	Change
Convertible Bond 2012/2018	37.51	44.10	-6.59
Convertible Bond 2015/2020	17.07	18.65	-1.58

### Summary of convertible bonds

€m	Volume of issue	Outstanding volume	Carrying amount as of Dec. 31, 16	Market price <sup>1)</sup> per Dec. 31, 16	Coupon % p.a.	Issue price
Convertible Bond 2012/2018	240.0	240.0	234.3	239.6	2.750%	100.0%
Convertible Bond 2015/2020	167.0	167.0	149.3	158.7	3.500%	100.0%
<b>Total</b>	<b>407.0</b>	<b>407.0</b>	<b>383.6</b>	<b>398.3</b>		

<sup>1)</sup> Corresponds to level 1 of the fair value hierarchy of IFRS 13

Please see **Note 2** ("Hybrid Financial Instruments") for a description of the accounting treatment for convertible bonds and their separation into an equity component and a debt component.

The weighted average cash interest rate on financial liabilities based on their nominal amounts in 2016 was 3.7% p. a. (2015: 3.6% p. a.). Including the non-cash imputed interest component on the convertible bonds, the weighted average effective interest rate for 2016 was 4.7% p. a. (2015: 5.4% p. a.). As of the balance sheet date, bank loans, overdrafts and other financial liabilities amounted to €125.4 million (2015: €128.0 million). Of that amount, €80.0 million (2015: €71.8 million) was subject to fixed interest and €45.4 million (2015: €56.2 million) was subject to variable interest rates. Excluding the proportionally consolidated joint operation SGL ACF, the total of all bank loans, overdrafts, and other financial liabilities was €8.3 million (2015: €2.6 million). Of that amount, €7.4 million (2015: €1.5 million) was subject to fixed interest and €0.9 million (2015: €1.1 million) was subject to variable interest rates.

#### **Syndicated credit facility**

In addition to the corporate bond and the two convertible bonds, SGL Group also has a secured syndicated credit facility totaling €50.0 million to be used for general corporate purposes. The credit facility has equal ranking with the corporate bond and was not utilized as of the reporting date. The syndicated credit facility was agreed with SGL Group's core banks and matures at the end of 2019. The credit facility is available to various SGL subsidiaries and can be drawn on in euros or in U.S. dollars. If the corporate bond is redeemed early, the amount available under syndicated credit facility would increase to €150 million, with the amount of the increase (€100 million) being available only for the repayment of the convertible bond due in 2018.

The agreed credit margin varies, in particular depending on the leverage of SGL Group during the term to maturity. The terms and conditions of the syndicated credit line include financing provisions.

#### **Trade payables**

Trade payables totaled €103.9 million as of December 31, 2016 (December 31, 2015: €162.9 million) and, as in fiscal year 2015, were primarily due to third parties and due for payment within one year.

#### **Other liabilities**

As of December 31, 2016, other financial liabilities included liabilities from finance leases in the amount of €20.9 million (December 31, 2016: €20.6 million), mainly attributable to an agreement on a heritable building right.

This line item also includes negative fair values relating to hedging instruments in the amount of €0.8 million as of December 31, 2016 (December 31, 2016: €1.9 million).

Miscellaneous other financial liabilities mainly include the non-controlling interests in the subsidiary partnership Kämpers GmbH & Co. KG, Rheine, Germany, which is classified as a liability in a total amount of €15.5 million (December 31, 2015: €16.0 million), as well as an outstanding financial liability of €8.9 million (December 31, 2015: €26.4 million) towards the acquirer of our business with aerostructure components. In its financial statements as of December 31, 2016, Kämpers GmbH & Co. KG reported sales of €58.1 million (2015: €54.9 million) as well as, for each year, net income in the low single-digit million euro range. Total assets amounted to €34.1 million and €38.4 million, respectively, while the ratio of current assets and current liabilities, respectively, to total assets was around 65% in both fiscal years.

Miscellaneous other liabilities totaled 32.5 million (December 31, 2016: €36.6 million) as of December 31, 2016 and included liabilities for payroll and church taxes of €7.1 million (December 31, 2015: €9.8 million), accrued interest of €10.0 million (December 31, 2015: €10.2 million), social security liabilities of €0.4 million (December 31, 2015: €0.3 million), other tax liabilities of €0.3 million (December 31, 2015: €0.3 million), and deferred income of €8.7 million (December 31, 2015: €8.8 million).

The following table shows all contractually agreed upon payments as of December 31, 2016 for repayments of principal

and payment of interest on recognized financial liabilities, including derivative financial instruments.

€m	2017	2018	2019	2020	2021	More than five years
<b>Non-derivative financial liabilities</b>						
Corporate bonds	12.2	12.2	12.2	12.2	250.5	
Convertible bonds	12.6	246.4	5.9	171.0		
Bank loans, overdrafts and other financial liabilities	7.2	121.8	1.0	1.0	1.0	1.5
Finance lease liabilities	1.0	1.0	1.0	1.0	1.0	75.1
Trade payables	103.9					
Miscellaneous other financial liabilities	11.3					15.5
<b>Derivative financial liabilities</b>	<b>0.8</b>					
<b>Total</b>	<b>149.0</b>	<b>381.4</b>	<b>20.1</b>	<b>185.2</b>	<b>252.5</b>	<b>92.1</b>

There were no significant changes compared to the disclosures made in prior year.

The estimated interest payments for floating-rate financial liabilities were determined on the basis of the interest-rate curve on the balance sheet date. Miscellaneous other financial liabilities were determined using undiscounted contractual cash flows for the subsequent fiscal years. Derivative financial liabilities are classified as payable on demand, regardless of their actual contractual maturity. This enables a presentation of cash outflows in the event of an immediate cancellation of the underlying derivative contracts. The SGL Group is of the opinion that this form of presenting liabilities from derivatives with a negative fair value as of the balance sheet date is appropriate.

## 26. Contingent liabilities and other financial obligations

As of December 31, 2016, outstanding guarantee obligations amounted to €0.3 million (December 31, 2015: €0.3 million). Contingent liabilities relating to investments accounted for At-Equity amounted to €6.5 million (December 31, 2015: €4.5 million). In addition, other financial commitments in connection with purchase orders for approved capital expenditure on property, plant and equipment amounted to €18.2 million as of December 31, 2016 (December 31, 2015: €12.0 million). Some of these capital expenditure projects extend beyond one year.

SGL Group secures the necessary raw materials for its production by means of procurement agreements with key suppliers. These agreements normally have a term of one year, include minimum quantities to be purchased by SGL Group and are fulfilled by physical delivery. The prices for the supplies are based on a base price that is adjusted for variable components.

A number of agreements to provide collateral were also signed with lenders in conjunction with the refinancing carried out in 2013. These agreements are restricted to share pledge agreements and/or corporate guarantees for a selected number of companies in the SGL Group. No charges on real estate or other assets have been pledged as collateral.

In addition, obligations under operating leases for land and buildings, IT equipment, vehicles, and other items of property,

plant and equipment amounted to €41.9 million as of December 31, 2016 (December 31, 2015: €55.7 million).

As of December 31, 2016, the future payments were as follows (the changes compared to the previous year were insignificant):

€m	2017	2018	2019	2020	2021	2022 and thereafter	Total
<b>Operating leases</b>	<b>9.9</b>	<b>7.3</b>	<b>5.9</b>	<b>4.7</b>	<b>4.8</b>	<b>9.3</b>	<b>41.9</b>
Finance leases	1.0	1.0	1.0	1.0	1.0	75.1	80.1
- discount included	0.0	-0.1	-0.1	-0.2	-0.2	-58.6	-59.2
<b>= Present value of finance leases</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>16.5</b>	<b>20.9</b>

Payments from subleases were received to an insignificant amount in both 2016 and 2015. Finance leases exclusively comprised lease agreements for items of property, plant and equipment concluded as standard lease agreements without any specific purchase option as well as one heritable building right. The land lease rate for the heritable building right is adjusted every 20 years, based on the then-applicable market value of the property. The last adjustment was made in 2006. Estimates of future increases are shown in the above table. As of December 31, 2016, there was no residual carrying amount (December 31, 2015: €0.5 million) for assets from finance leases, including the heritable building right. Expenses for rental and operating lease agreements totaled €34.3 million in 2016 (2015: €32.9 million).

Various legal disputes, legal proceedings and lawsuits are either pending or may be initiated in the future. This includes legal action arising in connection with alleged defects in SGL Group products, product warranties and environmental protection issues. Tax risks may also arise as a result of the SGL Group structure. Litigation is subject to considerable uncertainty; the outcome of individual cases cannot be predicted with any certainty. There is a reasonable probability that individual cases could be decided against SGL Group. Identifiable risks have been adequately covered by recognizing appropriate provisions.

As a company using a substantial amount of energy, our sites in Meitingen and Bonn were partially exempted from the cost allocation under the German Renewable Energy Sources Act (EEG). Depending on whether we will no longer be granted such an exemption from the EEG cost allocation or if we will be required to make a retrospective payment for the EEG cost allocation, this might have a negative impact on our business operations.

## 27. Related-party transactions

### Joint ventures and associates

SKion GmbH, Bad Homburg, holds a share of approximately 28.55% in SGL Carbon SE according to notifications pursuant to the German Securities Trading Act (WpHG). No transactions were conducted with SKion GmbH.

In fiscal years 2016 and 2015, SGL Group maintained business relations within its normal course of business with a number of

joint ventures and associates related to sales revenue and allocations of general and administrative expenses. In this context, SGL buys and sells products and services at market conditions. Collateral is reported under other financial obligations (see **Note 26**). Please refer to **Note 8** for information on joint ventures and associates.

The following table presents the volume of transactions with related companies included in SGL Group:

### 2016

	Sales of goods	Sales of services	Purchases of goods	Purchases of services	Receivables as of Dec. 31	Loans as of Dec. 31	Liabilities as of Dec. 31
Joint ventures	16.3	20.8	0.0	0.0	3.9	0.0	0.0
Associates	0.0	0.5	20.5	9.8	2.0	2.6	14.5
<b>Total</b>	<b>16.3</b>	<b>21.3</b>	<b>20.5</b>	<b>9.8</b>	<b>5.9</b>	<b>2.6</b>	<b>14.5</b>

### 2015

	Sales of goods	Sales of services	Purchases of goods	Purchases of services	Receivables as of Dec. 31	Loans as of Dec. 31	Liabilities as of Dec. 31
Joint ventures	16.4	11.3	0.3	0.0	3.3	0.0	0.6
Associates	1.1	0.0	29.5	0.0	0.9	1.8	10.3
<b>Total</b>	<b>17.5</b>	<b>11.3</b>	<b>29.8</b>	<b>0.0</b>	<b>4.2</b>	<b>1.8</b>	<b>10.9</b>

### Related persons

Related persons include members of the Board of Management and the Supervisory Board.

For fiscal 2016, the total remuneration (excluding benefit expenses) for the members of SGL Group's Board of Management active in the respective fiscal year based on the principle of allocation (Zuflussbetrachtung) amounted to €3,482 thousand (2015: €2,861 thousand). There was no remuneration under the share-based Matching Share Plan (MSP) (2015: gross remuneration of €114 thousand). For fiscal years 2016 and 2015, there were no new grants for MSPs and SARs since the issue of such grants was replaced with the cash-settled SGL Carbon SE Performance Share Plan.

In addition, pension expenses (service cost) in the amount of €1,169 thousand in fiscal 2016 (2015: €1,070 thousand) were taken into account for the members of the Board of Management as a remuneration component within the context of defined benefit plans. The DBO of the pension commitments for active members as of December 31, 2016 amounted to €11,880 thousand (December 31, 2015: €9,914 thousand).

Remuneration for the members of the Board of Management in fiscal 2016 amounted to a total net expense of €5,737 thousand (2015: €5,642 thousand). Additionally, an amount of €1,940 thousand was granted in connection with the retirement of a member of the Board of Management.

The net amounts outstanding to members of the Board of Management as of December 31, 2016 in the amount of €1,824 thousand (December 31, 2015: €1,085 thousand) consisted of provisions for annual bonuses.

Former members of the Board of Management and their surviving dependents received total compensation within the meaning of section 285 no. 9b HGB in the amount of €1,129 thousand (2015: €3,801 thousand). In the prior year, this amount included €2,552 thousand in connection with the exercise of a lump-sum option. As of December 31 2016, the pension provisions recognized for former members of the Board of Management (defined benefit obligation, DBO) amounted to €40,594 thousand (December 31, 2015: €39,989 thousand).

The remuneration paid to members of the Supervisory Board consisted of a basic remuneration as well as additional remuneration for Board activities and amounted to a total of €858 thousand (2015: €874 thousand), including attendance fees.

In addition, employee representatives in the Supervisory Board who are employees of SGL Group receive remuneration within the framework of their employment contracts of €369 thousand (2015: €309 thousand).

Details in relation to the remuneration system for members of the Board of Management and Supervisory Board members and the disclosure of individual levels of the remuneration can be found in the 2016 Group Management Report in the section "Remuneration Report."

No members of the Board of Management or the Supervisory Board received any loans or advances from SGL Group.

## 28. Additional disclosures on financial instruments

The following table shows the reconciliation of balance sheet items to the classes of financial instruments required to be established in accordance with IFRS 7:

€m	Measurement category under IAS 39	Carrying amount as of Dec. 31, 16	Carrying amount as of Dec. 31, 15
<b>Financial assets</b>			
Cash and cash equivalents	1)	324.5	236.8
Time deposits	1)	5.0	14.0
Trade receivables	1)	89.2	149.5
Available-for-sale financial assets	2)	3.7	5.5
Other financial assets	1)	2.6	1.8
Derivative financial assets			
Derivatives without a hedging relationship <sup>1)</sup>	3)	1.4	0.1
Derivatives with a hedging relationship	n.a.	2.1	0.1
<b>Financial liabilities</b>			
Corporate bonds	4)	250.0	250.0
Convertible bonds	4)	386.5	378.4
Bank loans, overdrafts and other financial liabilities	4)	125.4	128.0
Refinancing costs	4)	-10.0	-11.6
Finance lease liabilities	n.a.	20.9	20.6
Trade payables	4)	103.9	162.9
Miscellaneous other financial liabilities	4)	26.8	45.1
Derivative financial liabilities			
Derivatives without a hedging relationship <sup>2)</sup>	5)	0.2	0.7
Derivatives with a hedging relationship	n.a.	0.6	1.2
<b>Thereof aggregated by measurement category in accordance with IAS 39</b>			
1) Loans and receivables		421.3	402.1
2) Available-for-sale financial assets		3.7	5.5
3) Financial assets held for trading		1.4	0.1
4) Financial liabilities measured at amortized cost		882.6	952.8
5) Financial liabilities held for trading		0.2	0.7

<sup>1)</sup> Thereof €1.4 million (2015: €0.1 million) classified as cash flow hedges prior to the settlement of the hedged item or for hedging of intercompany loans in foreign currency

<sup>2)</sup> Thereof €0.2 million (2015: €0.7 million) classified as cash flow hedges prior to the settlement of the hedged item or for hedging of intercompany loans in foreign currency  
n.a.=not applicable



The carrying amounts for cash and cash equivalents, time deposits, trade receivables, and trade payables have short residual maturities and are approximately equivalent to fair value.

SGL Group measures financial assets on the basis of various parameters, such as the customer's credit rating and the risk structure of the financed project. This valuation is taken as the basis for valuation allowances on the mentioned receivables. The carrying amounts of these receivables, less valuation allowances recognized, approximate their fair values due to fact that the residual maturity largely is short-term. Other financial assets also include loans extended to joint ventures. If the loans have the characteristics of equity substitution, the loan amount is reduced through SGL Group's share in the losses of the joint venture that exceeds the carrying amount of the equity interest held in this company. SGL Group uses the market price in an active market as the fair value of financial assets available for sale. If no such market price exists, the fair value is determined using observable market data.

Please refer to **Note 25** for disclosures on the market value of the corporate bond and the convertible bonds as of the balance sheet date.

SGL Group calculates the fair value of liabilities to banks, other non-current financial liabilities, and liabilities from finance leases by discounting the estimated future cash flows using interest rates applicable to similar financial liabilities with comparable maturities. The fair values largely correspond to the carrying amounts.

The method used to calculate the fair values of the individual derivative financial instruments depends on the relevant type of instrument:

Currency forwards are measured on the basis of reference exchange rates, taking into account forward premiums and discounts. The following table shows the breakdown of the assets and liabilities measured at fair value into the three levels of the fair value hierarchy as of December 31, 2016 and 2015:

	Dec. 31, 16			Total
	Level 1	Level 2	Level 3	
Available-for-sale financial assets	3.7	-	-	3.7
Derivative financial assets	-	3.5	-	3.5
Derivative financial liabilities	-	0.8	-	0.8

	Dec. 31, 15			Total
	Level 1	Level 2	Level 3	
Available-for-sale financial assets	5.5	-	-	5.5
Derivative financial assets	-	0.2	-	0.2
Derivative financial liabilities	-	1.9	-	1.9

Net gains or losses recognized for financial instruments by measurement category in accordance with IAS 39 were as follows:

**Net gains/losses by measurement category**

€m	2016	2015
Loans and receivables	3.4	-0.6
Available-for-sale financial assets	0.3	0.5
Financial assets and financial liabilities held for trading	-2.9	-25.2
Financial liabilities measured at amortized cost	-3.0	-0.9

Net gains/losses for the “loans and receivables” measurement category largely include impairments of trade receivables, reversals of valuation allowances and cash receipts with respect to trade receivables already written off, together with gains/losses on currency conversion.

Net gains/losses for the “financial assets and liabilities held for trading” measurement category arise from the mark-to-market valuation of derivative interest-rate and currency instruments not subject to hedge accounting with respect to financing activities or, with respect to operating activities, for which hedge accounting has been terminated upon recognition of the hedged item in profit or loss. In economic terms, the derivative financial assets and liabilities are always based on a hedged item.

Net gains/losses for the “financial liabilities measured at amortized cost” category mainly comprise the non-controlling shareholders’ share in the net profit/loss of subsidiary partnerships.

Interest income and expense are not included in net gains and losses, as they are already recognized as described in **Note 9**. For further information on write-downs, please refer to the overview of changes in valuation allowances for doubtful trade receivables in **Note 17**.

**Financial instrument risks, financial risk management, and hedging**

SGL Group monitors financial risk (liquidity risk, default risk, and market price risk) using tested control and management instruments. Group reporting enables periodic assessment, analysis, measurement, and control of financial risk by the

central Group Treasury function. These activities include all relevant Group companies.

**Liquidity risk**

Liquidity risk is the risk that an entity might have difficulty in meeting its payment obligations in connection with its financial liabilities. Since the financial and economic crisis, liquidity risk has become a major focus of risk management. In order to ensure SGL Group’s solvency as well as its financial flexibility, the SGL Group carries out regular liquidity planning for the immediate future to cover day-to-day operations, in addition to financial planning, which normally covers five years. For the purpose of ensuring financial stability, SGL Group has endeavored to put in place a balanced financing structure based on a combination of various financing components (including capital market instruments and bank loans).

As a result of the capital increase effected in December 2016, which led to net issue proceeds of €173.3 million, the Company has sufficient liquidity reserves. The Company also has an unused syndicated credit line in the amount of €50 million. The liquidity available as of the balance sheet date in the amount of €333.0 million (including liquidity of €3.5 million from discontinued operations) is sufficient for the Company to more than cover its expected financing requirements for fiscal year 2017. Please refer to **Note 25** for information on the maturity of financial liabilities.

**Credit risk (counterparty default risk)**

To reduce credit risk, contracts for derivative financial instruments and financial transactions are concluded with SGL Group’s core banks, which have good credit quality.

By granting customers payment deadlines, SGL Group is exposed to normal market credit risks. As far as trade receivables and other financial assets are concerned, the maximum default risk is equivalent to the carrying amount as of the balance sheet date. In the past year, there were no significant occurrences of default in relation to customer receivables.

SGL Group has a credit management organization to manage customer credit risks. On the basis of global credit management guidelines, the credit management organization initiates and supports all key credit management processes, and it initiates and supports credit management action where

required. After analyzing individual risks and country risks, SGL Group insists – either in whole or in part – on cash in advance, documentary collection, letters of credit, or the provision of collateral in connection with certain activities.

SGL Group also has trade credit insurance in place that covers most of the trade receivables due from customers. In the event of default, the financial loss is reduced by existing collateral and/or compensation payments made under the credit insurance. The compensation payments under the credit insurance normally amount to 90% of the default and therefore include a deductible of 10%. In the context of determining valuation allowances on receivables, any existing cover commitments granted by the trade credit insurance are taken into account accordingly.

The average days sales outstanding (DSO) was 38 days at the end of fiscal 2016 (2015: 41 days). In fiscal year 2016, an average of 63% of our receivables was subject to trade credit insurance (2015: 72%).

Please refer to **Note 17** for information on valuation allowances for trade receivables as well as on the breakdown of trade receivables by age.

### Market price risk

As an enterprise operating at an international level, SGL Group is exposed to market risks arising in particular from changes in currency rates, interest rates, and other market prices. These risks may result in fluctuations of earnings, equity and cash flows. The objective of risk management is to eliminate or limit these risks through appropriate measures, above all through the use of derivative financial instruments. The use of derivative financial instruments is subject to rigorous controls based on internal policies. Derivative financial instruments are

exclusively used to minimize or pass off financial risk, not for speculative purposes.

### Currency risk

SGL Group operates on an international basis and is therefore exposed to currency risk arising from fluctuating exchange rates between various currencies. Currency risk is the risk that fair values or future payments of financial instruments will change as a result of exchange-rate movements. The risk arises when transactions are denominated in a currency other than the SGL Group's functional currency. Where SGL Group has cash flows in a non-functional currency, it endeavors to achieve a balance between receipts and payments as a so-called natural hedge against currency risk.

Currency hedges are entered into for the remaining net currency position (less natural hedging). SGL Group hedges such net currency positions, as required, within a time horizon of up to a maximum of two years. The most significant currency risks of SGL Group from operating transactions result from potential exchange rate changes between the euro and the Polish zloty. In order to hedge operating business, large parts of the corresponding net currency positions are hedged through currency forwards. In 2017, the Company is hedged against a strong Polish zloty at an average rate of EUR/PLN 4.46.

As a result of the hedge, SGL Group was not exposed to any material currency-related cash flow risks in its operating business as of the balance sheet date. The following table shows operating foreign currency derivatives with their nominal amounts and their recognized fair values as at December 31, 2016. The notional amount in this case is defined as the functional- currency-denominated equivalent value of foreign currency amounts purchased from or sold to external partners.

<b>EUR</b>						
	<b>Notional amounts</b>			<b>Total</b> Dec. 31, 15	<b>Fair values</b>	
	Purchase Dec. 31, 16	Sale Dec. 31, 16	<b>Total</b> <b>Dec. 31, 16</b>		<b>Total</b> <b>Dec. 31, 16</b>	Total Dec. 31, 15
€m						
<b>Forward contracts</b>	<b>76.2</b>	<b>51.3</b>	<b>127.5</b>	<b>131.7</b>	<b>1.9</b>	<b>-1.4</b>
USD	0.0	9.2	9.2	23.2	-0.5	-0.6
PLN	76.2	0.0	76.2	75.3	-0.3	-0.3
JPN	0.0	42.1	42.1	33.2	2.7	-0.5

<b>USD</b>						
	<b>Notional amounts in US\$m</b>			<b>Total</b> Dec. 31, 15	<b>Fair values in €m</b>	
	Purchase Dec. 31, 16	Sale Dec. 31, 16	<b>Total</b> <b>Dec. 31, 16</b>		<b>Total</b> <b>Dec. 31, 16</b>	Total Dec. 31, 15
<b>Forward contracts</b>	<b>0.0</b>	<b>3.7</b>	<b>3.7</b>	<b>13.5</b>	<b>0.1</b>	<b>-0.3</b>
GBP	0.0	0.0	0.0	9.7	0.0	-0.3
JPN	0.0	3.7	3.7	3.8	0.1	0.0

The fair values shown in the table represent financial assets or liabilities of SGL Group. In contrast, the notional amounts describe the hedged volume expressed in euros or U.S. dollars. The residual maturity of all derivative financial instruments for hedging currency risks does currently not exceed one year (2015: not exceed one year).

#### Derivative financial instruments in hedge accounting

SGL Group uses currency forwards to hedge currency risk from future receivables and liabilities denominated in foreign currencies. The derivatives used are accounted for as cash flow hedges (hedge accounting). The items hedged with cash flow hedges comprise highly probable future sales revenue or purchases denominated in foreign currency. These are expected to materialize between January and December 2017 and will be recognized in the income statement when realized. The maturity of hedges designated as cash flow hedges (recorded in the hedging reserve in equity) is matched with the maturity of the relevant hedged items. As of December 31, 2016, these hedges had positive fair values in the amount of €2.1 million (December 31, 2015: €0.1 million) and negative fair values of €0.6 million (December 31, 2015: €1.2 million).

Changes in the fair value of hedges assigned to intercompany loans as well as of operating hedges allocated to hedged items already realized as of the balance sheet date and therefore generally not – or no longer – designated as cash flow hedges were recognized through profit or loss on the balance sheet date. Positive fair values amounted to €1.4 million (December 31,

2015: €0.1 million); negative fair values amounted to €0.2 million (December 31, 2015: €0.7 million). The amounts accumulated directly in equity as hedging reserves to hedge these operating transactions were reclassified to the income statement once the hedged item was entered into. In fiscal year 2016, gains or losses resulting from changes in fair value of our currency forwards amounting to minus €3.1 million (2015: minus €3.7 million) previously recognized in equity were recycled to profit or loss. The residual maturity of these derivatives may be up to three months.

The effectiveness of designated hedges is determined prospectively using the critical terms match method in accordance with IAS 39. Quantitative effectiveness tests are carried out retrospectively using the dollar offset method. In this case, the cumulative change in value of anticipated cash flows from hedged items is compared against the change in the fair value of the currency forwards using the relevant forward rates. Quantitative effectiveness measurements are carried out as of each balance sheet date. It is generally assumed that a hedging relationship is effective if the changes in fair value of the hedge virtually offset (80% to 125%) the changes in the cash flows for the hedged items. As of the balance sheet date, these ratios were close to 100%.

In accordance with IFRS 7, sensitivity analyses are required to illustrate the currency risk relating to financial instruments. The analyses show the effects of hypothetical changes in relevant risk parameters on profit or loss and equity.

The analyses include all primary financial instruments used by SGL Group in addition to the derivative hedging instruments used in the SGL Group's operating activities. Specifically, these include cash and cash equivalents of €51.3 million (December 31, 2015: €38.7 million), trade receivables of €136.6 million (December 31, 2015: €120.1 million), and trade payables of €74.2 million (December 31, 2015: €114.3 million). Furthermore, foreign currency effects from internal lending activities recognized in profit or loss or directly in equity are also included. It is assumed that the balance as of the reporting date is representative of the reporting period as a whole. Any financial instruments not denominated in the functional currency of the

respective SGL subsidiary are therefore generally considered to be exposed to currency risk. Changes in the exchange rate result in changes in fair value and impact either profit or loss or the hedging reserve as well as the total equity of SGL Group.

The following table provides a comparison between the amounts reported as of December 31, 2016, and December 31, 2015. The analysis is based on a hypothetical 10% increase in the value of the euro and the U.S. dollar against the other currencies as of the balance sheet date.

EUR	Hypothetical exchange rate		Change in fair value/equity		Thereof: change in net profit/loss		Thereof: change in hedging reserve	
	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15
€m								
USD	1.1595	1.1976	-10.4	-13.3	-11.7	-14.9	1.3	1.6
PLN	4.8664	4.6877	2.3	10.1	7.7	8.9	-5.4	1.2
GBP	0.9418	0.8074	-1.9	-1.9	-1.9	-1.9	0.0	0.0
Other	-	-	-5.6	0.3	-4.4	-1.1	-1.2	1.4

USD	Hypothetical exchange rate		Change in fair value/equity		Thereof: change in net profit/loss		Thereof: change in hedging reserve	
	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15	Dec. 31, 16	Dec. 31, 15
US\$m								
GBP	0.8935	0.7416	0.2	1.1	0.2	0.5	0.0	0.6
CAD	1.4806	1.5272	0.6	0.1	0.6	0.1	0.0	0.0
MYR	4.9346	4.7446	0.5	0.2	0.5	0.2	0.0	0.0
Other	-	-	2.6	3.7	2.5	3.5	0.1	0.2

The approximate effect of a hypothetical 10% devaluation of the euro and the U.S. dollar against other currencies on the equity, profit or loss, or hedging reserve of SGL Group would be a reversal of the positive and negative signs shown above, with the amounts themselves remaining approximately the same.

### Interest-rate risk

Interest-rate risk is the risk that the fair values of or future cash flows from existing or future financial liabilities may fluctuate due to changes in market interest rates.

Interest rate risks from floating-rate financing instruments mainly arise from the variable-interest portion of the borrowings of the joint venture with BMW (SGL Carbon

Automotive Fibers "ACF") in the amount of €44.5 million. As of the balance sheet date, SGL Group had financial liabilities in a principal amount of €782.4 million (December 31, 2015: €785.0 million). Of that amount, liabilities of €45.4 million (December 31, 2015: €56.2 million) had a floating interest rate. The remaining liabilities of €737.0 million (December 31, 2015: €728.8 million) have a fixed interest rate and are therefore not subject to interest rate risk. An increase in interest rates of 100 basis points would lead to a theoretical decrease in profit or loss from floating-rate liabilities of €-0.5 million (2015: €-0.6 million).

The floating-rate liabilities were offset by cash and cash equivalents in the amount of €333.0 million (December 31,

2015: €250.8 million). An increase in interest rates of 100 basis points would lead to a theoretical increase in profit or loss from cash and cash equivalents of €3.3 million (2015: €2.5 million).

## 29. Segment reporting

The following segment information is based on the “management approach,” pursuant to which segment information must be presented on the basis of the internal management reporting. The Board of Management of SGL Group – as chief operating decision maker (CODM) – regularly reviews this segment information in order to allocate resources to the individual segments and to assess their performance. The performance of the segments is assessed by the management based on the operating result, working capital, investments, cash generation, and capital employed. However, Group financing (including financial income and expense) as well as income taxes are managed uniformly on a SGL Group-wide basis and are not allocated to the individual segments.

### Segments

Upon the fulfillment of the criteria of a classification of the business unit Performance Products (PP) as held for sale and as a discontinued operation, now, all operating business processes are bundled in the two business units Composites – Fibers & Materials (CFM) as well as Graphite Materials & Systems (GMS), which are also presented as reporting segments. Since January 1, 2016, CFM has no longer stood for “Carbon Fibers & Materials.” The new name better describes CFM’s newly defined business model. Materials competence and the global production network for fibers and materials will continue to form this business unit’s foundations, and CFM will continue to systematically expand its approach towards developing

composite materials and associated components for its various market segments.

The reporting segment GMS focuses on products made of synthetic graphite and expanded graphites for industrial applications, machine components, products for the semiconductor industry, composites, and process technology.

In addition to the two operating reporting segments, the research activities and our SGL Excellence activities as well as the central and service functions are included in the reporting segment T&I and Corporate.

Prior year figures in relation to the consolidated income statement were adjusted by PP and are thus reported on a comparable basis.

The following tables provide information on income, profit or loss, and assets and liabilities in the business units of SGL Group. External sales revenue was attributable almost exclusively to product sales. Trading or other sales revenue was insignificant. Intersegment sales revenue was generally derived from transactions at market-based transfer prices less selling and administrative expenses. Cost-based transfer prices may be used in exceptional cases. “Other” comprises companies that largely perform services for the other segments, such as SGL Carbon SE.

Capital expenditure and amortization/depreciation relates to property, plant and equipment and intangible assets (excluding goodwill). The consolidation adjustments item relates to the elimination of transactions between the segments.

Disclosures relating to the segments of SGL Group are shown below.

€m	CFM	GMS	T&I and Corporate	Consolidation adjustments	SGL Group
2016					
External sales revenue	317.4	444.1	8.3	0.0	769.8
Intersegment sales revenue	5.1	1.6	29.3	-36.0	0.0
<b>Total sales revenue</b>	<b>322.5</b>	<b>445.7</b>	<b>37.6</b>	<b>-36.0</b>	<b>769.8</b>
Operating profit/loss before non-recurring charges	20.1	27.8	-27.2	0.0	20.7
Non-recurring charges <sup>1)</sup>	11.7	-1.6	-7.1	0.0	3.0
Operating profit/loss after non-recurring charges	31.8	26.2	-34.3	0.0	23.7
Amortization/depreciation on intangible assets and property, plant and equipment	21.2	22.0	6.0	0.0	49.2
Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring charges	41.3	49.8	-21.2		69.9
Capital expenditure <sup>2)</sup>	10.8	15.0	8.8	0.0	34.6
Working capital (Dec. 31) <sup>3)</sup>	95.2	183.4	-24.4	0.0	254.2
Capital employed (Dec. 31) <sup>4)</sup>	386.4	385.7	57.8	0.0	829.9
Cash generation <sup>5)</sup>	13.3	39.0	-15.8	0.0	36.5
Employees of investments accounted for At-Equity <sup>6)</sup>	604			0.0	604
Total sales revenue of investments accounted for At-Equity <sup>6)</sup>	261.4			0.0	261.4
Return on capital employed in % (ROCE <sub>EBITDA</sub> ) <sup>7)</sup>	10.9	12.7		0.0	8.4

<sup>1)</sup> Non-recurring charges comprise restructuring expenses in a total amount of €9.8 million and reversal of impairment losses of €12.8 million. For more information, please refer to **Notes 7 and 8**

<sup>2)</sup> Defined as total of capital expenditure in other intangible assets and property, plant and equipment

<sup>3)</sup> Defined as sum of inventories and trade receivables less trade payables

<sup>4)</sup> Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital

<sup>5)</sup> Defined as total of operating loss/profit (EBIT) before non-recurring charges plus amortization of intangible assets and depreciation on property, plant and equipment plus change in working capital minus capital expenditure

<sup>6)</sup> Aggregated, non-consolidated 100% values with third parties

<sup>7)</sup> EBITDA before non-recurring charges for the last twelve months to average capital employed



€m	CFM	GMS	T&I and Corporate	Consolidation adjustments	SGL Group
2015					
External sales revenue	327.3	453.5	8.7	0.0	789.5
Intersegment sales revenue	4.4	0.9	25.3	–30.6	0.0
<b>Total sales revenue</b>	<b>331.7</b>	<b>454.4</b>	<b>34.0</b>	<b>–30.6</b>	<b>789.5</b>
Operating profit/loss before non-recurring charges	11.3	34.1	–31.7	0.0	13.7
Non-recurring charges <sup>1)</sup>	–0.5	–5.2	–1.1	0.0	–6.8
Operating profit/loss after non-recurring charges	10.8	28.9	–32.8	0.0	6.9
Amortization/depreciation on intangible assets and property, plant and equipment	20.7	22.5	7.0	0.0	50.2
Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring charges	32.0	56.6	–24.7		63.9
Capital expenditure <sup>2)</sup>	26.6	15.2	2.6	0.0	44.4
Working capital (Dec. 31) <sup>3) 8)</sup>	78.2	187.6	–10.7	0.0	255.1
Capital employed (Dec. 31) <sup>4)</sup>	372.1	395.8	72.8	0.0	840.7
Cash generation <sup>5)</sup>	–23.4	27.0	–23.9	0.0	–20.3
Employees of investments accounted for At-Equity <sup>6)</sup>	637			0.0	637
Total sales revenue of investments accounted for At-Equity <sup>6)</sup>	245.9	0.6		0.0	246.5
Return on capital employed in % (ROCE <sub>EBITDA</sub> ) <sup>7)</sup>	9.2	14.5		0.0	7.9

<sup>1)</sup> Non-recurring charges comprise restructuring expenses in a total amount of €6.8 million. For more information, please refer to **Notes 7**

<sup>2)</sup> Defined as total of capital expenditure in other intangible assets and property, plant and equipment

<sup>3)</sup> Defined as sum of inventories and trade receivables less trade payables

<sup>4)</sup> Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital

<sup>5)</sup> Defined at total of operating loss/profit (EBIT) before non-recurring charges plus amortization of intangible assets and depreciation on property, plant and equipment plus change in working capital minus capital expenditure

<sup>6)</sup> Aggregated, non-consolidated 100% values with third parties

<sup>7)</sup> EBITDA before non-recurring charges for the last twelve months to average capital employed

<sup>8)</sup> Figures adjusted to reflect PP as discontinued operations

€m	Germany	Europe excluding Germany	North America	Asia	Other	SGL Group
2016						
Sales revenue (by destination)	206.1	170.5	146.2	205.4	41.6	769.8
Sales revenue (by company headquarters)	319.0	252.9	161.5	36.4	0.0	769.8
Capital expenditure	18.7	8.3	5.3	2.3	0.0	34.6
Non-current assets <sup>1)</sup>	214.4	129.8	173.5	32.2	0.0	549.9
2015						
Sales revenue (by destination)	226.2	176.9	162.5	180	43.9	789.5
Sales revenue (by company headquarters)	305.1	265.2	170.1	49.1	0.0	789.5
Capital expenditure	16.3	13.5	13.6	1.0	0.0	44.4
Non-current assets <sup>1)</sup>	227.6	221.7	235.3	161.6	0.2	846.4

<sup>1)</sup> Non-current assets comprise other intangible assets, property, plant and equipment, investments accounted for At-Equity and other non-current assets (excluding financial assets)

### 30. Management and employee participation plans

SGL Group currently has three management and employee participation plans: two active plans (Short-Term Incentive Plan and Long-Term Incentive Plan) as well as the Stock Appreciation Rights Plan which is being phased out. The Long Term Cash Incentive Plan and the Matching Share Plan were settled as of the end of the term pursuant to the plan terms and conditions.

#### Short-Term Incentive Plan ("STI")

All employees receive an annual bonus regardless of whether they are covered by the collective wage agreement. The amount of the bonus is based on the achievement of short-term corporate and business unit targets as well as individual targets. The reference figure is the amount of the individual fixed remuneration. The bonus in relation to the material German companies was paid out in shares for the last time in 2016 for the fiscal year 2015. The employees covered by the collective wage agreement (non-exempt employees) received their bonus entirely in the form of shares, while those not covered (exempt employees) receive 50% of the bonus entitlement in shares (Bonus Shares). Senior management members (MG 1-3) do not receive any payout in the form of shares. The goal is to enable all employees to participate in the Company's short-term success and in so doing provide each

employee with a strong incentive to contribute to the positive performance of the Company.

The maximum bonus potential achievable consists of the following target categories: SGL Group, relevant business unit, and individual targets. For non-exempt employees, the degree of target achievement of the SGL Group targets and individual performance evaluations are additionally analyzed. The following criteria apply: income before taxes at SGL Group level, operating profit (EBIT), and average working capital for the business unit.

The bonus is paid in the form of shares in March or April of the following year. For the bonus paid in shares, the bonus amount is divided by the determined daily price quotation on March 16 of the relevant year. If no trading of shares takes place on that date, the price on the next trading day will be used. The resulting rounded number of shares is transferred to the employee's custodian account. A total of 30% of the shares are blocked for one year; 70% can be sold immediately. The remuneration in the form of Bonus Shares was awarded for the last time for the fiscal year 2015 and was replaced by a cash settled remuneration system in fiscal year 2016.

Therefore, there were no expenses for the 2016 Bonus Share Plan (2015: €4.8 million).

The percentage share of the STI in the base salary for the three upper management levels is within a defined corridor and reflects an appropriate risk/reward profile per management group.

MG	Threshold	Target	Stretch
MG1	0%	70%	119%
MG2	0%	50%	85%
MG3	0%	40%	68%

The three target categories have identical weightings for the three senior management groups. The “threshold” of 0% must be exceeded in order to trigger a bonus entitlement. In addition, a stretch (200%) is defined for the financial targets to reward performance in the case of overfulfillment of planned targets. The maximum to be achieved for the agreed personal targets is 100%. Overfulfillment is not possible.

		Weighting	Target categories	Degree of target achievement		
				Threshold 0%	Target 100%	Stretch 200%
Financial indicators	20%	SGL Group target				
	50%	BU targets				
	30%	Individual targets				

### Long Term Incentive Plan (“LTI”)

The Long Term Incentive Plan for Senior Management, i.e. the members of management levels MG 1–3 (“SGL Performance Share Plan” or “PSP”), is the foundation for uniform rules for the granting of remuneration components with long-term incentive effect and a balanced risk/reward profile in the form of virtual shares (“Performance Share Units” or “PSUs”).

The long-term remuneration component is based, in principle, on SGL Group’s return on capital employed (ROCE) as the internal assessment basis. Within the framework of the PSP, the Board of Management of SGL Carbon SE may, prior to the beginning of individual plan tranches, determine that the internal assessment basis/bases for such plan tranches alternatively or cumulatively may be the ROCE applicable to individual business units of SGL Group or one or more other performance indicators. Furthermore, the long-term remuneration component depends on the share price performance of SGL stock at the end of the performance period.

The PSP is a cash-settled long-term incentive plan that does not grant a right to receive actual SGL shares and provides for a payout depending on the degree of target achievement. The

objective of the allocation of PSUs is to retain senior management (MG 1–3) to SGL Group and to motivate them to ensure the SGL Group’s long-term success. In addition, the share price feature is intended to achieve a harmonization of the interests of senior management (MG 1–3) with that of the shareholders in view of a long-term added value of SGL Group.

Based on an allocation value to be determined by the Board of Management of SGL Carbon SE in euros as well as the average opening share price for the last 20 trading days prior to commencement of the performance period, each participant is allocated a preliminary number of Performance Share Units (“number of allocated PSUs”) at the beginning of the performance period. This number of allocated PSUs is calculated after the end of the performance period based on the determined degree of target achievement (the result of the performance-related adjustment is the “final number of PSUs”). The payout amount is calculated by multiplying the final number of PSUs by the average closing share price for the last 20 trading days.

The new Performance Share Plans helps to further harmonize the remuneration structure of senior managers with that of

the Board of Management. Replacement of the previous long-term share-based payment components further reduces the complexity of remuneration for management members and will also significantly reduce future administrative efforts.

Four plan tranches had been awarded until December 31, 2016. Pursuant to the plan terms, the number of the provisionally granted Performance Share Units is increased by a total of 139,959 Performance Share Units as compensation for the economic detriment associated with the capital increase in 2016.

- PSP-2015-2016: 19,963 Performance Share Units allocated on a provisional basis
- PSP-2015-2017: 29,802 Performance Share Units allocated on a provisional basis

- PSP-2015-2018: 44,004 Performance Share Units allocated on a provisional basis
- PSP-2016-2019: 46,190 Performance Share Units allocated on a provisional basis

The existing plan tranches, including the relevant targets, are presented below as of December 31, 2016:

Tranche	Allocation value	Price <sup>1)</sup>	PSU <sup>2)</sup>	Performance	Fair value <sup>3)</sup>
	€m	€	Number	0% – 150%	€m
LTI 2015 – 2016	2.7	13.70	219,557	-	0.0
LTI 2015 – 2017	4.1	13.70	327,699	-	0.0
LTI 2015 – 2018	6.0	13.70	483,942	-	0.0
LTI 2016 – 2019	6.2	13.38	507,924	73.70	3.1

<sup>1)</sup> Fair value at grant date

<sup>2)</sup> Outstanding as at Dec. 31, 16

<sup>3)</sup> PSU-number weighted with the performance and the average share price of 8.28 €, calculated on the basis of the last 20 trading days prior to Dec 31, 16

Target indicators ROCE	Minimum	Target	Maximum
Plan 2015–2016	3.0%	4.5%	5.5%
Plan 2015–2017	3.0%	5.0%	6.5%
Plan 2015–2018	3.3%	5.8%	7.8%
Plan 2016–2019	2.2%	4.6%	6.6%

### Long Term Cash Incentive-Plan ("LTCI-Plan")

Under the LTCI Plan, members of the Board of Management and selected senior managers are entitled to receive additional cash bonuses linked to specific performance targets. Until 2014, the participating executives were offered one LTCI Plan each year with a term of three years. A precondition for the payment

of an LTCI bonus is the achievement of predefined minimum values. If the minimum value is achieved as of the end of the term of the relevant LTCI plan, 25% of the maximum bonus (minimum bonus) will be paid. If the target is fully achieved or exceeded as of the relevant end of the term, the maximum bonus will be paid. If the target achievement is between the

minimum value and the target value as of the end of the term of the relevant LTCI plan, the relevant degree of target achievement (Z) is determined as a percentage by applying the following formula:  $Z = (\text{actual value} - \text{minimum value}) / (\text{target} - \text{minimum value})$ . The LTCI premium is calculated based on the minimum premium plus multiplying the difference between the maximum and the minimum premium by the degree of target achievement.

The currently outstanding LTCI plan uses as its target the average return on capital employed (ROCE), which is defined as the ratio of EBIT to average capital employed. The following target is determined for the remaining plan:

	<b>Minimum premium at an average ROCE</b>	<b>Maximum premium at an average ROCE</b>
Three-year plan 2014	4.0%	6.0%

The total volume of the LTCI plan discontinued in 2014 amounts to around €1.4 million for selected senior managers. The target required for a payout was not achieved.

### **Matching Share Plan**

Until March 2014, SGL Group implemented the Matching Share Plan for members of the first three management levels. Under the plan, participants were able to invest up to 50% of their annual bonuses in shares in the Company. If they had held the shares for at least two years, they would have received the same number of shares (matching shares – “MSP”). Please see **Note 22** for details on the number of shares available under the Matching Share Plan.

In 2016, a total of 19,976 shares were created via a capital increase from authorized capital to service the entitlements of the participating executives from the 2014 Matching Share Plan.

The determination of the market price on the grant date represents the basis of recognition in the financial statements. The market price of shares to be granted as part of the Matching Share Plan running until 2016 was €24.08 per share, calculated using the price of SGL shares on the purchase date. The expense recognized for the Matching Share Plan in 2016 was €0.3 million (2016: €0.5 million).

### **Stock Appreciation Rights Plan (SAR Plan)**

The 2010 SAR Plan came into effect on January 1, 2010. The SARs could be issued at any time during the period until the end of 2014. A maximum of 2,100,000 new shares are to be used to service the SAR Plan from 2010 onward.

SARs entitle the participants to receive variable remuneration from the Company equivalent to the difference (appreciation in price) between the SGL Carbon SE share price on the grant date (base price) and that on the SAR exercise date (exercise price) plus any dividends paid by the Company during this period, plus the value of the subscription rights, and they entitle the participants to purchase at the exercise price the number of SGL Carbon SE shares whose market value corresponds to the appreciation in price. Each SAR entitles the participant to receive that fraction of a new SGL Carbon SE share that is calculated by dividing the appreciation value by the issue price.

SARs have a term of up to ten years and SARs may not be exercised until the end of a vesting period of two years calculated from the grant date (holding period). SARs may then only be exercised during defined periods (exercise windows). The SARs expire if they are not exercised within this period.

Predetermined performance targets must be achieved to enable exercise. For 75% of the SARs granted, the performance target is the increase in total shareholder return (TSR) on SGL Carbon SE shares (absolute performance target). Accordingly, the absolute increase in the SGL Carbon SE share price between grant and exercise of the SARs must be at least 15%. The remaining 25% of the SARs may only be exercised if the performance of SGL Carbon SE shares is at least equivalent to that of the MDAX. The Company reserves the right to settle the appreciation through outstanding, repurchased SGL Carbon SE shares or cash, instead of issuing new shares. Finally, the participants must invest at least 15% of the gross receipts from the exercise of SARs in SGL Carbon SE shares and must hold these for a further period of twelve months. A total of 3,405,245 and 3,933,950 SARs, respectively, were granted under the 2005 SAR Plan (the predecessor of the 2010 SAR Plan) and the 2010 SAR Plan, of which a total of 2,868,355 and 634,519 SARs, respectively, have been exercised and 333,540 and 908,156 SARs, respectively, have expired without being exercised as the individuals holding these SARs are no longer employed by the SGL Group. As of the end of the year under review, a total of

203,350 SARs under the 2005 SAR Plan and 2,391,275 SARs under the 2010 SAR Plan remained outstanding.

The total expense for SARs in fiscal year 2016 amounted to €0.0 million (2015: €6.9 million). The fair values of the SARs were measured on the grant date on the basis of a Monte Carlo

simulation, taking into account the market conditions described above (TSR increase and MDAX index). In 2016, no SARs were exercised from one of the replaced long-term incentive plans (2005–2009 SAR Plan). The weighted average term to maturity for the 2005 SAR Plan is 1.0 years (2015: 2.0 years), and 5.2 years for the 2010 SAR Plan (2015: 6.2 years).

Additional information on instruments granted:

	SAR-Plan Number	SAR-Plan Avg. price in €	Matching-Share- Plan Number	Matching-Share- Plan Avg. price in €
Balance at Jan. 1, 16	2,744,861	30.08	19,976	23.17
Addition	0	0.00	0.00	0.00
Expired/returned	–150,236	26.57		
Exercised	0	0.00	–19,976	23.17
<b>Balance at Dec. 31, 16</b>	<b>2,594,625</b>	<b>30.29</b>	<b>0</b>	<b>0</b>
Range of exercise prices in €	17.01 – 37.77		-	
Expiration dates	Jan. 15, 17		Mar. 12, 16	
Intrinsic value as of Dec. 31, 16 (in €m)	-		-	
Intrinsic value as of Dec. 31, 15 (in €m)	0.0		0.3	

### 31. Audit fees and services provided by the auditors

The following fees were incurred in the year under review for the services provided by the auditor (Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, office Eschborn, Germany) of the consolidated financial statements:

€m	2016	2015
Audit fees	0.9	0.9
Other attestation and valuation services	1.5	0.2
Tax advisory services	0.0	0.0
Other services	0.4	0.2
<b>Total</b>	<b>2.8</b>	<b>1.3</b>

**32. List of shareholdings pursuant to Section 313 (2) of the German Commercial Code (HGB)**

A. Consolidated Companies		Interest in %	held via
<b>a) Germany</b>			
1 SGL Carbon SE	Wiesbaden		
2 SGL CARBON GmbH <sup>1)</sup>	Meitingen	100	1
3 Dr. Schnabel GmbH <sup>1)</sup>	Limburg	100	2
4 SGL CARBON Beteiligung GmbH <sup>1)</sup>	Wiesbaden	100	1
5 SGL TECHNOLOGIES GmbH <sup>1)</sup>	Meitingen	100	1
6 SGL epo GmbH <sup>1)</sup>	Willich	100	5
7 SGL Technologies Composites Holding GmbH <sup>1)</sup>	Meitingen	100	5
8 SGL TECHNOLOGIES Beteiligung GmbH <sup>1)</sup>	Meitingen	100	5
9 SGL Kämpers Verwaltungs-GmbH	Rheine	51	8
10 SGL Kämpers GmbH & Co. KG	Rheine	51	8
11 SGL TECHNOLOGIES Zweite Beteiligung GmbH	Meitingen	100	5
12 SGL/A&R Immobiliengesellschaft Lemwerder mbH	Lemwerder	51	5
13 SGL/A&R Services Lemwerder GmbH	Lemwerder	100	12
14 SGL/A&R Real Estate Lemwerder GmbH & Co KG	Lemwerder	100	13
15 SGL GE Holding GmbH	Meitingen	100	2
16 SGL GE GmbH & Co. KG <sup>2)</sup>	Meitingen	100	17
17 SGL GE GmbH	Meitingen	100	15
18 SGL GE Treuhand GmbH	Meitingen	100	17
19 SGL CFL CE GmbH	Meitingen	100	36
20 SGL Carbon Asset GmbH	Meitingen	100	4

<sup>1)</sup> Exemption in accordance with section 264 (3) of the German Commercial Code (HGB)

<sup>2)</sup> As reported by general partner



A. Consolidated Companies		Interest in %	held via
<b>b) Other countries</b>			
21 SGL CARBON Holding S.L.	La Coruña, Spain	100	15
22 SGL CARBON S.A.	La Coruña, Spain	99.9	21
23 SGL Gelter S.A.	Madrid, Spain	64.0	2
24 SGL CARBON S.p.A.	Milan, Italy	99.8	20
25 SGL Graphite Verdello S.r.l.	Verdello, Italy	100	2
26 SGL GE Carbon S.r.l.	Lainate, Italy	100	21
27 SGL CARBON do Brasil Ltda.	Diadema, Brazil	100	2
28 SGL CARBON Sdn. Bhd.	Kuala Lumpur, Malaysia	100	21
29 SGL CARBON GmbH	Steeg, Austria	100	1
30 SGL GE GmbH	Steeg, Austria	100	15
31 SGL Carbon Fibers Ltd.	Muir of Ord, United Kingdom	100	29
32 Project DnF	Halifax, United Kingdom	100	29
33 FISIFE, S.A.	Lavradio, Portugal	100	29
34 Munditêxtil, LDA	Lavradio, Portugal	100	33
35 SGL BUSINESS SERVICES, UNIPessoal, LDA	Lavradio, Portugal	100	2
36 SGL CARBON Holdings B.V.	Rotterdam, Netherlands	100	4
37 SGL CARBON Polska S.A.	Racibórz, Poland	100	19
38 SGL Graphite Solutions Polska sp. z o.o	Nowy Sącz, Poland	100	36
39 SGL CARBON Luxembourg S.A.	Luxembourg	100	1
40 SGL CARBON Holding S.A.S.	Paris, France	100	1
41 SGL CARBON S.A.S.	Passy (Chedde), France	100	40
42 SGL CARBON Technic S.A.S.	Saint-Martin d'Heres, France	100	40
43 SGL CARBON Ltd.	Alcester, United Kingdom	100	1
44 SGL CARBON LLC	Charlotte, NC, USA	100	4
45 SGL GE CARBON Holding LLC	Charlotte, NC, USA	100	15
46 SGL GE Carbon LLC	Dover, DE, USA	100	45
47 SGL GE Carbon Fund Corporation	Charlotte, NC, USA	100	45
48 Québec Inc.	Montreal, Québec, Canada	100	44
49 SGL Technologies North America Corp.	Charlotte, NC, USA	100	44
50 Hitco CARBON COMPOSITES Inc.	Gardena, CA, USA	100	49
51 SGL TECHNIC Inc.	Valencia, CA, USA	100	49
52 SGL Carbon Fibers LLC	Evanston, WY, USA	100	49
53 SGL CARBON Technic LLC	Strongsville, OH, USA	100	44
54 SGL Carbon Investment Fund, LLC <sup>1)</sup>	St. Louis, MS, USA	0	n/a
55 Heartland Renaissance Fund Sub XIII, LLC <sup>1)</sup>	Little Rock, AR, USA	99.9	54

<sup>1)</sup> Control due to economic circumstances

<sup>2)</sup> No control due to contractual arrangements

A. Consolidated Companies		Interest in %	held via
<b>b) Other countries</b>			
56 SGL CANADA Inc.	Lachute, Quebec, Canada	100	15
57 SGL Land Holding Inc.	Lachute, Quebec, Canada	100	1
58 SGL CARBON India Pvt. Ltd.	Maharashtra, India	100	1
59 SGL CARBON Far East Ltd.	Shanghai, China	100	1
60 SGL CARBON Japan Ltd.	Tokyo, Japan	100	1
61 SGL CARBON Korea Ltd.	Seoul, Korea	100	1
62 SGL CARBON Asia-Pacific Sdn. Bhd.	Kuala Lumpur, Malaysia	100	1
63 SGL Quanhai Carbon (Shanxi) Co. Ltd.	Yangquan, China	84.5	4
64 SGL Tokai Process Technology Pte.Ltd.	Singapore	51	1
65 SGL CARBON KARAHM Ltd.	Sangdaewon-Dong, Korea	50.9	64
66 SGL CARBON Graphite Technic Co. Ltd.	Shanghai, China	100	64
67 Graphite Chemical Engineering Co. Ltd.	Yamanashi, Japan	100	64
68 SGL TOKAI Carbon Ltd.	Shanghai, China	75	15
69 SGL Carbon Hong Kong Ltd.	Hong Kong, China	100	1
70 SGL Graphite Solutions Taiwan Ltd.	Taipei City, Taiwan	100	2
<b>B. Equity investments over 20%</b>			
<b>a) Germany</b>			
71 SGL Lindner GmbH & Co. KG <sup>2)</sup>	Arnstorf	51	4
72 Benteler SGL Verwaltungs GmbH	Paderborn	50	7
73 Benteler SGL GmbH & Co. KG	Paderborn	50	7
74 SGL Automotive Carbon Fibers GmbH & Co. KG <sup>2)</sup>	Munich	51	5
<b>b) Other countries</b>			
75 SGL Automotive Carbon Fibers LLC <sup>2)</sup>	Moses Lake, WA, USA	51	44
76 Brembo SGL Carbon Ceramic Brakes S.p.A.	Stezzano, Italy	50	5
77 MRC-SGL Precursor Co. Ltd.	Tokyo, Japan	33.3	5
78 Fisigen, S.A.	Lisbon, Portugal	49	33

<sup>1)</sup> Control due to economic circumstances

<sup>2)</sup> No control due to contractual arrangements

---

### **33. Declaration of Conformity with the German Corporate Governance Code**

The annual declaration of conformity with the German Corporate Governance Code according to Section 161 of the German Stock Corporation Act (AktG) was issued by the Board of Management and the Supervisory Board of SGL Carbon SE on September 07, 2016 and has been published on the website of SGL Carbon SE.

### **34. Events after the balance sheet date**

None.

Wiesbaden, March 2, 2017

**SGL Carbon SE**  
**The Board of Management of SGL**

**Dr. Jürgen Köhler      Dr. Michael Majerus**

# Additional Information

---

<b>Independent Auditors' Report</b>	<b>172</b>
<b>Responsibility Statement</b>	<b>173</b>
<b>Corporate Bodies</b>	<b>174</b>
<b>Glossary</b>	<b>177</b>
<b>List of Acronyms</b>	<b>181</b>
<b>Financial Calendar</b>	<b>182</b>
<b>Five-year Financial Summary</b>	<b>183</b>

# Independent Auditors' Report

---

We issued the following opinion on the consolidated financial statements and the group management report:

"We have audited the consolidated financial statements prepared by SGL CARBON SE, Wiesbaden, comprising the income statement, the statement of comprehensive income, the statement of financial position, the cash flow statement, the statement of changes in equity and the notes to the financial statements, together with the group management report for the fiscal year from 1 January to 31 December 2016. The preparation of the consolidated financial statements and the group management report in accordance with IFRSs [International Financial Reporting Standards] as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB ["Handelsgesetzbuch": German Commercial Code] is the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Sec. 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management

report. We believe that our audit provides a reasonable basis for our opinion. Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development."

Eschborn/Frankfurt am Main, 2 March 2017

Ernst & Young GmbH

Wirtschaftsprüfungsgesellschaft

Bösser

Krzyzanowski

Wirtschaftsprüfer

Wirtschaftsprüfer

# Responsibility Statement

---

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group Management Report includes a fair review of the development and performance of the business and the position of the group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Wiesbaden, 2 March 2017

**SGL Carbon SE**  
**The Board of Management of SGL Group**

**Dr. Jürgen Köhler**

**Dr. Michael Majerus**

# Corporate Bodies

---

## Board of Management

(Status December 31, 2016)

### Dr. Jürgen Köhler

**Chairman/Chief Executive Officer of SGL Carbon SE**

#### Responsible for:

Human Resources  
Management Development  
Legal and Compliance  
Corporate Development  
Internal Audit  
Corporate Communications

#### Internal board memberships:

SGL Automotive Carbon Fibers GmbH & Co. KG, Munich <sup>2)</sup>  
SGL Automotive Carbon Fibers LLC, Charlotte, USA <sup>2)</sup>  
Benteler SGL GmbH & Co. KG, Paderborn  
Brembo SGL Carbon Ceramic Brakes S.p.A., Stezzano, Italy <sup>2)</sup>

### Dr. Michael Majerus

**Chief Financial Officer of SGL Carbon SE**

#### Responsible for:

Group Accounting  
Group Controlling  
Group Treasury  
Financial Reporting  
IT Services  
Investor Relations  
Group Taxes

#### Internal board memberships:

SGL Carbon GmbH, Meitingen  
SGL CARBON Holding S.L., La Coruña, Spain  
SGL Carbon LLC, Charlotte, USA

### Dr. Gerd Wingefeld (until 31.12.2016)

**Chief Technology Officer of SGL Carbon SE**

#### Responsible for:

Technology & Innovation  
Environment Protection, Health and Safety Affairs  
Purchasing  
SGL Excellence  
Engineering

#### Internal board memberships:

SGL Quanghai CARBON (Shanxi) Co. Ltd.,  
Shanxi Province, China <sup>2)</sup>  
SGL Tokai Process Technology Pte. Ltd., Singapore <sup>2)</sup>  
SGL CARBON Japan Ltd., Tokyo, Japan <sup>2)</sup>

<sup>1)</sup> Chairman

<sup>2)</sup> Shareholder Committee

With memberships outside Germany, the respective country is mentioned



**Supervisory Board**

(Status December 31, 2016)

**Susanne Klatten****Chairwoman of the Supervisory Board of SGL Carbon SE**

Entrepreneur

**External board memberships:**

ALTANA AG, Wesel

BMW AG, Munich

UnternehmerTUM GmbH, Munich <sup>1)</sup>**Dr.-Ing. Hubert Lienhard****Deputy Chairman of the Supervisory Board of SGL Carbon SE**

Chief Executive Officer

Voith GmbH, Heidenheim

**Voith internal board memberships:**Voith Turbo Beteiligungs GmbH, Heidenheim <sup>1)</sup>Voith Industrial Services Holding GmbH & Co. KG, Stuttgart <sup>2)</sup>  
(until 29.01.2016)Voith Hydro Holding GmbH & Co. KG, Heidenheim <sup>2)</sup>Voith Turbo GmbH & Co. KG, Heidenheim <sup>2)</sup>**External board memberships:**

EnBW AG, Karlsruhe

Heraeus Holding GmbH, Hanau

KUKA AG, Augsburg

SMS Holding GmbH, Düsseldorf

**Helmut Jodl****Deputy Chairman of the Supervisory Board of SGL Carbon SE**Deputy Chairman of the Works Council (full-time)  
SGL CARBON GmbH, Meitingen**Dr. Christine Bortenlänger**Managing Director Deutsches Aktieninstitut e.V.,  
Frankfurt/Main**External board memberships:**

Covestro AG, Leverkusen

Covestro Deutschland AG, Leverkusen

OSRAM GmbH, Munich

OSRAM Licht AG, Munich

TÜV Süd Aktiengesellschaft, Munich

**Dr. Daniel Camus**Chief Financial Officer, The Global Fund, Geneva, Switzerland  
and former member of the Board of Management (CFO) EDF,  
Electricité de France, Paris, France**External board memberships:**

Cameco Corp., Saskatoon, Canada

Contour Global Ltd., New York, USA (since 04.03.2016)

Valéo SA, Paris, France

<sup>1)</sup> Chairwoman/Chairman of the supervisory board<sup>2)</sup> Chairman of the advisory committee<sup>3)</sup> Chairman of the board of directors

### **Ana Cristina Ferreira Cruz**

Head of Integrated Management System,  
FISIPE S.A., Lavrado, Portugal

### **Georg Denoke**

Former Member of the Executive Board of Linde Aktiengesellschaft, CFO, Labor Relations Director

### **Edwin Eichler**

Consultant

### **External board memberships or similar posts:**

Heidelberger Druckmaschinen AG, Heidelberg (until 28.07.2016)  
Hoberg & Driesch GmbH & Co. KG, Düsseldorf (Advisory board member)  
Fr. Lürssen Werft GmbH & Co. KG, Bremen (Advisory board member)  
Schmolz & Bickenbach AG, Emmenbrücke, Switzerland <sup>3)</sup>  
SMS Holding GmbH, Düsseldorf <sup>1)</sup>

### **Michael Leppek**

Managing Director (1<sup>st</sup> authorized Representative), IG Metall Augsburg

### **External board memberships or similar posts:**

AIRBUS Helicopters Deutschland GmbH, Donauwörth  
Fujitsu Technology Solutions GmbH, Munich (until 30.09.2016)  
KUKA AG, Augsburg  
MAN Diesel & Turbo SE, Augsburg

### **Marcin Rzeźniński**

Technology & Quality Manager SGL Graphite Solutions Polska Sp. z o.o., Nowy Sącz, Poland

### **Markus Stettberger**

Chairman of the Works Council (full-time)  
SGL CARBON GmbH, Meitingen

### **Hans-Werner Zorn (until 31.03.2016)**

Chairman of the Works Council (full-time)  
SGL CARBON GmbH, Bonn

### **Dieter Züllighofen (since 01.04.2016)**

Chairman of the Works Council (full-time)  
SGL CARBON GmbH, Bonn

<sup>1)</sup> Chairwoman/Chairman of the supervisory board

<sup>2)</sup> Chairman of the advisory committee

<sup>3)</sup> Chairman of the board of directors

# Glossary

---

## Commercial Glossary

### Bond

Collective term for interest-bearing debt instruments with contractually fixed repayment terms. Bonds are issued either by governments or companies and sold through financial institutions and provide long term external financing.

### Cash flow

An economic measure for the inflow and outflow of cash funds representing the net inflow from sales activity and other current activities in a period. In a cash flow statement, the change in cash and cash equivalents is broken down by operating activity, investing activity and financing activity.

### Cash flow hedge

A hedge of a recognized asset or of future, highly likely (foreign currency) transactions. The change in value of the hedging instrument is recognized directly in equity.

### Cash generation

Total EBIT plus amortization/depreciation on intangible assets and property, plant & equipment plus change in working capital less capital expenditure.

### Capital Employed

The sum of Goodwill, other intangible assets, property, plant & equipment, investments accounted for At-Equity, inventories, trade receivables less trade payables.

### Convertible bond

A corporate bond that includes a share option. Under the option, the bond can be exchanged (converted) for shares in the company subject to certain preconditions. The exchange is possible within a specific period at a fixed price. The conversion price normally exceeds the share price on the date of the bond issue.

### Corporate Governance

The German Corporate Governance Code is the primary legislation governing the management and monitoring of German publicly traded companies and comprises international standards for adequate and responsible corporate management.

### Declaration of conformity

Declaration of conformity by the Board of Management and Supervisory Board of compliance with the German Corporate Governance Code pursuant to section 161 German Stock Corporation Act (AktG).

### Deferred taxes

Assets and liabilities arising from the different treatment of transactions for financial and tax reporting purposes.

### Distributable accumulated profits/accumulated losses

Result of SGL Carbon SE as reported in its German GAAP financial statements based on calculation pursuant to the German Commercial Code (HGB).

### DSO (Days Sales Outstanding)

Trade account receivables divided by sales revenue, times 360 (A low figure indicates that the company collects its outstanding receivables quickly).

### Earnings per share (EPS)

The figure of EPS is calculated by dividing the net result of the year attributable to SGL Carbon SE shareholders by the weighted average number of outstanding shares for the financial year.

### EBIT

Earnings before interest and taxes. EBIT is an important key performance indicator for assessing the operational profitability of companies.

### EBITDA

Earnings before interest, taxes, depreciation and amortization. In the case of EBITDA, the focus is rather more on cash earnings potential.

### Equity ratio

The shareholders' equity as a proportion of total assets. The higher the equity ratio, the more independent a company is from external providers of capital. The equity ratio is also an indicator of the creditworthiness and robustness of a company.

**At-Equity method**

Method used in the consolidated financial statements for measuring and accounting for investments in which the SGL Group has joint control in, or significant influence over. Under the equity method, investments of this kind are initially recognized at cost. In subsequent years, these investments then change in line with their profit or loss contribution.

**EURIBOR**

Euro InterBank Offered Rate (EURIBOR) is an interest rate at which euro interbank term deposits are offered

**Derivative financial instruments**

Forward contracts whose value is derived from another existing (primary) market value. An example of a derivative is a currency option, in which the premium largely depends on the option price, the maturity of the option and the volatility of this currency.

**Free cash flow**

The balance of cash flow from operating activities and cash flow from investing activities. Free cash flow therefore reflects the amount available to the company, for example, for debt repayment or distribution of dividends.

**Free float**

The total number of shares not owned by major investors (e.g. the parent company). Free float shares are distributed among a large number of shareholders and can therefore be bought and sold by many people. The number of free float shares therefore also normally provides an indication of the liquidity of the shares.

**Functional costs**

Functional costs include cost of sales, R&D expenses, selling expenses and general and administration expenses.

**Gearing**

The ratio of net financial debt to equity. Gearing is a key performance indicator reflecting financial strength and illustrates the dependency of a company on third-party lenders. The higher the figure, the greater the theoretical dependency.

**Goodwill**

The excess of cost of an acquisition over the fair value of the acquired entity at the time of acquisition.

**Gross profit**

Sales revenue less cost of sales.

**Hedging**

Strategy to limit or eliminate price risks. Hedging is standard practice in capital markets and is used by market players to offset risks.

**International Financial Reporting Standards (IFRS), formerly International Accounting Standards (IAS)**

Uniform accounting standards to enhance comparability of financial data. According to European Union regulation, publicly traded companies are required to prepare their consolidated financial statements in accordance with these rules.

**Joint venture**

A contractual agreement whereby two or more parties undertake an economic activity that is subject to joint control.

**Joint operation**

A joint arrangement whereby the parties that have joint control of the arrangement have rights of the assets, and obligation for the liabilities, relating to the arrangements.

**Market capitalization**

Key performance indicator providing information on the stock market value of a listed company. It is calculated by multiplying the number of shares by the current share price.

**Rating**

Internationally recognized criteria for assessing the credit-worthiness of a debtor or company. Ratings are determined by specialist agencies using standardized procedures.

---

**Return on sales**

Ratio of EBIT to sales revenue. Return on sales (ROS) provides information on a company's operating profit as a percentage of sales revenue in the period under review. A high return on sales indicates a high level of profitability.

**ROCE (Return on capital employed)**

The ratio of EBIT to average capital employed. This key performance indicator provides information on the return on average capital employed by a company over a specific period.

**Syndicated Loan**

A loan offered by a syndicate consisting of several core industries; the loan's overall risk (e.g. resulting from credit quality or capital lock-up) is spread across the financial institutions involved.

**Weighted average cost of capital (WACC)**

An average representing the expected return on all of a company's securities. Each source of capital, such as stocks, bonds and other debt, is assigned a required rate of return, and then these required rates of return are weighted in proportion to the share each source of capital contributes to the company's capital structure. The resulting rate is what the firm would use as a minimum for evaluating a capital project or investment.

**Working Capital**

Inventories plus trade receivables minus trade payables. This figure describes the current assets employed by a company in the short-term. The lower the working capital, the better the liquidity position of a company.

## Technical Glossary

### Cathodes

Indispensable component in the production of primary aluminum. Cathode blocks are capital investment products, used to line large smelting cells, in which aluminum oxide is reduced by an electrolysis process to produce aluminum which is deposited on these blocks.

### Coarse grain graphite

The grain size lies between 1mm and up to approx. 20mm. Key material property is the high resistance to thermal shock. Typical product examples are graphite electrodes for steel scrap recycling, cathodes for aluminum electrolysis and furnace linings for crude steel production.

### Fine grain graphite

Specialty graphite with a fine grain structure and a grain size of between 1mm and few  $\mu\text{m}$ , with which the required material strengths can be achieved. Fine grain graphites have a broad spectrum of applications in the semiconductor, mechanical engineering, metallurgical, industrial furnace construction, medical and analysis technology industries (isostatic graphite).

### Graphite electrodes

The core business of the business unit Performance Products. Graphite electrodes are used in steel production in electric arc furnaces. In a furnace, they can withstand temperatures of up to 3,500 degrees Celsius and are therefore the "engine" in the melting process of scrap recycling to produce new steel. During the manufacturing process for electric steel, graphite electrodes are fully consumed within six to eight hours.

### Isostatic graphite

Special fine grain graphite for specific applications. Its name is derived from the method of production (isostatically pressed; in a chamber of water subjected to equal pressure from every side). The main features of isostatic graphite are strength, density and isotropic structure. It is therefore used in all applications where the mechanical properties of conventional graphite are inadequate.

### Lithium-ion battery

Rechargeable battery with high energy and performance density. The cathode is made from a lithium compound, the anode from carbon or graphite. During the charging process, the lithium ions in the cathodes migrate to the carbon lattice of

the anode material (intercalation). During discharging, the lithium ions from the intercalation migrate back to the cathode. Lithium-ion batteries are the standard batteries for mobile applications today, such as for mobile phones and laptops. They are growing in importance for power tools (e.g. cordless screwdrivers) and for electric vehicles.

### Natural graphite

A natural mineral. It is extracted from both surface and underground mining. High purity (>99%) is achieved by purification processes (flotation, thermal and chemical purification). Natural graphite possesses the nearly ideal crystalline structure of graphite. Its use as a lubricant is well known. The largest natural graphite amounts are used for fire proof applications. Small amounts are also included in the recipe for fine grain graphites. Inclusion of acids produces graphite salts, which are converted to expanded graphite in a thermal process.

### PAN-Precursor

Synthetic fiber made from polyacrylonitrile (PAN). PAN-precursor is the raw material used in the production of carbon fibers.

### Petroleum coke

Is a mass volume by-product of the oil refining process (80 million tons). Calcined petroleum cokes are used particularly for anodes in the aluminum electrolysis. The so-called needle coke is a special quality, which can only be produced by a few refineries. This needle coke is almost exclusively used for the production of graphite electrodes. Their outer form and tailor made physical properties enable the production of modern high performance electrodes.

### REACH (regulation for chemicals)

REACH stands for Registration, Evaluation, Authorization and Restriction of Chemicals, an EU regulation for chemicals that became effective June 1, 2007. The scope of REACH includes manufacturers or importers who, in the European Union, either manufacture chemical substances and/or use such substances in formulations or import such substances into the European Union amounting to more than one ton per year.

# List of Acronyms

---

<b>A AktG</b> German Stock Corporation Act (Aktengesetz)	<b>L LTCI</b> Long Term Cash Incentive
<b>C Cefic</b> European Chemical Industry Council	<b>LTI</b> Long Term Incentive
<b>CFRP</b> Carbon Fiber Reinforced Plastic	<b>M MDAX</b> Mid-Cap-DAX
<b>D DAX</b> German Stock Index (large caps)	<b>R REACH</b> Registration, Evaluation, Authorization and Restriction of Chemicals
<b>E EBIT</b> Earnings before Interest and Taxes	<b>ROCE</b> Return on Capital Employed
<b>EBITDA</b> Earnings before Interest, Taxes, Depreciation and Amortization	<b>S SAR</b> Stock Appreciation Rights
<b>EHSA</b> Environment, Health & Safety Affairs	<b>SDAX</b> Small-Cap-DAX
<b>EPS</b> Earnings per Share	<b>V VorstAG</b> Act on the Appropriateness of Management Board Remuneration
<b>H HGB</b> German Commercial Code	<b>W WpHG</b> German Securities Trading Act
<b>I IAS</b> International Accounting Standards	
<b>IASB</b> International Accounting Standards Board	
<b>IFRIC</b> International Financial Reporting Interpretations Committee	
<b>IFRS</b> International Financial Reporting Standards	
<b>IT</b> Information Technology	



# Financial Calendar

---

## March 21, 2017

- Publication of the 2016 Annual Report
- Year-end press conference, analyst conference, and conference call for analysts and investors

## May 11, 2017

- Report on the first quarter of 2017
- Conference call for analysts and investors

## May 17, 2017

- Annual General Meeting

## August 10, 2017

- Report on the first half of 2017
- Conference call for analysts and investors

## November 09, 2017

- Report on the first nine months of 2017
- Conference call for analysts and investors

## Contact

### Investor Relations

SGL Carbon SE  
Söhnleinstrasse 8  
65201 Wiesbaden/Germany  
Phone: +49 611 6029-103  
Fax: +49 611 6029-101  
E-mail:  
Investor-Relations@sglgroup.com

[www.sglgroup.com](http://www.sglgroup.com)

## Production Credits

### Published by

SGL Carbon SE  
Head Office  
Söhnleinstrasse 8  
65201 Wiesbaden/Germany

### Concept and Design of Strategy Chapter

muehlhausmoers  
corporate communications gmbh

## Photo Credits

### Board of Management

Rüdiger Nehmzow

### Chairwoman of the Supervisory Board

Astrid Eckert

Produced inhouse with firesys

# Five-year Financial Summary

€m	Footnote	2016	2015 <sup>1)</sup>	2014	2013 <sup>2)</sup>	2012 <sup>3)</sup>
<b>Financial performance</b>						
Sales revenue		769.8	789.5	1,335.6	1,422.6	1,617.1
<i>thereof outside Germany</i>		73%	71%	80%	82%	85%
<i>thereof in Germany</i>		27%	29%	20%	18%	15%
EBITDA before non-recurring charges	4)	69.9	63.9	84.1	102.8	250.3
Operating profit/loss (EBIT) before non-recurring charges	4)	20.7	13.7	2.7	22.8	170.0
Result from continuing operations before income taxes		-27.2	-45.4	-104.4	-161.1	82.3
Consolidated net result (attributable to the shareholders of the parent company)		-111.7	-295.0	-247.0	-317.0	26.8
Return on sales (EBIT-margin)	5)	2.7%	1.7%	0.2%	1.6%	10.5%
Return on capital employed (ROCE <sub>EBITDA</sub> )	6)	8.4%	7.9%	5.9%	6.5%	15.5%
Earnings per share, basic (in €)		-1.19	-3.22	-3.26	-4.47	0.38
<b>Net assets</b>						
Equity attributable to the shareholders of the parent company		331.8	289.3	567.6	607.7	942.2
Total assets		1,899.2	1,856.1	2,170.3	2,059.1	2,497.5
Net financial debt		449.4	534.2	389.9	491.1	490.3
Equity ratio	7)	17.5%	15.6%	26.2%	29.5%	37.7%
Gearing	8)	1.35	1.85	0.69	0.81	0.52
Headcount	9)	5,384	5,658	6,342	6,387	6,757
<b>Financial position</b>						
Payments to purchase intangible assets and property, plant and equipment		34.6	44.4	132.6	117.0	131.3
Depreciation/amortization expense		49.2	50.2	81.4	80.0	80.3
Working capital	10)	254.2	255.1	462.4	476.2	623.0
Free cash flow	11)	-48.1	-99.3	-121.3	41.9	-52.9

<sup>1)</sup> Adjusted to reflect PP as discontinued operations

<sup>2)</sup> Adjusted by BaFin adjustments as well as classification of AS as a discontinued operations and proportional consolidation of SGL ACF

<sup>3)</sup> Adjusted by BaFin adjustments as well as classification of AS and RB as a discontinued operations and proportional consolidation of SGL ACF

<sup>4)</sup> Before non-recurring items of €3.0 million in 2016, minus €6.8 million in 2015, minus €51.2 million in 2014, minus €122.8 million in 2013 and minus €3.9 million in 2012

<sup>5)</sup> EBIT before non-recurring charges to sales revenue

<sup>6)</sup> EBITDA before non-recurring charges to average capital employed - continuing operations (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

<sup>7)</sup> Equity attributable to the shareholders of the parent company to total assets

<sup>8)</sup> Net financial debt to equity attributable to the shareholders of the parent company

<sup>9)</sup> As of Dec. 31, including discontinued operations

<sup>10)</sup> Total of inventories and trade receivables less trade payables

<sup>11)</sup> Cash flow from operating activities (continuing operations) minus cash flow from investing activities (continuing operations)



**SGL Carbon SE**  
Söhnleinstrasse 8  
65201 Wiesbaden/Germany  
Phone +49 611 6029-0  
Fax +49 611 6029-305  
[www.sglgroup.com](http://www.sglgroup.com)