sgl carbon

Annual Report

Key Figures 2018

5.4% Return on capital employed (ROCE $_{EBIT}$)

€m	Footnote	2018	2017	Change
Financial performance				
Sales revenue		1,047.5	860.1	21.8%
thereof outside Germany		66%	73%	-
thereof in Germany		34%	27%	-
EBITDA before non-recurring items	1)	127.2	90.7	40.2%
Operating profit/loss (EBIT) before non-recurring items	1)	64.6	40.1	61.1%
Result from continuing operations before income taxes		51.3	−7.8	>100%
Consolidated net result (attributable to the shareholders of the parent company)		41.3	138.9	−70.3%
Return on sales (EBIT-margin)	2)	6.2%	4.7%	1.5% points
Return on capital employed (ROCE $_{EBIT}$)	3)	5.4%	4.6%	0.8% points
Return on capital employed (ROCE $_{EBITDA}$)	4)	10.5%	10.5%	-
Earnings per share, basic and diluted (in €)		0.34	1.14	−70.2%
Net assets				
Equity attributable to the shareholders of the parent company		531.6	457.0	16.3%
Total assets		1,585.1	1,541.7	2.8%
Net financial debt		242.2	139.0	74.2%
Equity ratio	5)	33.5%	29.6%	3.9% points
Gearing	6)	0.46	0.30	49.8%
Headcount	7)	5,031	4,732	6.3%
Financial position				
Payments to purchase intangible assets and property, plant and equipment		78.1	52.9	47.6%
Depreciation/amortization expense		62.6	50.6	23.7%
Working capital		419.1	318.5	31.6%
Free cash flow	8)	−58.5	−144.7	59.6%

[1] Before non-recurring items of €16.3 million in 2018 and €8.9 million in 2017
[2] EBIT before non-recurring items to sales revenue
[3] EBIT before non-recurring items to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)
[4] EBITDA before non-recurring items to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)
[5] Equity attributable to the shareholders of the parent company to total assets
[6] Net financial debt to equity attributable to the shareholders of the parent company
[7] As of Dec. 31, including employees with fixed-term contracts
[8] Cash flow from operating activities (continued operations) minus cash flow from investing activities (continued operations)

Table of Contents

Letter from the Board of Management

Dear Shareholders, Employees and Friends of SGL Carbon,

In 2018, the first year of the new SGL Carbon, we surpassed our sales revenue and earnings targets. We also successfully implemented our strategy and made significant progress in improving the operating performance of the Company. As a technology-based company, our focus is now on developing smart solutions in the areas of mobility, energy, and digitization that are increasingly shaping our future. We understand smart as meaning intelligent, trendsetting, and sustainable. Therefore, it is important that both our business units are able to cover the entire value chain, from raw material to finished component. This is what will set us apart from the competition and deliver crucial quality and cost benefits.

The former joint ventures with Benteler and BMW are now wholly owned by SGL Carbon. The integration was completed very speedily and efficiently on all sides. The introduction of our standardized cross-site operations management system (OMS) in production is also proceeding to plan. We have expanded our production capacity at many sites in order to meet the needs of our customers. With our new 3D printing center, the battery applications lab, and the fiber placement center, we have significantly extended our technological expertise. We have also made excellent progress in terms of digitization over the past year and are working hard in various parts of the Company to move our processes, our production systems, and the way we communicate with customers into the digital world. The new branding has given the new SGL a distinctive and contemporary identity. We also successfully placed a new convertible bond in the market, thereby improving our funding position.

In its first year, the new SGL Carbon has already exceeded the revenue threshold of one billion euros, which equates to a respectable 22% increase in sales revenue compared to 2017. Around half of the growth was due to the strong increase in sales revenue in the market segments of mobility, digitization, chemicals and industrial applications. The remaining growth is a result of the full consolidation of the former joint ventures with BMW and Benteler and the first-time adoption of IFRS 15. Our earnings before interest and tax, EBIT before non-recurring items, rose even more impressively. The strong 61% profit growth compared to 2017 is primarily due to the improved operating performance of our Graphite Materials & Systems (GMS) business unit and the IFRS 15 effect. The latter is a result of increased customer-specific production quantities and price increases.

The strong increase in growth in the GMS business unit means we are now reaching the limits of our capacity, particularly in the battery & other energy, LED, and automotive & transport market segments. To harness additional growth potential, we will need to invest more than originally planned – an additional €80 million in total over the next three years. In December 2018, we therefore raised our sales target for 2022 from around €1.3 billion to just under €1.4 billion. As a result of the higher sales revenue, we also expect an additional EBIT contribution for 2022 in the low double-digit millions of euros.

We are presently focusing our attention on 2019. In all likelihood, economic growth will be lower than last year in all key regions. We are nonetheless confident that we will do well. With our new corporate structure and identity, we are much better diversified and our business model is built around future and growth topics such as electric mobility, energy supply, and digitization. We are therefore expecting a mid single digit percentage increase in consolidated revenue this year, which will be primarily volume driven. Consolidated EBIT before non-recurring items is expected to hold steady at last year's level after the very significant increase in 2018. After net profit of around €41 million last year, consolidated net income this year is likely to break even. It should be noted that the net profit for 2018 includes a high positive non-recurring item of around €28 million. In addition, this year's net financing costs will include an additional expense arising from the planned issue of a bond to fund the liabilities due at the end of 2020.

We have been very busy over the last few years and have achieved a great deal. This would not have been possible without the efforts of many people, especially our employees, and we would therefore like to express our special thanks to them. We would also like to thank our customers, suppliers, business partners, and shareholders for their loyalty and for the confidence they have shown in us. The new SGL Carbon is pursuing clear goals: we want to achieve sustainable and profitable growth while playing our part in making the world a little smarter every day.

Yours sincerely,

The SGL Carbon Board of Management

Dr. Michael Majerus
Chief Financial Officer

Dr. Jürgen Köhler
Chief Executive Officer

Report of the Supervisory Board

Dear Shareholders,

2018 was a successful year for us. Following the radical change and realignment in 2017 and the emergence of a ‘new’, leaner SGL Carbon, we embarked on an impressive growth path in 2018. Last year, I reported on the restructuring of the joint ventures and the consolidation of all key activities in the CFM value chain – from carbon fibers and materials to components – under the control of SGL Carbon. The figures for the past financial year show that our Company recorded strong growth in its core markets and under the adopted strategy, and there are many reasons to be optimistic that this can be continued in the coming years.

Among other things, we completed the acquisition of the remaining shares in the German joint venture with BMW Group in 2018 and generally placed our balance sheet on a more stable footing by issuing a convertible bond and through the progress made with our operations in both business units.

Although the highly volatile financial markets of recent months have not yet rewarded these efforts and successes to the extent expected, SGL’s medium and long-term planning clearly indicates it is an innovative company that is successful in its markets.

Following the reduction of the Board of Management to two members, we have now also streamlined the Supervisory Board in recognition of the realignment of the Company, partly as a result of a suggestion from shareholders. Trimming the Supervisory Board down from twelve members to eight, and reducing the number of committees from five to three is a logical consequence of the significant reduction in the size of the Company following the sale of the PP activities.

Cooperation between the Board of Management and Supervisory Board

In 2018, 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 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 a continual basis. The Board of Management kept us informed in a regular, timely, and comprehensive manner, both in writing and verbally, about the Company’s situation and the major business transactions and projects. Where legislation and the Articles of Incorporation required the Supervisory Board to make decisions concerning individual transactions or projects 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 orally 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 at length, 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 Carbon 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. The regular topics covered at the meetings included, 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 strategic positioning and the growth plans for the GMS and CFM business units presented by the Board of Management constituted key issues for deliberation and were the subject of regular, in-depth Supervisory Board discussions. Another important issue that we addressed was the short- and medium-term financial planning.

At the meeting in March, the Supervisory Board discussed the 2017 annual financial statements and consolidated financial statements with the independent auditors and approved them and the annual report. In addition to discussing the targets for the Board of Management (both achievement of the 2017 targets and the new targets for 2018), the Supervisory Board also approved the agenda for the Annual General Meeting, which included the nominations to be put to the AGM concerning the (re-)election of some shareholder representatives to the Supervisory Board.

In addition to the general business situation, the Supervisory Board meeting in May also discussed the composition of the Supervisory Board committees. In this context, and as a consequence of the reduction in the number of Supervisory Board members resolved at the Annual General Meeting, the Supervisory Board also resolved to reduce the number of committees. The Strategy Committee and the Governance and Ethics Committee were dissolved, with the remit of the Governance and Ethics Committee being transferred to the Audit Committee.

The resolution to issue a convertible bond and the delegation of the final decision on the convertible bond to the Audit Committee were also important. Mr. Denoke and Mr. Jodl were elected as deputy chairmen of the Supervisory Board at the May meeting.

September's Supervisory Board meeting was held at our newly acquired production site in Austria. We focused on strategic issues concerning the GMS and CFM business units and on the financial position of the Company. Strategic investment projects of the GMS business unit in the area of batteries for electric vehicles and silicon carbide coating for the LED industry were discussed. The meeting also agreed the declaration of compliance for 2018.

At an extraordinary meeting of the Supervisory Board held by conference call on September 24, 2018, it was decided to delegate a decision on planned financing measures to the Audit Committee.

The December meeting focused on the Company's operational planning and budget for 2019, together with its medium-term planning. At this meeting, the Supervisory Board was also given an overview of the status of individual strategic projects, particularly those of the GMS business unit. Financing matters were also discussed and the Supervisory Board granted the Board of Management approval to issue a corporate bond for the purpose of financing growth and servicing liabilities maturing in 2020 – subject to a suitable issuance window.

Activities of the Committees

Prior to the May meeting, the Supervisory Board had a total of five permanent committees to ensure that its duties are discharged efficiently. In May, the Supervisory Board agreed to reduce that number to three; the members of these three committees are presented in the Corporate Governance and Compliance Report (see pages 11 to 17). In addition, the Audit Committee held an extraordinary meeting in 2018 where it dealt in detail with a financing decision in connection with the issue of a (convertible) bond. The committee chairpersons reported in detail on the work of the committees at the meetings of the Supervisory Board.

The Audit Committee held face-to-face meetings in March, September, and December of the year under review and was also kept regularly informed prior to publication of the quarterly reports. When reviewing the quarterly financial statements, the Audit Committee also discussed ongoing issues relating to reporting and any other special topics of current interest. All the face-to-face meetings were also attended by the independent auditors, which enabled the Company's audit procedures, key audit issues, and material findings arising from audits of the annual financial statements to be discussed.

Current business performance and any business risks identified by the system for documenting and managing risk were discussed at all of the face-to-face meetings of the Audit Committee. The non-audit services provided by the auditors were also discussed to identify any areas where the independence of the auditors might potentially be compromised.

A core agenda item at the March meeting was an in-depth discussion of the annual financial statements of SGL Carbon SE and the consolidated financial statements for 2017. The Audit Committee also examined the internal control system, the audits carried out by the internal auditors, the current audit plan, and the non-financial Group statement (CSR report).

The September and December meetings focused primarily on financing considerations and, in particular, preparations for the issue of the convertible bond in September as well as the potential issue of a corporate bond and the arrangement of the new syndicated loan. The committee also discussed potential conflicts of interest of the members of the Supervisory Board, and the compliance report.

The Personnel Committee held a total of two meetings at which it discussed overarching personnel issues. The March meeting discussed target attainment by and target agreements concluded with members of the Board of Management. At its December meeting, the committee discussed various matters including the decision to be taken in March 2019 concerning a contract extension for the CEO and the possibility for members of the Board of Management to hold other posts outside the Company.

The Governance and Ethics Committee met for the final time in March 2018, before being dissolved in May when its duties were transferred to the Audit Committee. As in the previous year, the committee discussed the ongoing analysis of potential conflicts of interest within the Supervisory Board and internal compliance procedures. The committee received 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.

At its only meeting in March 2018, the Strategy and Technology Committee dealt in particular with the status of the divestments of the PP business unit, the acquisition of shares in the joint ventures with BMW and Benteler, the sale of shares in the joint venture with Kümpers, and strategic projects in the GMS business unit (expansion of graphite production capacity for the production of lithium-ion batteries).

The Nominating Committee met once, in March, and discussed the nomination of representatives of the shareholders ahead of the Annual General Meeting in May. Ms. Ingeborg Neumann was nominated as a candidate for election.

Attendance at the four ordinary and one extraordinary Supervisory Board meetings was 96%. Every committee meeting was attended by all its 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 2018

Both at the Audit Committee meeting and at the Supervisory Board meeting held in March 2019, 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, 2018, and the management reports of SGL Carbon SE and of SGL Carbon had been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, 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 29, 2018. 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 2018.

At its meeting in March 2019, 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 289a (1) and 315a (1) HGB. Please refer to the corresponding disclosures in the management report (see pages 40 to 93). The Supervisory Board has examined these disclosures and determined that they were complete.

Susanne Klatten, Chairwoman of the Supervisory Board

With regards to the separate non-financial report, KPMG issued an unqualified opinion.

This means that, based on the audit activities carried out and the audit evidence obtained, no information was obtained which would lead to the assessment that the separate non-financial report was not in compliance in all material respects with sections 315b, 315c in combination with 289c to 289e HGB.

Similarly, based on its own assessment, the report of the Audit Committee regarding its preparatory assessment, and the audit opinion of KPMG, the Supervisory Board did not find any reasons to suggest that the separate non-financial Group report had not been prepared properly and appropriately.

Corporate Governance and Declaration of Compliance

At its meeting on September 12/13, 2018, the Supervisory Board discussed the corporate governance principles of SGL Carbon SE. 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 11 to 17 of this annual report and in the corporate governance declaration on the Company's website at www.sglcarbon.com under 'Company/Corporate Governance'.

Personnel and functional changes on the Board of Management and Supervisory Board

There were no changes to the Board of Management of the Company in the reporting period. The Board of Management has consisted of two people since January 1, 2017. Three shareholder representatives stepped down from the Supervisory Board with effect from April 30, 2018. Two of them were re-elected. Ms. Ingeborg Neumann was elected as a new member of the Supervisory Board. The Supervisory Board was reduced from twelve to eight members by a resolution of the AGM in May 2018. As a result of this streamlining, the terms of office of the following members were ended: Dr. Christine Bortenlänger, Dr. Daniel Camus, Petra Borowski, and Arnhild Broszio.

Thanks from the Supervisory Board

The Supervisory Board wishes to thank the Board of Management, the staff, and the employee representatives of all SGL Carbon companies for their work, without which it would not have been possible to meet the challenges once again facing SGL Carbon's business in 2018. Special thanks also go to the resigning members of the Supervisory Board who have actively supported our Company through their work in recent years.

Wiesbaden, March 26, 2019

The Supervisory Board

S. Klatten

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 the SGL Carbon group are managed by the Board of Management. The Board of Management comprised two members in fiscal year 2018. 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 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. As a result of the change to the Articles of Incorporation resolved in the 2018 General meeting, SGL Carbon SE's Supervisory Board comprises eight members since June 25, 2018 (previously: twelve members) and is co-determined. The four shareholder representatives on the Supervisory Board are appointed by the Annual General Meeting, the four employee representatives are appointed by SGL Carbon SE's Works Council according to the Company's agreement with its employees regarding co-determination in the Company. 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.

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 and profiled the competences of the entire board. According to its objectives, 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 as defined in clause 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 restriction on this member's candidacy. Each member shall ensure that he or she has sufficient time to fulfil 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 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. In addition, at least one member of the Supervisory Board should have relevant professional experience and industrial expertise in SGL Carbon's fields of business and its key customer industries. What is more, at least one member in each case should have in-depth experience in corporate management and strategy, compliance and risk management, innovation competence (including digitization) and well-honed professional experience in developing executives and human resources. In total, 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. In addition, the composition of the Supervisory Board should reflect the Company's international activities; at least one member of the Supervisory Board should have specific international knowledge and experience as a result of his or her origins, education or professional activities. 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 currently met with Ms. Neumann, Mr. Denoke and Mr. Eichler. 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, which applies for the Company, even demands that the Company's Supervisory Board has at least 30% of both female and male members (subject to transitionary rules for existing mandates).

The Supervisory Board's objectives for its composition and competence profile for the entire board 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 in accordance with the objectives and the competence profile.

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 addition, the Supervisory Board's Audit Committee (see below in the section on the Supervisory Board's committees), reviews whether transactions between SGL Carbon 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 the Company's interests. In the reporting period, no conflicts of interest were notified by members of the Supervisory Board or Board of Management that would have required immediate disclosure 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 30.

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 clause 3.8 of the German Corporate Governance Code.

Committees support the work of the Supervisory Board

The Supervisory Board has a total of three 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 other members of this committee are Ms. Neumann 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. Mr. Denoke is the Chairman of the Audit Committee. Its other members are Ms. Neumann, Mr. Stettberger and Mr. Züllighofen. The responsibilities of the committee include monitoring the Company's financial accounting process, risk management, compliance, and consequently its internal control and auditing system. It is also in charge of checking the Group's related-party transactions. In addition, it is in charge of carrying out its own review of the consolidated financial statements of SGL Carbon 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 addition to these permanent committees, the Supervisory Board can also form temporary, project-related committees as required. Through to 29 May of the year under review there also existed the Supervisory Board's Strategy and its Governance and Ethics Committee. The tasks of the Governance and Ethics Committee, i.e., in particular reviewing transactions by SGL Carbon companies with members of the Supervisory Board and its related parties were transferred to the Audit Committee. The Supervisory Board as a whole performs now the Strategy Committee's tasks.

Systematic Risk Management

Since a responsible approach to risk is an integral part of all good corporate governance practices, SGL Carbon 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 system is enhanced on an ongoing basis and continuously adapted 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 72 to 79.

Updated Declaration of Compliance

During the year under review and in the interest of a continuing process to improve its corporate governance, SGL Carbon SE's Board of Management and Supervisory Board dealt with the recommendations of the German Corporate Governance Code. The Board of Management and Supervisory Board issued the current declaration of compliance according to Section 161 of the Aktiengesetz (AktG - German Stock Corporation Act) on September 13, 2018. 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 dated September 13, 2018

"The Board of Management and Supervisory Board of SGL Carbon SE declare:

1. Since the last declaration of conformity in July 2017, 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 February 7, 2017 (publication as of April 24, 2017) as published by the German Federal Ministry of Justice and Consumer Protection in the section of official notice of the Federal. The Company will continue to fully comply with these recommendations in future.

The Corporate Governance Principles of SGL Carbon SE furthermore satisfy almost without exception 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 own 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. The following table provides an overview of the transactions reported to us during the year under review:

Managers' Transactions 2018

Transaction date	Name of person	Information on the transaction(s)	ISIN	Type of transaction	Price/currency (€)	Volume (€)	Aggregated volume (€)
Board of Management							
12/07/2018	Dr. Köhler	Equity	DE0007235301	Purchase	7.0967	106,451.04	106,451.04
Supervisory Board							
09/13/2018	SKion GmbH	Convertible bond	DE000A2G8VX7	Purchase	100,000.00	30,000,000.00	30,000,000.00

Remuneration of the Board of Management and 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 Article 12 of the Articles of Incorporation.

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 85 to 91).

Share-based incentive systems for SGL Carbon employees

The share-based incentive systems which were in place at SGL Carbon during the period under review are presented in the notes to the consolidated financial statements [Note 33].

Compliance as part of our management and corporate culture

SGL Carbon introduced its Code of Conduct in 2005 and updated this in 2017. The Code underscores the obligation of SGL Carbon and its employees to comply with the law and internal policies and sets standards for ethical and lawful conduct. It reflects the common values that define our corporate culture and business conduct. For us, 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 representatives, and the Group Compliance department. All employees are personally responsible for ensuring that their actions and conduct are in line with the Code of Conduct of SGL Carbon 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-today business. This allows compliance to sustainably support the success of our business.

SGL Carbon introduced and implemented its compliance program many years ago. The Board of Management has tasked the Group Compliance department with the worldwide management of this program. Its task is to manage the required comprehensive organizational, communications, and control structures for SGL Carbon at all sites, 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.

In so doing, SGL Carbon's management and executives serve as important role models when it comes to personnel and leadership responsibility. As a result, compliance is a fixed agenda item in the annual Group Communication Forum (GCF). This is used to constantly sensitize top executives for compliance and to train them.

Part of SGL Carbon's compliance organization is a network of regional and local compliance representatives. In order to ensure the transfer of knowledge between the network and Group Compliance, regional compliance conferences were held in all three regions of Europe, Asia and North America in 2018. At these conferences, which take place every two years, we train compliance representatives on issues including current topics. In so doing we also discuss the continued development of our compliance program, while considering local needs. In addition, we hold regular telephone conferences on specific issues.

The local compliance representatives are the point of contact for employees at the respective sites for all matters pertaining to compliance, and they also support the responsible department when introducing compliance initiatives at the various sites. In 2018 this related, in particular, to rolling out the compliance survey. Starting in 2016, SGL Carbon has performed a voluntary, group-wide employee survey on compliance topics every two to three years. The survey is initially geared to employees around the world who have a company e-mail address. In 2018 the online compliance survey was repeated at all locations and the group of production employees was added. They were also provided with a hard copy of the questionnaire. The compliance survey allows us to gain valuable feedback on the structure of our compliance program and the associated activities. We recorded a substantial increase in our participation rate among white collar employees in 2018. This totaled 77% in the year under review, compared to 60% in 2016.

Our top-level objective for compliance is that all of our employees know and respect the requisite regulations, in order to reduce the risk of breaking the law, thus avoiding possible damage for SGL Carbon. As a result, our compliance policies are a fixed part of our documents for new hires, and are issued to all of our new employees. In twice-yearly reporting by our Local Compliance Representatives (LCRs), we have them confirm that this process is operating correctly. Confirmation of receipt which provides written documentation that the employee is aware of the regulations in the Code of Conduct is filed in the employee's file. SGL Carbon's Code of Conduct was fundamentally revised in 2017, and this was re-issued to all employees worldwide in 2018. The local HR departments also obtained confirmations of receipt for this code. The Code of Conduct, the Gifts and Invitations Policy and the Whistleblower Guidelines are available in a total of nine local languages, the Antitrust Policy is available in a total of five languages. Employees can download the policies from the intranet and our sharepoint.

In addition, our employees also participate in mandatory compliance training, which we perform as both face-to-face and eLearning training sessions. As a rule, initial training is performed as eLearning. As a result of the update to our Code of Conduct, in 2018 we also revised our eLearning program, which has been in place since 2013, concerning this issue. In the first half of 2019 the updated online training course will be provided in both German and English versions. Additional translations will follow in the second half of 2019. The aim is to ensure that all of our white collar employees have once again passed through the eLearning program by the end of 2019. In future, the online training will be included in the onboarding training catalogue for new employees.

SGL Carbon already introduced an extensive global antitrust compliance program back in 2001. One of the key elements is the regular mandatory training sessions, which are offered as both face-to-face and eLearning sessions. These mandatory training sessions are aimed at all managers 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 Carbon Antitrust Compliance Policy with their onboarding documents, and have to sign these. They then take part in the mandatory online training session. All employees in this target group take part in regular refresher courses, which are held both as face-to-face and also eLearning sessions. This process is also part of our internal control as part of our ICS (internal control system).

A key component of the compliance program is also our preventative work with regard to anti-corruption (see CSR report “Anti-corruption and bribery”, page 20).

SGL Carbon introduced a Supplier Code of Conduct in 2015. Under this code, all SGL suppliers and their sub-contractors must also undertake to comply with legal, ethical and sustainable behavior (see CSR Report “Responsibility for the supply chain”, page 21).

SGL Carbon aims to create an environment in which all compliance matters can be discussed in an open manner. Our employees are encouraged to discuss all issues concerning integrity with their superior, the Compliance department or a member of the Compliance Network. In addition, over and above the existing communication and reporting channels, we also have a whistleblower system in the form of the Compliance Helpdesk. This allows employees to transfer information on potential compliance infringements confidentially according to our Whistleblowing policy; the Whistleblowing policy also regulates binding protection for the whistleblower. This e-mailbox can also be reached by third parties via SGL Carbon’s website.

Group Compliance reviews reported compliance-relevant issues as part of the internal compliance review. The department is tasked with ensuring that non-compliant actions and violations are prevented and recognized in good time, that our Company’s activities comply with the applicable laws and statutory provisions, and that potential for improving our internal business activities is identified.

During the period under review SGL Carbon dealt with all of the notifications of potential violations with regard to anti-trust law, anticorruption, export controls and customs, protecting trade secrets, and anti-fraud which could result in financial damage or damage to the Group’s reputation. These were all processed without exception in order to be able to derive and implement concrete activities if required. We are convinced that the components of compliance management presented as well as our monitoring processes are also suitable for ensuring behavior in line with the law in all of SGL Carbon’s areas in future.

Other compliance measures relate to capital market regulations and compliance with the respective Group policy, which regulates issues including trading in SGL Carbon SE securities for members of the Board of Management, the Supervisory Board and the Company’s employees. The Group policy also governs the proper handling of potential insider information. 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 existing compliance program for export controls and customs ensures that the exchange of goods and technology and the use of services correspond to the respective internal and external requirements (see CSR Report “Responsibility for the supply chain”, page 21).

In 2018, the Group Internal Audit Department, in coordination with Group Compliance, reviewed the implementation of anti-corruption and anti-fraud management at individual subsidiaries as part of their regular audits. The focus was on obtaining audit security concerning whether the local companies uphold the defined compliance regulations. The task was also to recognize and uncover individual violations of the regulations. 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. Company management in the business units already performed a top-down risk assessment in 2016/2017 of the issues defined as being core compliance risks: antitrust, anti-corruption, export control and customs, protecting trade secrets and anti-fraud. In a bottom-up approach, in 2018 a risk estimate was performed, and also a review of the specific processes together with the local compliance representatives. This resulted in an update to the compliance risk landscape. The regular compliance risk assessment was also continued as part of the BU compliance surveys to be returned each year.

The Supervisory Board's Audit Committee addressed the Company's compliance report in detail at its meeting in December 2018.

Information on the auditors

KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, Frankfurt office, has been the statutory auditor of SGL Carbon SE and the SGL Carbon group since the 2017 financial year (January 1, 2017 - December 31, 2017). Mr. Janz has signed as the responsible Public Auditor since the 2017 financial year. This appointment followed 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).

For details on the statutory auditor's fees, please refer to page 159 of the 2018 annual report.

At the 2019 General Meeting, the Supervisory Board will make a proposal, based on the recommendations of its Audit Committee, that KPMG AG Wirtschaftsprüfungsgesellschaft Berlin, should be appointed as the auditor for the Company and Group for fiscal year 2019 (and with respect to any audit reviews of financial information during the year also for these audit services).

Corporate Social Responsibility

About this report

This chapter presents SGL Carbon's corporate social responsibility activities. Socially responsible, environmentally conscious and resource-friendly behavior, promotion of responsible and sustainable product solutions, responsibility for our employees, commitment to human rights as well as compliance and anti-corruption standards, are integral parts of SGL Carbon's corporate culture and objectives. They are key requirements to the long-term success of our business.

Fundamentals

This report presents SGL Carbon's non-financial group declaration according to Section 315b of the HGB and its content corresponds to the requirements of Section 315c in connection with Section 289c of the HGB. The following report presents our key non-financial activities with regard to the five aspects environment, employees, social requirements, upholding human rights and combating corruption and bribery in detail and transparently in a separate, Non-financial Group Report. We present our business model in detail in the chapter "SGL Carbon – the Group" (page 42) of the Group Management Report.

In preparing this separate, Non-financial Group Report, we use the Sustainability Reporting Standards (SRS) of the Global Reporting Initiative (GRI) as a basis for the non-financial performance indicators presented. In order to be able to better map our special requirements, and as a result of the constant further development of our issues, in addition we have developed some own key performance indicators (KPI).

The content of the separate, Non-financial Group Report was reviewed as part of an external assurance engagement with limited security by KPMG Wirtschaftsprüfungsgesellschaft (see information on page 71).

Key issues

In order to form the foundations for the first Non-financial Group Report 2017, in 2016 and 2017 SGL Carbon performed a materiality analysis based on the criteria in the Global Reporting Initiative. In line with the double materiality claim, this analysis considered the economic impact that an issue has on the Company, and how SGL Carbon's business activities impact third parties. A total of 23 material topics were derived and prioritized in line with their importance for the understanding of the course of business, earnings, the Company's position as well as the impact its activities have on the aspects set out above (in line with Section 289c (3) of the HGB).

In order to validate the topics, the 23 topics identified in the previous year were once again assessed in 2018 by the functional responsible managers named by SGL Carbon with regard to the criteria of double materiality according to the HGB. These specialists used a questionnaire to evaluate and provide reasons for the importance of each individual topic. After a final discussion with the responsible project coordinators, the accumulated results of the validation were discussed with the Board of Management, which confirmed these after a joint discussion.

This validation of the material issues resulted in central adjustments for SGL Carbon's 2018 Non-financial Group Report. The topic of "Lobbying/participation in political processes" carried under "Corporate citizenship" is no longer carried as an independent topic in this report, but rather it is included in the topic of "Anti-corruption and bribery" under "Compliance". In addition, the "Compliance" section also discusses the issues of compliance and anti-corruption in the supply chain as well as human rights in the section entitled "Responsibility for the supply chain". In contrast to the previous year, the issue of environmental impact of products is reported in 2018 under the "Products" section and not under "Environment, health and safety affairs". "Management" is also no longer an independent topic in the report. Instead, the central aspects of this issue are integrated into the main topics in the "Employee affairs" section. The subject of "Local communities" is no longer a part of the separate Non-financial Group Report.

The key issues thus identified for SGL are broken down into "Compliance", "Products", "Environment, health and safety affairs" and "Employee affairs". In addition, we also offer a voluntary report on "Corporate citizenship", which does not include a material topic for the Non-financial Group Report. The following table shows the allocation of key issues to these various areas: We report voluntarily on the issue shown in italics and this thus does not form part of the Non-financial Group Report.

Area	Key issues for SGL Carbon
Compliance	• Compliance Management • Anti-corruption and bribery (including upholding human rights and lobbying / participation in political processes) • Responsibility for the supply chain
Products	• Product quality • Environmental impact of product • Sustainable product innovation
Environment, health and safety affairs	• Energy consumption and CO_2 emissions • Health and safety at work and health protection • Process safety • Resource management (waste and water)
Employee affairs	• Diversity and equal opportunities • Employability and development • Attractiveness as an employer
Corporate citizenship	• *Local communities*

The different chapters describe the concepts that we are pursuing, and present the results of the activities put in place to date. Issues with voluntary reporting are marked correspondingly with footnotes in each case and do not form part of the Non-financial Group Report.

Material risks according to Section 315c in connection with Section 289c (3) Nos. 3 and 4 of the HGB

In this separate, Non-financial Group Report, we consider the key risks linked to our own business activities and also risks which have a material negative impact on the affairs set out as part of the non-financial report (Section 315c in conjunction with 289c (3) Nos. 3 and 4 of the HGB).

In this regard, key risks have been identified for the individual affairs and evaluated in view of the management activities and controls. The group's risk management department has assessed the risk estimates made for the individual affairs with regard to risks that could very probably have a major negative impact. In summary, no material risks were ascertained which could very probably have a major negative impact on the affairs.

Compliance

Compliance Management

As a global group, SGL Carbon has particular responsibility for dealing with its employees, customers, business partners, shareholders and the public. SGL Carbon's Code of Conduct is an integral component of our management and corporate culture, and given this background it sets standards for responsible, legally compliant behavior. This includes our compliance with internal and external regulations and that ethical and sustainable principles govern our activities. We also attach great importance to observing human rights at our sites. As a result, in the SGL Carbon Code of Conduct we have undertaken to comply with the principles of the UN Global Compact.

SGL Carbon's compliance program includes the Code of Conduct as well as additional internal requirements and policies and trainings for various target groups and specific topics (see the Corporate Governance and Compliance Report, page 15). A key component is the anti-corruption program (see the section on "Anti-corruption and bribery").

The Chief Compliance Officer is responsible for SGL Carbon's compliance strategy and monitoring the structures and processes in the Compliance Management System (CMS). He reports directly to the CEO. He is supported in his work by the Group Compliance department. The organization also includes SGL Carbon's Compliance Network, which comprises regional and local compliance representatives as well as compliance representatives from the Business Units (BU) and corporate functions (see Corporate Governance and Compliance Report, page 15).

The effectiveness and efficiency of the CMS is constantly reviewed, and this enables us to react in a reasonable manner to new statutory requirements and changes in its business environment. In agreement with the Compliance Committee, each year the Group Compliance department identifies and defines any action that may be required and measurable objectives approved by the Board of Management for the subsequent year. We summarize the results and the resulting downstream activities as part of an annual review.

Regular risk assessments form part of our effective compliance management system. In so doing, we regularly reassess the topics that Group Compliance defined as being core compliance risks (antitrust law, anticorruption, export control and customs and protecting business secrets) together with the business units' management and the compliance network, and we review the suitability of the existing compliance program (see Corporate Governance and Compliance Report, page 15).

Compliance topics are regularly documented by the Local Compliance Representative (LCR) and respective representatives of the Business Unit (BU) as part of our compliance reporting process. We use semi-annual and annual LCR/BU questionnaires to confirm that the compliance program is being implemented at our local sites and within the business units. The questionnaire to the LCRs includes confirmation that our local sites around the world observe and uphold human rights. The results from the evaluation of the questionnaires are discussed with the Board of Management, as well as the Supervisory Board's Audit Committee. If required, they also form the basis for the reorientation of compliance activities.

Anti-corruption and bribery

SGL Carbon attaches great importance to its excellent relationships with customers and suppliers. We demand and promote transparent, legal processing of all of our Company's transactions. We do this to create trust and secure business relationships over the long term.

Our principles for fighting bribery and corruption are defined in our Code of Conduct, which applies throughout the entire group, in our Anti-corruption training concept and in our Policy for Gifts and Entertainment (G&E Policy). Among other items, our G&E Policy also sets out how to deal with tangible and intangible gifts. These must be in line with our policy and also correspond to our business partners' regulations. Our top-level Compliance objective also applies here - that all employees must be informed about all key policies and also uphold these.

SGL Carbon has a group-wide Business Partner Compliance Process (BPC) to monitor the risks and control of the work flows when dealing with sales agents. In 2018 the target group of distributors was added to this process. This process includes having the new business partners go through a multi-stage check prior to signing the agreement. This is also part of our internal control as part of our ICS (internal control system). In addition to new intermediaries, existing sales agents are also subject to regular reviews depending on risk category. This allows the BPC process to ensure and increase transparency when working with intermediaries. In 2018 the GMS Business Unit reworked all of its workflows for dealing with sales agents while including the BPC process. The CFM Business Unit will follow in 2019.

In view of the constantly further developing underlying statutory conditions, SGL Carbon continuously optimizes its training content and constantly identifies training requirements. As part of the regular training plan for 2018 face-to-face training sessions were conducted at selected sites as well as during regional meetings of business units and Corporate Functions. 412 employees were trained at these training sessions.

In addition to the existing face-to-face training sessions, in 2018 SGL Carbon introduced an eLearning program on anti-corruption at all of its local sites.[1] This online training session is currently aimed at all white-collar employees. To date 1,432 employees of a total 1,736 employees have completed this online training course. It was still running through to January 31, 2019 in North America. In addition, the training program has been included in the SAP Onboarding Compliance Training Catalog since July 2018, in order to provide all new employees in this target group with corresponding instruction.

Our Code of Conduct also regulates how to deal with donations to political parties and in this regard it points out our Sponsoring and Donations Policy. This governs the standard which applies throughout the group which ensures transparent dealings with sponsoring and donations and which also forbids

[1] Sites in Wackersdorf, Ried/Ort are still outstanding, as anti-corruption training was also provided at these locations in 2018 as part of the Compliance Days held there.

financial support for parties and candidates in political offices as well as members of parliament. These regulations apply to all employees of SGL Carbon, its subsidiaries, and also the members of its Board of Management (also refer to the chapter on "Corporate Citizenship", page 31).

Responsibility for the supply chain

As one of the leading companies in the industry, SGL Carbon produces and sells its products all over the world and has a wide variety of business relationships. We expect our business partners to undertake legal, ethical and sustainable behavior to the same extent as SGL Carbon for the duration of the partnership. In order to guarantee this commitment, we have introduced a Code of Conduct for Suppliers and Subcontractors (Supplier Code of Conduct). In addition to adhering to rules that govern integrity, anticorruption among suppliers and social and environmental standards, it also includes requirements for dealing with conflict materials as well as mandatory acceptance of the UN Global Compact principles.

Global Purchasing is responsible for implementing and applying the Supplier Code of Conduct that was introduced in 2015 and incorporated in SGL Carbon's general purchasing conditions. As part of the successive roll-out, the Code was issued to the most important and risk-relevant target groups which were defined based on their proportion of the annual purchasing volume. We also request from all new suppliers, who are selected by Global Purchasing, to sign the Code or to present equivalent standards of compliance.

As part of the supplier assessment that is performed annually, we assess points that correlate with delivery performance and quality, and since 2018, we also evaluate the supplier's performance with regard to legal, ethical and sustainable behavior. The results of this assessment are included in our supplier risk management, from which requirements are derived for any necessary supplier developmental activities, supplier audits, or assessments to be performed. In the case of the latter, we also began to consider compliance with environmental and social standards in 2019.

As part of the "Together for Sustainability" (TfS) initiative, a group of leading international chemicals companies, two German subsidiaries from both of SGL Carbon's business units went through an online sustainability assessment, which is repeated annually. Furthermore, the GMS Business Unit participated in an on-site TfS audit in 2016.

SGL Carbon has production facilities in a large number of countries, and delivers products to customers all over the world, which is why avoiding risks connected with trade activities and customs regulations is of major importance. These risks include limitations regarding deliverability, tax evasion, customs and other duties as well as fines and delinquencies. We aim for our compliance processes to ensure that the exchange of goods and technology and the use of services correspond to the respective internal and external requirements. This principle is reflected in the Global Trade Policy, which applies throughout the group, and also in SGL Carbon's process instructions for the preparation, optimization and execution of all trade activities, for control mechanisms and also for the management and monitoring of risks and responsibilities.

Our export executives and export control delegates are responsible for export controls in our companies and units. Our compliance program for export control and customs has been working with an IT-based compliance module since 2009. This enables the efficient monitoring and processing of export transactions. This module was fundamentally reworked in 2018 and adjusted to the latest statutory requirements. In addition, the new evaluation of the customs procedures (e.g. Authorized Economic Operator) was successfully performed.

Our export control methods are also a key component of the Compliance Risk Assessment (see Compliance, page 20). We aim to thus ensure that international treaties and national laws are upheld for international transactions and inter-company transfers. In addition, our employees must make themselves aware of the local laws and regulations on export controls and customs before embarking on any business travel.

What is more, we ensure that our employees are aware of all of the relevant export compliance regulations and that export control officers and select employees regularly undergo additional training. Binding face-to-face training sessions and workshops are held in this regard every year. During the year under review the focus was on Germany and France in particular.

Please refer to the section on Compliance on page 20 for information on SGL Carbon's anticorruption activities and on doing business in line with regulations.

Products

We have identified the subjects of product quality, the environmental impact of our products and sustainable product innovation as central factors for our business. In our opinion these aspects form the foundations for our current and long-term success.

Product quality

SGL Carbon aims to achieve a high level of customer satisfaction by delivering constant excellent product and service quality, thus securing long-term business relationships. Product quality falls under Quality Management in the BU GMS and Integrated Management System in the BU CFM. The global heads of both areas report directly to the head of their respective BU. We have established monthly reporting for local site managers and BU directors based on local and global quality performance indicators.

As only users can assess a product's true benefits, we evaluate the quality of our products based on customer feedback. Complaints offer a measurable indicator in this regard. We want to avoid these as far as possible. If complaints should still occur, the SGL Carbon aims to ensure direct, open and constructive dialogue with customers. This means that customer complaints have to be consistently worked through. This includes rectifying defects and preventing them from occurring again in future. In order to assess and improve customer satisfaction concerning our product quality we defined our KPI "Complaint costs[2]/sales" in 2018 and recorded this indicator for the first time for the BU GMS. Both of the indicators included therein relate exclusively to external customers. In 2018 the Complaint Cost/Sales KPI in the BU GMS totaled 0.08%.

We published the Cost of Poor Quality (COPQ) KPI for the BU GMS in fiscal 2017. This KPI comprises external and internal non-conformity costs (customer complaint costs, costs for scrap and write-downs, costs for reworks and extra work). However, as these indicators do not directly reflect external customers' perspective, in fiscal 2018 SGL Carbon resolved to move over to the Complaint Costs/Sales KPI. In 2018 this transition was initially performed for the BU GMS. In order to make the evaluation of performance more uniform for both BUs, in 2019 this KPI will also be used and recorded in the BU CFM.

[2]The Complaint Costs KPI does not include goodwill.

Corresponding assessments will be performed throughout the entire production process in order to ensure high product quality. This will allow any differences to be recognized and rectified at an early stage. However, company-wide high quality is based on the relevant production and business processes and systems. That is why we started to introduce a management system tailored to SGL Carbon in our production operations in 2017. This aims to standardize workflows, make systems within the organization uniform and to work out a common understanding at all of our production locations. The so-called Operations Management System (OMS) is a management system which spans the whole of SGL Carbon for optimized planning and execution with regard to costs, efficiency and reliability. In line with its principles this system unites and integrates various processes, expectations and requirements and gears our organization to successful, end-to-end management of our business. The OMS comprises six elements: Strategic Orientation and Objectives, Organizational Structure, Corporate Culture, Performance Management, Shopfloor Management and Methods and Tools.

OMS is being introduced at all of SGL Caron's 34 locations step by step and in parallel. After the pilot phase was concluded in 2018, all of our locations around the world are now being subject to a maturity assessment for the production systems and processes. We want to identify strengths from which other locations can learn, and also uncover potential starting points for improvements.

Almost all of the sites in the SGL Group are already integrated in the respective BU's global quality management system and certified according to the ISO 9001 Quality Management standard, which supports the system and organizational quality. In addition, in line with specific requirements there are also certifications according to ISO 14001 (Environmental Management), ISO 50001 (Energy Management), OHSAS 18001 (Occupational Health and Safety Assessment Series), AS 9100 (Quality Management for aerospace industry) and IATF 16949 (Quality Management in the automotive industry).

Environmental impact of products

Global megatrends for mobility, energy and digitization are impacting SGL Carbon's markets. In this regard, sustainability plays a key role - right now and also in the foreseeable future. The potential positive impact on the environment that could result from our products is regarded as being a key driving force on many of the markets we supply. This includes the use of composites in wind turbines to generate renewable energy, or also the increasing use of our battery and fuel cell solutions as part of future energy and mobility concepts. Many of our products have the potential to support the development of low CO_2 technologies (for example for photovoltaic, LED lighting, lightweight construction, heat and energy efficiency). In the mobility sector our light composite solutions help to cut energy requirements in the automotive and aviation industries, and can thus help to reduce CO_2 emissions overall.

Our Innovation Team is responsible for these activities. This Committee spans multiple departments and comprises members of the management of both BUs as well as Central Innovation. It reports to the Board of Management.

SGL Carbon has a database with the most important data for the innovation projects and a market and technology-based evaluation method in the form of a portfolio analysis. In 2018 we added environmental impact to this evaluation to give it an additional dimension. This includes estimates concerning the impact of production and product use on the climate and also recyclability, material efficiency and the use of hazardous substances.

In the future we want to further structure this portfolio analysis method for reviewing relevant sustainability aspects along the entire value chain. Our aim is to include the findings we obtain in our innovation processes to support our growth strategy. That is why we worked out a possible approach for a systematic method together with a sustainability advisor in 2018. Our joint activities in the year under review included developing relevant milestones that are to be pursued in multi-departmental workshops in 2019.

In addition, at present we are supporting a scientific study over the 2018-2019 period, which aims to illustrate the CO_2 balance of composite materials across the entire life cycle for various scenarios in connection with our portfolio of product and innovation projects. SGL Carbon is also active in FOREL (Forschungs- und Technologiezentrum für ressourcen-effiziente Leichtbaustrukturen der Elektromobilität - Research and Technology Center for Resource Efficient Lightweight Structures for Electromobility), an industrial group which discusses and develops sustainability issues such as recycling and life cycle assessment (LCA) for lightweight components in electromobility.

Sustainable product innovation

As part of the assessment of sustainability issues in our existing markets, we are also determined to discover new opportunities to drive our innovations and future growth. This is reflected in many innovative projects including the use of recycled carbon fiber materials or developing electromobility solutions.

In 2018 the TOSCAA project was concluded. This project investigated the potential for using recycled carbon fibers as an overmoulding material. In order to intensify our efforts to use recycled materials we launched the project CAReBo, which aims to review the feasibility of realizing a modular battery tray structure made of recycled secondary carbon fiber materials for electric vehicles. In addition, we are also a partner in the MAI CC4 CaRinA project, which aims to develop a clear and easily accessible, cost-specific performance spectrum for recycled secondary carbon fiber materials.

In addition, we are also a partner in the development of a sustainable low-energy process to produce safe drinking water using microbial desalination cells (MDC) as a pre-treatment for reverse osmosis. The EU Horizon 2020 project MIDES aims to develop the world's largest demonstrator of innovative MDC technology. As part of the OEKOBAT project we are investigating the replacement of binder materials, which are required when graphite is used in lithium-ion batteries for next-generation water-based and thus environmentally-friendly energy systems.

In order to obtain a holistic understanding of our sustainability impact, a systematic product portfolio assessment will be used in future. This will allow us to identify strengths and also to uncover possible starting points for changes.

Environment, Health & Safety Affairs

Responsibility for the environment as well as our employees' health and safety is a key component of SGL Carbon's corporate culture. High standards in these areas are prerequisites for our Company's sustainable economic success. In our Code of Conduct and the EHSA Policy (Environment, Health & Safety Affairs) which is being applied at all of our locations around the world since 2015, we undertake to create secure and healthy working conditions for our employees, and to minimize the impact our business activities have on the environment. A Code of Conduct for Suppliers and Subcontractors has also been in place since 2015. According to this Code they are obliged to behave legally, ethically and sustainably.

One of the key areas for cooperation between SGL Carbon and our suppliers and customers is in exchanging information. This aims to minimize risks when using chemical substances. In an internal standardized global system, we create relevant product information such as safety data sheets which we provide to our customers. As a result, we comply with the requirements of the EU regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Our central corporate EHSA organization coordinates all groupwide activities for environmental protection and health and safety at work, sets uniform standards and audits the progress in cooperation with local EHSA representatives. It reports to SGL Carbon's Board of Management once per quarter, informing it of the current developments.

Energy consumption and CO_2 emissions

The manufacturing of carbon fibers and specialty graphites requires a large amount of energy due to the high-temperature technologies used. The bulk of SGL Carbon's energy consumption is due to creating heat and also includes the thermal cleaning of emissions. As a company using a high amount of energy we have special responsibilities with regard to climate change and the environment, as the consumption of energy is also linked to emissions of greenhouse gases - in particular CO_2. SGL Carbon's CO_2 emissions are primarily scope-1 emissions which are created during combustion processes, and scope-2 emissions which are due to our electricity consumption. We also constantly make our processes more energy efficient for economic reasons. These account for a high proportion of production cost and, as a result, price fluctuations for energy costs can have both a positive and negative impact on earnings.

The individual production locations and business units are responsible for concrete implementation of the activities and projects. For this purpose, each location has an energy officer, who reports to the location's managers or management at least once per year. The EHSA Steering Committee is responsible for controlling and monitoring energy management at all locations. In this regard the level of target attainment is reported to this committee every quarter. The EHSA Steering Committee is composed of the heads of the Operations areas in the various business units and is managed by SGL Carbon's CEO.

The top-level target for energy management is to use all types of energy efficiently and to thus ensure constant improvements. In so doing, SGL Carbon is focused on energy-efficient equipment and processes. We have included this in our EHSA energy management policy and our Code of Conduct. In addition, we offered training activities at the ISO 50001 certified locations and communicated energy management within the Company. We want to ensure that our employees are also energy aware and to develop competences that they can actively use to reduce energy consumption.

Since December 2015 all of SGL Carbon's European production locations have an ISO 50001-certified energy management system. Certification was issued by the testing companies DQS and DEKRA. The non-European locations in Moses Lake, Gardena and Arkadelphia have also been certified to ISO 50001.

The ISO 50001-certified locations evaluate implementation in the annual management review and in regular internal and external audits. In 2018 a total of 15 internal audits for the energy management system were performed by correspondingly trained internal auditors from other SGL locations. External audits are performed at least once every three years by an accredited certification institution.

We undertake to cut our global energy consumption based on adjusted revenues by 1% each year, and by 10% through to 2027 compared to the comparable figure from 2017. We aim to comply with the heightened requirements since ISO 50003 came into force and also the requirements for global, efficient energy management. In this regard specific KPIs to measure energy consumption have been defined for all of our global production locations and also activities and projects to increase energy efficiency.

SGL Carbon also works together with external partners as part of its energy management. An example is the energy efficient networks at our location in Bonn. These are based on an initiative by the federal government, and serve the voluntary, systematic, and target-oriented exchange of experience among companies from one region or industry. In Meitingen in 2017, SGL Carbon brought an energy project to life with the local municipality and additional partners. In so doing, we undertook to provide a local new housing area with low-temperature waste heat for their home heating free of charge for 20 years. This waste heat is produced in the plant from cooling equipment and high-temperature furnaces. Thanks to this project, the local community can avoid emissions, and thus saves using primary energy by using the waste heat instead.

In 2018 Corporate EHSA invited all of SGL Carbon's European energy officers to a two-day best practice workshop at the Meitingen facility. This served to exchange information and efficiently implement energy-saving projects and activities. It focused on reports about the projects implemented at the locations over the past few years and the results obtained. Finally, the presentations and evaluations of the activities were provided in the Company's network, so that every location can benefit from these and take over additional, efficient activities from other locations.

In addition, we continued our activities to reduce CO_2 emissions in 2018. This includes, for example, procuring energy from regenerative sources at our locations in Wackersdorf, Ort and Ried.

Environmental data [1]	2018	2017	Change
Energy consumption			
in gigawatt hours (GWh)	1,441	1,310	10%
thereof oil and gas	500	466	7%
thereof electricity	646	546	18%
thereof steam	296	298	–1%
in relation to economic output (MWh per €1,000 in sales revenue) [2]	1.37	1.45	–5%
CO_2-emissions [3]			
in thousands of tons (kt)	406	368	10%
thereof direct	93	86	8%
thereof indirect	313	282	11%
in relation to economic output (t per €1,000 in sales revenue) [2]	0.39	0.41	–6%
Water requirement			
Total (millions m^3)	9.24	9.08	2%
thereof from Company wells	62%	49%	26%
thereof from rivers	20%	31%	–35%
thereof from public water supply	18%	20%	–11%
in relation to economic output (m^3 per €1,000 in sales revenue) [2]	8.8	10.0	–12%
Waste volume			
in thousands of tons (kt)	29.7	19.2	55%
thereof hazardous waste	3.6	3.2	13%
in relation to economic output (kg per €1,000 in sales revenue) [2]	28.3	21.2	33%

1) Data include pro-rata consolidated entities
2) Adjusted sales revenue (excluding price and currency effects)
3) The calculation of CO_2-emissions is based on „UK Government GHG Conversion Factors for Company Reporting" of the Department for Business, Energy & Industrial Strategy, Gov. UK for direct emissions (Scope 1) and steam (Scope 2) as well as on „EMISSION FACTORS 2018" of the International Energy Agency (IEA) for indirect emissions (Scope 2)

We were thus able to reduce energy consumption and also CO_2 emissions based on adjusted sales in 2018.

Health and safety at work and health protection

SGL Carbon relies on having a highly performing workforce for its entrepreneurial success. We regard protecting our employees' health and safety as being an ethical obligation with a high entrepreneurial value. We have set out binding requirements for all of our employees in our Code of Business Conduct and Ethics and our EHSA Policy which applies worldwide. We also attach great value to the corresponding standards at our business partners, and consider health and safety at work aspects when selecting suppliers. The code of conduct for suppliers and subcontractors stipulates that these must ensure their employees' health and safety at all of their workstations, and set up a management system for constant improvement.

The EHSA Steering Committee meets four times per year, and is responsible for managing and supervising the health and safety at work activities (see Energy consumption and CO_2 emissions). In addition, exchanges take place between our global Corporate EHSA unit and local EHS managers on top level issues in our global EHSA network. This aims to ensure that all of the statutory regulations are upheld and that corresponding systems are put in place at the respective locations.

SGL Carbon's target is consistently preventing work-related injuries and illnesses. We comply with the relevant national acts of law, European regulations and internal policies in all of our production processes. It is the responsibility of the Company's management and each individual employee to ensure safe working conditions. The EHSA company unit supports the business units in setting up management systems for health and safety at work, and further developing these. The respective business units and site management are responsible for implementing these.

SGL Carbon uses various incentive systems to actively include its employees in preventing accidents, and considers their ideas for combating the risk of accidents. For example, the issue of health and safety at work is anchored in the annual targets at the Meitingen facility. This location runs a campaign once per year. It launched the Vision Zero prevention campaign in 2018. This is an initiative by the German employer's accident insurance associations and focuses on preventing accidents. As part of this campaign, employees evaluate their own team's performance with regard to factors such as leading by example, recognizing hazards and equipment safety. Linking in to this they then define and implement improvement activities.

If an accident at work does happen, this is recorded in the groupwide Incident Management System. SGL Carbon uses a systematic process to investigate incidents, derive proposals for improvement and in so doing it takes into account which solutions have already been effective in preventing accidents. Once per month the EHSA organization issues a safety report and relevant statistics to the Board of Management, managers of the business units, and the locations as well as the EHS managers. This allows us to review compliance with the EHSA policy, and in the case of negative developments to implement counter-measures immediately.

A key activity in attaining the objectives at SGL Carbon is the Safety Pledge Program. In 2015 this was initially introduced in the USA and continued over the following two years. It has been in place in China since 2016. During the period under review, 69% of production employees participated in this initiative. At locations with a higher frequency of accidents (Lavradio, Ort, Chedde as well as the joint venture Brembo SGL Ceramic Brakes GmbH in Meitingen) we also performed individual initiatives to prevent accidents with various activities at the start of 2018.

In addition, SGL Carbon regularly holds employee training sessions. Executives also must ensure that the employees in their area of responsibility receive training and support for safety issues. We thus aim to increase our employees' awareness of safety relevant issues, and actively prevent accidents. At present, no information is collected on the number of training sessions and the number of participants.

The aim is also to permanently improve the existing safety precautions. In 2018 the target frequency for accidents was 3.61 accidents per million working hours after the integration of the former joint venture locations of Benteler SGL. This target was reached with an actual result of 3.45. As a result, accident frequency was once again on a low level. In addition, the severity of accidents was also lower year-on-year, and this figure was also lower than the target.

Process safety

Events such as accidents, fires or explosions could lead to longer periods of production downtime and lower quality at SGL Carbon and cause substantial damage to people and the environment. These could result in entitlements to compensation for damages and the rectification of damage. We thus pursue the target of establishing safe production processes and constantly improving our safety culture.

As part of its entrepreneurial duty of care, SGL Carbon has a global guideline and a Process Safety Management Policy in place since 2017. The system includes various elements such as process safety analyses, investigating accidents and the control of counter-measures. Process safety is also an issue at the quarterly meetings of the EHSA Steering Committee (see Energy consumption and CO_2 emissions). This is coupled with an incident management system for health and safety at work and process security (see Health and Safety at Work) in which we precisely classify every accident. This identifies whether the incident was due to problems with workplace safety or process safety.

Since 2002 SGL Carbon has been using a group-wide standardized Risk Management System (RMS) in order to minimize risks in its production processes. In doing so we analyze the extent of and hazard potential from crises and calculate their economic consequences such as the costs of rectifying environmental damage or lost sales as a result of production downtime. We implemented a total of eleven activities from 2017 to 2018 in order to improve process safety. These were mostly technical activities for repairs and maintenance, and also organizational improvements.

SGL Carbon performs annual audits in cooperation with the insurance company, which include a safety analysis of many processes and systems and simulation of stress scenarios. The results are evaluated and documented. If necessary, we put concrete activity plans in place on this basis. A total of 13 locations were audited in 2018. Ten of these facilities were awarded the Highly Protected Risk status - the highest possible safety level. In 2018 a total of eight accidents and serious near misses connected with process safety were registered at all of the facilities around the world.

Resource management (waste and water)

As part of SGL Carbon's business activities, waste products from carbon and residual materials are produced. Both carbon and also the residual materials produced in most of the production processes are highly recyclable. We primarily use water to cool production equipment.

At all of its locations worldwide, SGL Carbon undertakes to comply with all of the applicable statutory requirements and to uphold effective management processes and continuous performance improvements for its management of resources. We pursue the objective of using resources efficiently, and avoiding impacting the environment as far as possible. We thus aim to constantly reduce water consumption and the production of waste. Our principle for waste avoidance is: avoidance is better than recycling and recycling is better than disposal. Waste that cannot be prevented can often be reused in other products or at other locations. For example, recycled carbon fibers can be used as fleece textiles for automotive production. SGL Carbon uses water carefully, and uses secondary circuits and cooling equipment wherever this makes economic sense. Water that does not come directly into contact with production is not contaminated, and can be discharged into rivers after use in some cases.

SGL Carbon has set out how it deals with resources in the policy on EHSA training. The Code of Conduct for suppliers and subcontractors also includes information on waste. It obliges us and our suppliers to obtain the requisite licenses, to recycle, and to avoid waste and emissions of hazardous substances into the environment. Once per month, together with the local EHS officer, the EHSA organization collects data at all of the facilities which shows the use of resources and generation of waste. Water consumption is stated for each water source, and a distinction is made between hazardous and nonhazardous waste.

We were thus able to reduce water consumption based on adjusted sales in 2018.

The increase in the quantity of waste based on adjusted sales in 2018 was caused by extensive construction work. After adjustment for these non-recurring items the quantity of waste to adjusted sales was slightly higher than the previous year's figure.

Employee affairs

SGL Carbon has a total of 5,031[3] employees at more than 30 facilities in Europe, Asia and America. Their dedication, competence and performance are critical factors for the Company's success. As a result, we aim to acquire the best talent for our Company, and to specifically further develop its employees and enhance their loyalty to the Company. In addition to the large number of opportunities for training and continuing professional development, we also employ a varied, fair and respectful working and management culture. The Company offers all its employees the possibility to develop their full potential. This is set out in the Code of Conduct as well as the SGL Competency Model.

At SGL Carbon, the role of Human Resources is understood according to the so-called HR-Business Partner Model, that is to say as a strategic partner for the business units and an advisor for executives. HR activities span inclusion in strategic entrepreneurial decisions through to operational HR processes, which is reflected, in organizational terms, in the fact that there are HR Business Partners at various levels - globally for the business units, the central R&D department, and the Corporate Functions, and locally for the individual plants.

HR management with this structure is responsible for a large number of different tasks:

- Managing HR processes such as hiring and personnel administration, including questions concerning labor law
- Qualifying, coaching and training management and employees
- Defining remuneration programs for senior management based on market standards and performance
- Coordinating international employee assignments
- HR-related reporting to the Company's management
- Contact for the Company's management for questions of personnel planning and covering these requirements
- Positioning SGL Carbon as an attractive employer on the market
- Efficiently managing the HR impact of change processes

In addition to efficiency, customer proximity and service quality are increasingly becoming central criteria when structuring and implementing HR processes. Given this background, SGL Carbon will introduce a comprehensive, cloud-based IT solution for these processes from 2019. The Board of Management passed corresponding resolutions in 2018.

HR reports regularly to the Board of Management. The Head of HR meets personally with the CEO once every two weeks and once per month with the CFO. As a result, top management is very aware of HR issues.

SGL Carbon keeps a keen eye on potential HR risks. This also includes the strategic importance of recruiting resulting from the increasing dearth of specialists. This also applies to the Group's efforts to increase employee loyalty serving to combat high

[3] In contrast to previous reporting practice, this figure also includes temporary employees. The following section recalculates the comparable figures for 2017 on this basis where applicable.

employee fluctuation, and thus also keeping expertise in the Company. The Group's forward looking competency management also plays a key role. This identifies the competencies which will be required from senior and middle management in future and promotes these. In addition, risks can also result from employees' changing requirements and wishes. We use an external advisor to record these for Germany and also globally using the employee survey, performed for the first time in 2018.

Diversity and equal opportunities

The variety of its workforce constitutes a strategic advantage for SGL Carbon: The employees' different competencies and perspectives reinforce the Company's ability to innovate, and enhance its position as an attractive employer. This variety helps us to beat the competition for highly qualified specialists. It also allows us to combat the challenges resulting from demographic change.

SGL Carbon aims to establish a non-discriminatory work and management culture in which all employees contribute their personal and specialist expertise, and make sure they have equal opportunities for career success and fair pay - irrespective of their sex, age, origins, religion, sexual orientation or health issues. Our Code of Conduct is a key pillar in our commitment to diversity and equal opportunities. In our Code of Conduct, we back a diverse and integrated working environment, characterized by trust, openness and respect. Disadvantages as a result of age, religion or origins will not be tolerated. "Valuing diversity" is also anchored in the SGL Competency Model as one of six components. The model includes vital, globally valid behavior requirements for middle and senior management. We always use local collective agreement systems or similar systems for remuneration, which is why non-discriminatory remuneration can be assumed. In areas not covered by collective agreements, the recognized analytical job evaluation method according to Hay is applied. We took the new statutory requirements from the Entgelttransparenzgesetz (German Remuneration Transparency Act) into account in 2018. In cooperation with the management consultants hkp///Group, the Company's audit procedure was implemented as part of the remuneration transparency act for salaries not based on the collective agreement. In summary, it was not possible to ascertain any statistically significant differences in remuneration between male and female employees. If required, individual cases were examined as part of the upcoming global salary adjustment process for SGL's management.

In order to promote international exchange and knowledge transfer within the Company, SGL Carbon deploys single employees to different locations worldwide. These international assignments are generally from one to five years. In 2018 the Group employed expatriates in China, Germany, Portugal and the USA.

Percentage of women	2018	2017
Total workforce	18%	17%
thereof Europe	18%	17%
thereof North America	19%	16%
thereof Asia	18%	19%
Senior management	19%	14%
Middle management	17%	16%
Talent pool	29%	23%

Age structure	2018	2017
< 30 years	19%	21%
30 to 50 years	53%	51%
> 50 years	28%	28%

Internationality	2018	2017
Total workforce	5,031	4,732
thereof Germany	2,271	2,161
thereof rest of Europe	1,448	1,436
thereof North America	824	704
thereof Asia	488	431
Number of expatriates	6	8

Employability and development

In competition for the best talent, top-quality for training and continuing professional development is of key importance. This not only helps to acquire and further develop junior staff, it is also the key to enhance loyalty to the Company for experienced employees and to retain their knowledge in the Company for its long-term success.

Our aim is to maintain our employees' employability and to promote their professional and personal development. Consistent personnel development is a fixed part of the Company's philosophy. It reinforces the Company's competitive advantage and responsibility for its employees.

Vocational training has always played an important role at SGL Carbon. The Company's vocational training offering spans twelve technical, commercial and IT professions in Germany as well as five dual study programs. In Meitingen in 2018 two (female) apprentices received an award as being the best in their profession in each case in the region covered by the chamber, in Bonn one apprentice was the best in the whole of Germany in the field of materials testing - chemicals.

In addition, during the year under review SGL Carbon was honored for the first time by the international research and consulting network “Great Place to Work®” with the certificate “Great Start”, and now ranks among “Germany’s best training companies”. The certification process equally considered feedback from apprentices in Germany, which was collected in parallel to the global employee survey using a separate questionnaire, and also a detailed evaluation of the Company’s operational training concept (Culture Review) in Germany by Great Place to Work®.

In order to enthuse school pupils for technical professions, SGL Carbon has been a member of the Initiative Junge Forscherinnen und Forscher e.V. since 2010 as one of its founding members. As was the case in the previous year we supported this association to the tune of €10,000 in 2018 and also provided a great deal of personnel support. For example, a manager from our central R&D department was appointed to the association’s board in April 2018.

SGL Carbon offers its employees opportunities for their personal and professional development throughout their entire career. This includes training and continued professional development, expanding tasks and responsibilities within a specific position, as well as changes of position. In regular talks, managers discuss concrete individual development activities such as training sessions, coaching or special tasks with employees.

In addition to local training offerings at individual locations, we enable specialists and managers to participate in the Corporate Training Framework. This interdisciplinary training offering passes on knowledge for communication, people management, project management, sales proficiency and self-management (for example resilience).

In its Leadership@Work program SGL Carbon specifically prepares leaders and experts for further-reaching management tasks. The program is the key element in SGL Carbon's internal management development activities. It is characterized by the systematic use of self-reflection and feedback - for example from the use of 360° feedback, based on the SGL Competency Model. In addition, this series is very close to the real challenges faced in management work. This is achieved using so-called action-learning elements, however in particular also by using mentors. These are select top managers at SGL Carbon which support the groups as co-trainers and coaches. More than 1,300 employees have already participated since Leadership@Work was introduced in 2001.

The activities are supplemented with regular potential analyses. As part of the annual talent management process, SGL Carbon identifies and promotes talented staff. In so doing, the employees’ management potential is assessed. In the second instance, we also evaluate potential for a specialist career. If necessary, the HR managers also discuss concrete target positions with the respective managers and employees, and plan corresponding development purposes.

A framework concept for expert careers was developed in 2017, in particular for the target group of experts who do not aim for a traditional management career. We launched our pilot project in part of our central R&D in 2018, its implementation will be continued in 2019.

Apprenticeships and dual study programs	2018	2017
Total apprentices	99	102
– Site Meitingen	60%	64%
– Site Bonn	34%	30%
– Site Limburg	5%	4%
– Site Willich	1%	2%
Number of professions for apprentices	12	13
Number of apprentices taken over after training completion	25	31
Number of dual study programs	5	6

Personnel development and talent management	2018	2017
Number of participants in the training portfolio “Corporate Training Framework”	156	175
Number of participants in the management development program “Leadership@Work”	50	20
Ghost rate in the talent pool (percentage of talent with no job change for six years)	6%	7%
Talents who left the Company	7%	6%

Attractiveness as an employer

It is becoming increasingly important for companies to be perceived as an attractive employer. This is due to factors including the lack of specialist staff. This is making it increasingly difficult to hire suitable employees. A wide variety of factors play a role in making an employer attractive. These include interesting opportunities for entering the company and careers, attractive remuneration, family-friendly working hours, as well as an appreciative leadership and corporate culture.

SGL Carbon wants to maintain its attractiveness as an employer and expand this if possible, in order to acquire specialists and talents and also to bind these employees to the Company over the long term. This was one of the ideas behind performing a group-wide employee survey for the first time in 2018. The global participation rate was 54%, which can be interpreted as being a solid basis for constructive dialog with employees in view of the reorganization which the Company has gone through in the past few years.

The content-wise results of the employee survey showed a varied profile of strengths and weaknesses. SGL Carbon's strengths from an employee perspective include, for example, the pride in the Company, its activities and products, as well as its salaries being perceived as fair and reasonable. Examples of the topics requiring improvement include team spirit and individual aspects of the perceived management behavior. Following communication of the overall results at SGL by the Board of Management to all of the employees, local information on the location-specific results was passed on at the individual sites. The latter also formed the starting point for the follow-up processes of the employee survey, which starts with brainstorming workshops and also includes project groups on the individual initiatives through to implementation of the proposed improvements. In addition to the locally defined action areas, the Board of Management has defined a "Culture of feedback and recognition" as a top-level issue at the Company. Regular employee surveys are to be held at the latest in 2021 and thereafter in a multi-year rhythm to record the progress in further developing the SGL Culture.

We have enjoyed a successful presence with our own brand as an employer already since 2008. During the year under review, implementation of the new corporate brand meant that we had to fundamentally redesign our employer brand as well. After the concept-based principles were worked out in 2018, we have been using the new employer brand, which is closely geared to the new corporate brand with its three SGL Values (convince through performance; be open-minded, create momentum) in our external and internal communication since the first quarter of 2019.

SGL Carbon uses the slogan "Let's co-create smart solutions" to position itself when looking for new employees - in job adverts, on its own careers page, at fairs and in brochures. As part of its university marketing, we specifically address universities and colleges and offer students various opportunities for combining academic theory with business practice - including internships, working as a student, and theses. As a long-standing member of the "Fair Company" employer initiative, we undertake to offer students top-quality learning at fair conditions.

Our central research and development department Central Innovation plays a key role in contact between our Company and universities. During the period under review, this department employed a total of 61 students from eleven different countries, and around 28% of this figure were female. In addition, this department supported 37 bachelor and master's theses as well as dissertations in 2018.

As part of our recruiting, in 2018 we further expanded our contacts with potential applicants in social networks that we started in the previous year (Active Sourcing). During the year under review this recruiting channel was used for a total of 28 specialist and management positions, primarily in Europe. In so doing, we approached more than 350 potential candidates, of which 45% reacted to our contact.

The recruiting process is already mostly standardized in Germany, the USA and China. The medium-term target is to standardize the process all over the world as far as this is possible and reasonable considering the legal and cultural framework conditions in the individual countries, and this will be pursued from 2019 as part of the cloud-based IT solution being implemented.

In addition to recruitment a further key issue is that the remuneration system is structured so that this is performance-oriented and in line with the market, and consistently geared to the corporate strategy. During the year under review we assessed the short-term incentive plans for SGL's management (MG 1-4). As a consequence of this assessment, we will no longer agree personal bonus-relevant objectives from 2019. This approach aims to reinforce cooperation, exchanges and a common understanding of performance among executives, colleagues and employees. We offer our employees in Germany a company pension scheme as a voluntary component. This offers additional financial protection for the duration of their pension.

Offers by the Company to make it easier to combine professional and private life are an additional activity to remain competitive in an international environment, reinforcing our attractiveness as an employer. In Germany, we concluded the overall works agreement (Gesamtbetriebsvereinbarung) for Alternating Teleworking ("Alternierende Telearbeit") in 2017 after a successful pilot project in previous years. This agreement allows employees to work from home for up to 40% of their working hours. Written agreements in this regard as stipulated in the overall works agreement were concluded with a total of 57 employees by the end of 2018.

In particularly challenging professional or private situations, SGL employees in Germany can also benefit from external advice. The “Employee Assistance Program” (EAP) offers free, and if requested anonymous help with issues such as caring for dependents, childcare, finances, careers and health, 24/7. Employees can use this service in person, by phone or online.

With regard to company healthcare management, employees in Germany can use various number of offerings decentrally, i.e. at an individual plant level. In Meitingen several corresponding events and activities were held during the year under review. In addition to various activities for sport, fitness and nutrition we also offered, for example, heart rate variability measurement, stop smoking programs, flu vaccinations and mobile blood donations. In Bonn we offered ergonomics advice at our office workstations, seminars on stress management and courses on dealing with shift work in a healthy way.

Number of staff	2018	2017
Number of employees	5,031	4,732
Number of new hires (worldwide) [1]	439	303
– thereof men	77%	82%
– thereof women	23%	18%
Fluctuation rate (worldwide) [2]	8.5%	8.5%
– Europe	8.3%	6.7%
– North America	11.8%	14.8%
– Asia	4.3%	10.8%

1) Exclusively includes “real” new hires for employees with non-limited term contracts, i.e. not taking over temporary employees or removing limited terms on employment contracts.
2) Based on the average headcount, includes employees leaving the Company voluntarily and involuntarily.

Part-time employment and reconciliation of work and family	2018	2017
Percentage of part-time employees in Germany [1]	4.2%	4.6%
Male part-time employees (Germany) [1]	1.3%	1.4%
Female part-time employees (Germany) [1]	18.0%	19.1%
Number of employees who used the advice service (EAP) [2]	2.1%	2.4%

1) Based on a balance sheet date of 12/31/2018 excluding marginal employment employees, students and temporary workers.
2) The usage rate for 2017 include discontinued operations.

Corporate citizenship[4]

As a so-called corporate citizen and a company acting responsibly, corporate citizenship is a key issue for SGL Carbon. In so doing, we want to make a particular contribution to the local environment for our facilities, and that is why we support, in particular, projects that have a local or thematic link to our Company. Sponsoring, donations and active support for our employees form a key part of our charitable activities.

SGL Carbon’s entire corporate citizenship is based on our Sponsoring and Donations policy, revised in 2017. This sets the group-wide standard and is binding for all of the employees at our Company and its subsidiaries, for business partners, shareholders and the members of our Board of Management. We aim to use this to ensure that our selection and support of projects is transparent and follows uniform regulations. Accordingly, we focus on, for example, charitable institutions, initiatives and projects that serve to improve quality of life.

The management of the respective local site can decide on supporting specific projects, initiatives, institutions or associations for up to an individual amount of €5,000. If the amount to be sponsored or donated exceeds this amount, the Board of Management must provide its approval. In addition, the Corporate Communications and Marketing department must also be informed. The policy also regulates the concrete criteria for the award. This is coupled with instructions on the operational implementation of donation projects for the employees on location. Proper implementation of the policy is reviewed with the help of an annual survey of CSR activities. As part of this, for example, expenses for CSR activities at all of the Company’s locations are systematically recorded, reviewed and summarized in an internal report. The Corporate Communications and Marketing department is responsible for performing

4 We report voluntarily on the subject of local communities. The chapter on Corporate Citizenship, which presents this subject, does not form part of the separate Non-financial Group Report.

and monitoring the sponsoring/donation activities. No violations of the policy were ascertained in the year under review.

SGL Carbon's corporate citizenship is characterized by its great variety. This is also due to the wide variety of languages and cultures at our production facilities in Europe, North America and in Asia. However, these various activities always share the personal commitment of our local employees. Their wide variety of commitment spans many areas - from education through to promoting the local economy or supporting sporting and cultural establishments.

In 2018 around €60,000 was donated to more than 80 projects. The primary focus at more than 50% was on social activities, followed by education (35%) and sports (12%).

As in the past, SGL Carbon also focused on promoting science. These activities were controlled by the group's global research department Central Innovation. We award a number of prizes to provide scientists with incentives and to promote the discovery of new applications for carbon. During the period under review, the SGL Award was issued for the best thesis at the faculty of engineering at the Technical University of Munich and a prize for the Nano School Competition held by Clusters Nano Technology in the Bavarian Initiative for New Materials. In addition, representatives from our Company volunteered in juries to select winners, for example for the CCeV study prizes or the prize board of the Deutsche Gesellschaft für Materialkunde.

As a co-founder of the "Initiative Junge Forscherinnen und Forscher e.V." (IJF – Initiative for young researchers), SGL Carbon also offers comprehensive support for scientific education – from nursery schools through to universities. In 2018, SGL employees again supported the initiative with donations and active participation in the form of excursions. Promoting university education is also a key issue for us. For example, last year we once again supported different universities, for example the Technical University in Munich and the Technical University in Dresden.

SGL Carbon in the Capital Markets

During the past year, SGL Carbon shares did not manage to escape the stock market downturn unscathed and closed the year at €6.10

The global stock market trend was very volatile in 2018. All of the major indices suffered noticeable losses, in particular due to political factors such as the ongoing trade war between the US and China, the increasing probability of a hard Brexit, and the Italian budgetary crisis. In addition to the political factors, a moderate slowdown of the global economy could also be felt, particularly in the stock markets. The IMF lowered its growth forecast for the global economy by 0.2 percentage points to 3.7% in October. Meanwhile, the OECD predicted global economic growth of 3.0% for 2018, and the ifo World Economic Climate Index signaled a slowdown of the global economy for the third time in a row. Although the US Federal Reserve (FED) raised interest rates several times by small increments in 2018, the European Central Bank (ECB) continued to pursue a looser monetary policy, which may well have saved the European stock exchanges from an even larger setback.

The DAX, Germany's leading index, got off to a good start in 2018, reaching its annual high of 13,559 points right away on January 23. The first sell-off, which began in February, was temporarily stopped at the end of March, with the leading index recovering to 13,169 points by the middle of May. Starting at the end of May, the DAX recommenced its downward trend, consistently reaching new lows. The DAX reached its annual low of 10,381 points on the second last day of trading in 2018. The index closed the year at 10,558 points on December 28, corresponding to a decrease of just under 18% – the threshold of a bear market. The reasons for the index's poor performance included the slowdown in the economic boom since the beginning of the year and the increasing cyclical risks of foreign markets, which affected the automotive industry in particular. As a result, the ifo Institute considerably lowered its growth expectations for 2018 to only 1.5%. In March, that figure was still at 2.6%. Due to the economic slowdown in Germany, but especially in the EU as a whole, the ECB held out the prospects of not to raise interest rates until the end of 2019. Should the overall economic climate deteriorate even further, a rate hike may not take place until the beginning of 2020, with interest rates thus remaining at 0% for the time being.

The MDAX mid-cap index also fell by 18% during the past year, while the SDAX small-cap index – which includes the shares of SGL Carbon – suffered a slightly sharper decline of 20%.

Key figures of SGL Carbon SE shares	2018	2017
Number of shares at year-end	122,341,478	122,341,478
High (€) [1]	13.37	14.42
Low (€) [1]	5.99	7.89
Closing price at year-end (€)	6.10	11.39
Market capitalization at year-end (€m)	745.7	1,393.5
Average daily turnover in Xetra trading (number of shares)	282,614	425,342
Free float at year-end (%)	approx. 46	approx. 46
Earnings per share (€) (basic)	0.34	1.14

Just like the DAX, the Dow Jones got off to a good start in 2018 (increasing by 5.3% in January), but soon lost nearly all it had gained (decreasing by 4.4% in February). Unlike the DAX, the Dow Jones initially traded sideways. On March 23, the index reached its temporary low for the year of 23,533 points. Starting at the beginning of July, the Dow Jones commenced an upward trend that culminated in an annual high of 26,828 points on October 3. The key American index was also gripped by the sell atmosphere that already prevailed on the market, however, and lost 12.5% between the beginning of October and the end of the year. Overall, the Dow Jones lost 6.0% by December 31, closing the year at 22,878 points. Interest rates in the US, at least, appeared to normalize. The FED raised interest rates four times during the past year, with rates currently ranging between 2.25% and 2.5%. The IMF predicted growth of 2.9% for the US in 2018.

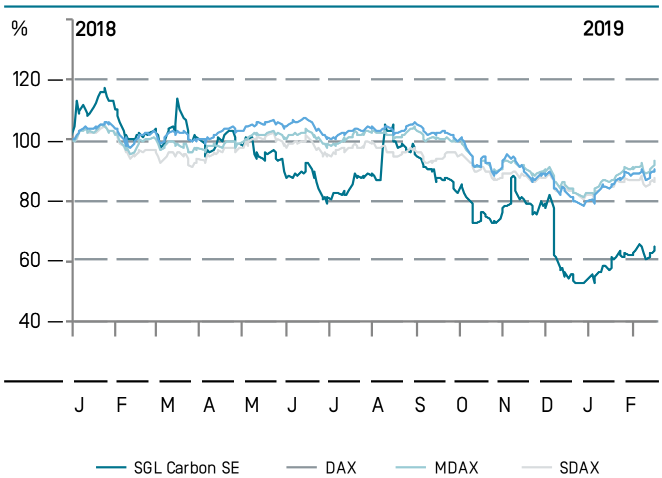
Given the tightening of financial regulations to curb shadow banking, and its trade disputes with the US, China's growth slowed to the lowest level seen in almost three decades, falling to 6.6% in 2018. The drop in growth also reflects weaker exports and investment restraint. The IMF expects the slowdown to continue in 2019.

Following a solid start to the year, the EUR/USD rate hovered between 1.2200 and 1.2400 from February until mid-April. Beginning in mid-April, the euro depreciated sharply against the dollar, falling by 6.7% by the end of May. The euro reached its annual low of 1.1218 against the dollar on November 12. Overall, the euro lost 4.9% against the dollar in 2018, ending the year at a rate of 1.1467. One reason for the high demand for the dollar and its resulting appreciation was the four interest rate hikes introduced by the FED during the past year.

The oil price trend was also very volatile in 2018, with the price of a barrel (159 liters) of Brent increasing by 29% from January to October and reaching an annual high of USD 86.29 on October 3, before slumping by around 40% to finish the year at USD 53.80. The majority of the price decline was driven by political reasons (Trump, OPEC), but the weakening economy and the associated decrease in demand, coupled with simultaneously higher delivery volumes, also put pressure on oil prices. The price of American WTI crude oil fell by 24% during the course of the year, ending the year at USD 45.41. At the same time, Brent performed slightly better than WTI, decreasing by 19% in 2018.

Following the sharp increases compared to 2017, the prices for calcined petroleum coke and pitch, our raw materials in GMS, showed only limited price changes during the course of 2018.

Relative share price performance



SGL Carbon shares unable to escape adverse trading environment

Structural changes to our group structure and an improvement of the operating conditions in a majority of our end markets have enabled us to raise our financial targets for fiscal year 2018 three times. Although our share price did not keep pace with our operating performance, it did manage to follow the course of the benchmark indices up to the beginning of December. The announcement of our five-year projections on December 5 caused our share price to fall noticeably in an overall very nervous capital markets environment. As a result, SGL shares performed considerably worse than the indices year on year. It has to be kept in mind, that the movements of our share price in both directions are quite pronounced given the relatively small free float of our shares.

Our share price did react positively to the news of the sale of our investment in the joint venture SGL Kümpers. Our results for fiscal year 2017, which we published on March 14, 2018, were also received positively.

Our mid-year results published on August 7, 2018, led to a noticeable increase of more than 20% in our share price, to €11.95.

The capital markets responded with a drop in our share price following our announcement on September 13 concerning the issue of a convertible bond (in a principal amount of €159.3 million, with a coupon of 3.00%, and maturing in September 2023) to refinance existing liabilities.

On October 11, 2018, we organized our first Capital Markets Day in over 10 years for investors and analysts at our German site in Meitingen. The event was very well attended. We subsequently received positive feedback both from the analyst and investor sides, which was reflected in our share price in the short term, despite the longer-term downward trend.

The announcement of our results for the first nine months of the fiscal year on November 6 led to an increase in our share price of 12%. That increase should mostly be attributed to the further increase to our full-year target, however.

In an overall very nervous capital markets environment, the announcement of SGL Carbon's new five-year plan on December 5, 2018, led to a decrease of over 30% in our share price. Despite the increase to our medium-term Group targets for Group sales and EBIT due to the accelerated expansion of selective production capacities, the capital markets did not react positively to our new projections. Instead, the investment-related postponement to the year 2021 of our target to achieve positive free cash flow was interpreted negatively.

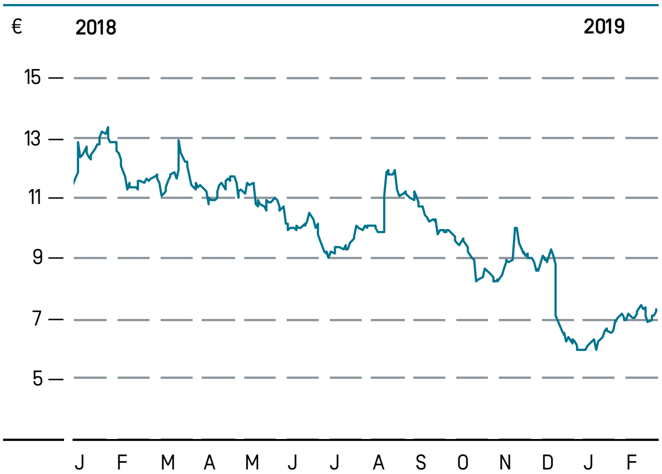
SGL Carbon shares recorded an annual low of €5.99 on December 27, 2018, while the annual high of €13.37 was reached on January 23, 2018. As a result of the factors described above, our stock fell by nearly 50% in value over the course of 2018, ending the year at €6.10.

This more than proportional share price decline can also be attributed to a misunderstood perception of SGL Carbon as an automotive supplier. The automotive index (STOXX Europe 600 Automobiles & Parts) declined by approximately 30% and thus also underperformed the general indices. However, only about

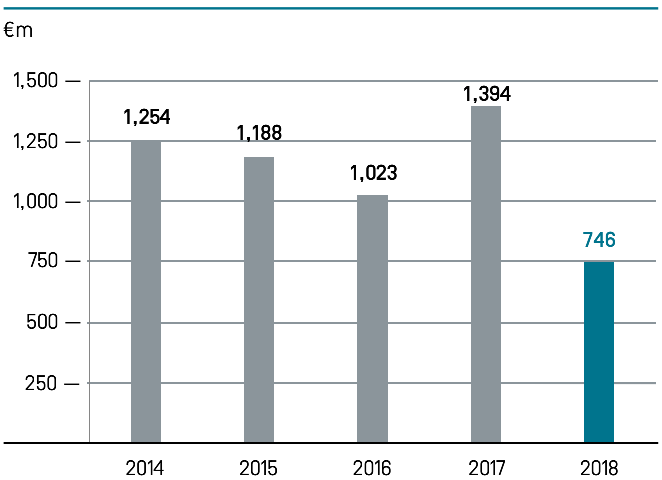
30% of Group sales goes to the automotive industry and we do not serve the broad demand curve of the automotive industry. The largest demand driver for our products for the automotive industry is generated from structural developments such as CO_2 emission reduction, which demand lightweight and electro-mobility solutions.

During the first weeks of 2019, our stock in turn managed to outperform the generally stable development of the stock market, and also benefited from an upgrade to our rating provided by one research institute. Since the beginning of the year, SGL shares gained just under 21% to €7.36 up to the middle of February, while the DAX only increased by about 7%.

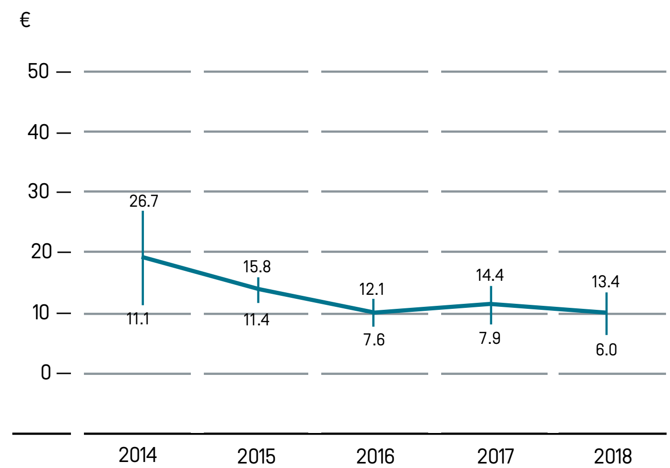
Share price performance



Market capitalization



Highest and lowest price of the share [1]



[1] Historical prices adjusted to reflect the capital increase

Market capitalization and index ranking reflecting decrease in share price

Due to the negative development in our share price, market capitalization decreased during the course of 2018. After reaching €1,393.5 million in the previous year, market capitalization was down to €745.7 million at the end of the reporting period. As of December 28, 2018, the free float market capitalization of SGL Carbon SE was €402.82 million, which put the company in 150th place in the index rankings as calculated by Deutsche Börse AG, after coming in at 133rd place in the previous year[1]. Deutsche Börse calculates the index rankings using the average volume-weighted share price over the 20 days preceding the respective reference date. The number of shares in circulation remained unchanged during the past year, at 122,341,478 shares.

[1] On September 24, 2018, Deutsche Börse changed the classification and composition of its share indices, abolishing the strict separation between the technology sector and more traditional sectors. Subsequently, the number of companies listed in the MDAX increased from 50 to 60, and in the SDAX from 50 to 70. As a result, the 2017 rank of 79 corresponds to rank 133 in the new system.

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%.

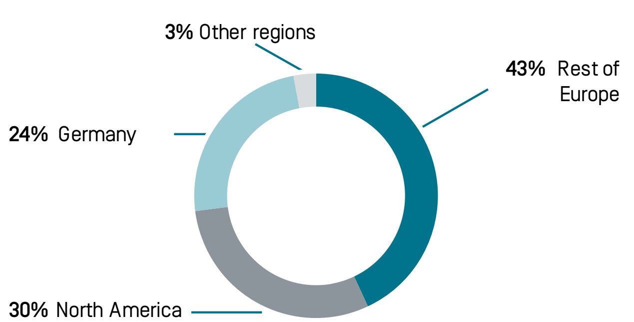
In addition, BMW AG and Volkswagen AG hold the following shareholdings subject to disclosure requirements based on the respective voting rights announcements and other notifications:

BMW AG	October 15, 2014 [1]	18.44%
Volkswagen AG	February 6, 2018 [2]	7.41%

[1] Date of the most recent voting announcement
[2] Other notification

In total, these anchor investors hold approximately 55% of our share capital and thus contribute to the stability of SGL Carbon. One the other side, this leads to a relatively low free float, which can often contribute to high share price volatility due to the relatively low trading volume.

Geographical distribution of institutional investors



According to a shareholder identification exercise carried out in March 2018, the geographical distribution of institutional investors was as follows: about 24% of our shares are held by investors in Germany, 43% in the rest of Europe, and 30% in North America. Other regions, such as Asia, the Middle East and South America, are also represented in our shareholder base with 3%.

Business situation necessitates continued dividend suspension

Due to the accumulated losses of our parent company SGL Carbon SE in fiscal year 2018, the company has no capacity for the distribution of dividends. Additional growth will allow our company to operate more profitably on a sustainable basis. Only then will the payment of earnings-related dividends be possible. At the same time, however, it will also be carefully considered whether priority should be given – as it is at the moment – to capital expenditure in order to participate in the strong growth in some of our market segments.

2018 Annual General Meeting

A total of 67.52% of the voting capital was represented at the Annual General Meeting of SGL Carbon SE on May 29, 2018 (2017: 62.72%). This equates to 82,600,839 shares and the same number of votes. A total of approximately 700 interested shareholders, shareholder representatives, and guests participated in our Annual General Meeting. All items on the agenda were approved by a large majority. The speech held by CEO Dr. Jürgen Köhler was once 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 10, 2019.

Intensive communication with the capital markets

As of the middle of February 2019, SGL Carbon shares were being covered by a total of 11 German and international analysts (prior year: 11). Dialog with analysts focused on the Group's strategic realignment and growth strategy, the consolidation of the joint ventures SGL ACF and Benteler SGL and the sale of our shareholding in the joint venture SGL Kümpers, the earnings situation in the current economic environment, and SGL Carbon's medium-term projections. Our new five-year projections in particular, which were published in December 2018, led to an extraordinary communication expense. In mid-February 2019, the analysts rated our shares as follows: five analysts issued a buy or outperform recommendation, three analysts issued a sell, underperform, or underweight recommendation, and three analysts issued a hold or neutral recommendation. The analysts' investment recommendations reflected a broad spectrum of price targets. On February 15, 2019, our shares closed at €7.36; the analysts' price targets ranged from €5.00 to €14.10.

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

Analyst coverage [1]

Alphavalue
Baader Bank
Bank of America Merrill Lynch
Bankhaus Lampe
Berenberg
Commerzbank
Deutsche Bank
J.P. Morgan Cazenove
Kepler Cheuvreux
Landesbank Baden-Württemberg
Oddo BHF (Bond research)
Société Générale

[1] As of February 15, 2019.

We aim to provide all capital market participants with transparent, timely, and comprehensive information on SGL Carbon's current business position and its future prospects. With this objective in mind, we maintained our high level of investor relations activities in 2018. In more than 260 one-on-one meetings with analysts and investors in Germany and abroad, we gave a general overview of SGL Carbon and provided information on our strategic realignment, our new medium-term projections, the optimization of our joint venture structures, and our growth prospects for the medium- to long-term future.

For the first time in ten years, on October 11, 2018, we organized a Capital Markets Day for investors and analysts at our German site in Meitingen, during which we presented selected market segments and products in detail. We also gave a tour of our Lightweight and Application Center (LAC), as well as presenting a display of various products, which afforded visitors the opportunity to interact directly with those responsible for our products, as well as to "touch" the exhibits. Both our CEO, our CFO, and the heads of our business units were available to answer questions during the entire event.

Capital market conferences and roadshows were our main forums for intensive, face-to-face dialog with institutional investors. All in all, we participated in 16 investor conferences and 10 roadshows in Germany and abroad in 2018.

One of the primary ways in which we provide capital markets participants with timely and comprehensive information is by holding conference calls in which SGL Carbon'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 managers' transactions 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, Düsseldorf, Frankfurt, Hamburg, Hannover, Munich, Stuttgart
German 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

Maturity structure improved due to successful issue of convertible bond

On September 20, 2018, SGL Carbon SE issued a convertible bond due in five years in September 2023, in a principal amount of €159.3 million. The convertible bond is based on a total of 12.2 million shares and an interest coupon of 3.0% p.a. The initial conversion price was €13.022, which corresponds to a 30% premium over the volume-weighted average price of SGL

Carbon SE shares when the bond was placed. The convertible bonds are unsecured and unsubordinated, with conversion rights to shares. The fair value of the share conversion rights of €13.7 million was recognized separately in capital reserves at the date the bond was issued and therefore deducted from the bond liability. Proceeds from the placement of the convertible bond will primarily be used to refinance existing liabilities and to extend our debt maturity profile.

Overview of SGL Carbon SE bonds

On the few remaining trading days until its maturity, the price of our convertible bond 2012/2018 oscillated in a narrow range in the vicinity of its nominal value. The bond was fully repaid on its maturity date of January 25, 2018.

The price of our convertible bond 2015/2020 decreased during the past year. Although the price was 105.3% at the beginning of 2018, by the end of the year it was 97.9%. One reason for this was the decrease in our share price, which made the conversion of the bond at a price of €17.07 appear less likely.

The price of our new convertible bond 2018/2023, which was issued at 100% of its nominal value on September 20, 2018, fell by the end of the year due to the decrease in our share price and the associated decrease in the conversion right value, amounting to 86.9% at the end of 2018.

During the first weeks of 2019, the price of our convertible bond 2015/2020 increased slightly by 0.6 percentage points to 98.5%, while the price of our convertible bond 2018/2023 remained in the vicinity of its year-end price.

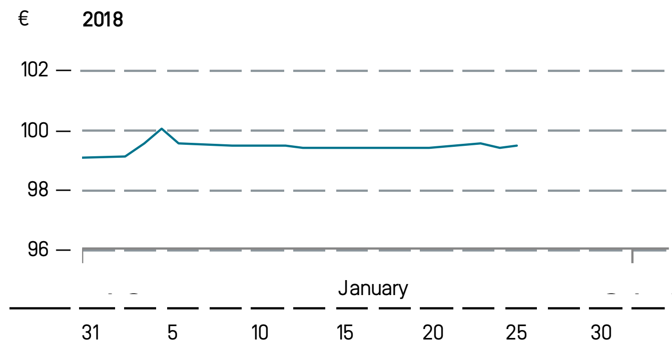
Corporate bond

WKN	ISIN	Coupon	Maturity date
A1X3PA	XS1002933403	4.875%	January 15, 2021 (redeemed early on October 30, 2017)

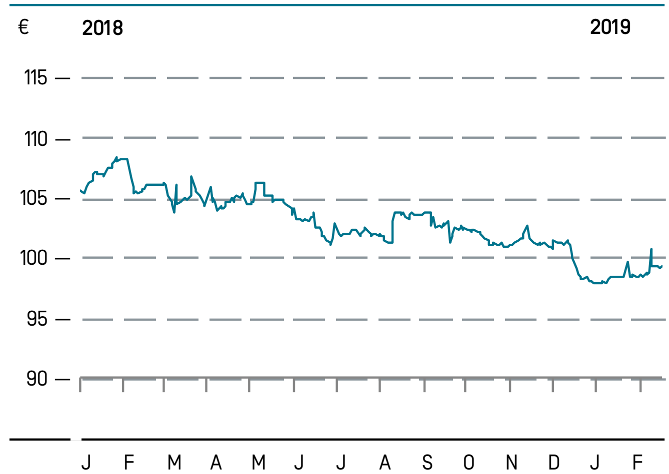
Convertible bonds

WKN	ISIN	Coupon	Maturity date
A1ML4A	DE000A1ML4A7	2.75%	January 25, 2018 (repaid on maturity date)
A168YY	DE000A168YY5	3.5%	September 30, 2020
A2G8VX	DE000A2G8VX7	3.0%	September 20, 2023

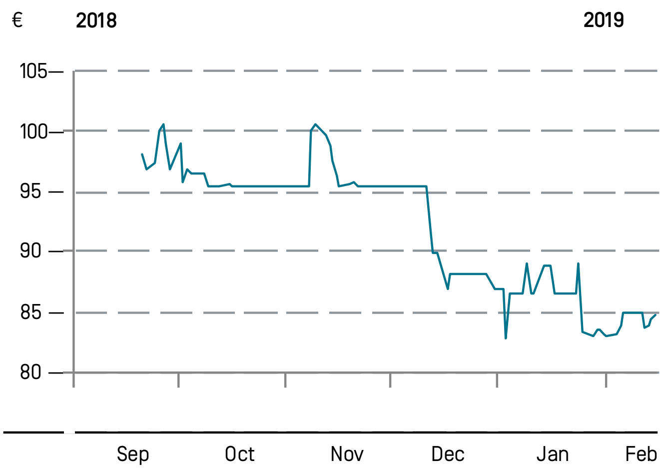
Performance of convertible bond
(matures January 25, 2018 – repaid at maturity date)



Performance of convertible bond
(matures September 30, 2020)



Performance of convertible bond
(issued on September 20, 2018
matures September 20, 2023)



Further information on SGL Carbon, 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@sglcarbon.com

You may also visit the investor relations section of our website (www.sglcarbon.com).

We look forward to hearing from you!

Group Management Report

We successfully further developed the new SGL Carbon in fiscal 2018 in both operating and strategic terms.

Consolidated revenue up 22% to €1,048 million. Around 50% of this increase was driven by strong organic growth.

Consolidated EBIT before non-recurring items up by around 61% to €65 million.

Revenues, EBIT and net income thus grew better in 2018 than originally forecast.

A new brand presence also visually underscores the strategic reorientation.

The former joint ventures with Benteler and BMW now entirely form part of SGL Carbon - and in both cases integration went very well and proceeded quickly.

A new convertible bond was successfully placed on the market and improved our financial base.

This Group Management Report provides detailed information on the business development and its underlying conditions in 2018 and also provides in-depth explanations of our results of operations, financial position, and net assets. In addition, we also provide an outlook on the anticipated development with its material opportunities and risks.

SGL Carbon - the Group

Business model of the Group

Legal structure of the Company

SGL Carbon SE, headquartered in Wiesbaden (Germany), is quoted on the Frankfurt stock exchange. The shares are currently included in Deutsche Börse's SDAX index. SGL Carbon comprises 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 35).

Business activities and organizational structure

SGL Carbon is a company which operates globally and which had a total of 5,031 permanent and temporary employees at the end of 2018. In our continuing operations, we operated a total of 32 production facilities as of the balance sheet date, of which 17 are located in Europe, eight in North America and seven in Asia. We operate two of these production facilities together with our joint venture partners in the Composites – Fibers & Materials (CFM) business unit. With a service network in more than 80 countries, we can flexibly accommodate the regional and industry-specific requirements of our customers.

Fiscal year 2018 was characterized by organic growth, in particular in the Graphite Materials & Systems (GMS) business unit, as well as the completion of the value chain in the CFM business unit with the acquisition and integration of the former joint ventures with Benteler and BMW.

SGL Carbon's business activities focus on the development, production and distribution of customer-specific solutions and applications based on our material competence with carbon fibers, composites and specialty graphites. SGL Carbon 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, a command of high-temperature manufacturing processes as well as application and engineering expertise for customer-specific solutions. Our materials are characterized by 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 Carbon sells to a wide spectrum of industries, ranging from the more traditional industrial sectors, such as the chemical and automotive industries, to newly developed future high-growth areas, such as the lithium-ion battery, LED and semiconductor industries, as well as multi-industry applications for lightweight construction.

SGL Carbon's organizational structure comprises the two business units Composites – Fibers & Materials (CFM) and Graphite Materials & Systems (GMS), which also represent reporting segments. Central and service functions and central research activities are included in a separate reporting segment Corporate. In this annual report, business activities are presented based on these three reporting segments.

After the acquisition of the joint ventures with BMW and Benteler and the sale of SGL Kümpers, SGL Carbon now only holds select participating interests in companies together with other shareholders. Some of these companies (e. g., SGL Quanhai Carbon) are fully consolidated and included in the results of their respective segments. In addition, we have a material participating interest carried at equity in the joint venture with Brembo (Brembo SGL) in the CFM reporting segment. In this joint venture we develop and produce carbon ceramic brake disks for the automotive industry together with our partner.

You can find additional information on material investments accounted for at equity under Note 8 of the notes to the consolidated financial statements.

Resource allocation is decided at a business unit level and reviewed and approved by the Board of Management at its annual objectives meetings. Our two global business units are responsible for the development, production and marketing of their products and solutions, while all service and administrative activities are concentrated in the corporate functions. In this context, the business units are now also directly responsible for research and development activities that are directly related to customers. The research and development expenses disclosed under Corporate relate to longer-term and strategic projects.

Change in the scope of consolidation

Up to and including fiscal year 2017, 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 (SGL ACF), have been accounted for as joint operations and proportionally consolidated in SGL Carbon's financial statements based on its respective ownership interests, and in line with accounting standard IFRS 11 Joint Arrangements.

An agreement from 2017 between SGL Carbon and BMW Group includes a step-by-step acquisition of the two 49% interests held by BMW Group in the SGL ACF companies. On January 11, 2018 BMW's interests in and control of SGL Automotive Carbon Fibers GmbH & Co. KG was transferred to SGL Carbon. In the second step, BMW's interest in SGL Automotive Carbon Fibers LLC will be transferred to SGL Carbon. This is expected to take place at the end of 2020 at latest. As a result, SGL ACF has been fully consolidated in SGL Carbon's consolidated financial statements since January 11, 2018 and continues to be reported in the CFM reporting segment. After this was successfully entered in the commercial register in fiscal year 2018, the two companies are known as SGL Composites GmbH & Co KG (SGL Composites Deutschland) and SGL Composites LLC (SGL Composites USA).

On December 19, 2017 we already acquired the 50% interest held by Benteler Carbon Composites Beteiligungs-GmbH in the former joint venture Benteler SGL GmbH & Co. KG, Paderborn. These activities have also been fully consolidated since the acquisition and carried in the CFM reporting segment. The company was renamed to become SGL Composites GmbH (SGL Composites Austria) in fiscal 2018.

For SGL Carbon, these acquisitions constitute the consistent consolidation of all key activities in the value chain, from carbon fibers and materials through to components, under the sole responsibility of SGL Carbon.

The business model in our business units

Carbon Fibers & Composites business unit (CFM)
The Composites - Fibers & Materials (CFM) reporting segment bundles all of the materials business based on carbon fibers. It covers the entire, integrated value-added chain, from raw materials through carbon fibers to composite materials and the components made from them. Carbon fibers and fiber composite materials will benefit 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, aerospace, wind and other industries.

As a result of the acquisition of SGL ACF and the former Benteler SGL we have reinforced our market position in the automotive segment in particular. In the units which now form SGL Composites 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 these fabrics to produce components, for example for the passenger cell in the BMW i3 and i8, and also individual components for the 7-series.

The acquisition of the former Benteler SGL completes our value chain and reinforces our component production competence, as here 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.

The value chain is supplemented by our joint venture Brembo SGL (ceramic brake discs), accounted for at equity. 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 (www.carbonceramicbrakes.com).

As industrial applications for composite materials are still in their infancy, we permanently develop processes and methods in our Lightweight and Applications Center (LAC) at our Meitingen (Germany) facility to support our customers in the optimum use of fibers and materials for composite materials. The LAC allows processes and products to be developed, as well as the manufacture of prototypes and small series.

As a result, we can offer our customers one-stop shopping for solutions along the entire value chain from carbon fibers and materials through to components as well as expertise in series production.

The main raw material in the reporting segment CFM is acrylonitrile (ACN) for the production of acrylic fibers, which, as a so-called polyacrylonitrile (PAN) precursor, can then be further processed to carbon fibers. We will secure the future supply of PAN precursor in our Portuguese facility. By additional converting textile lines to PAN precursor as required, the development of the entire carbon fiber value chain is being driven forward. The supply of PAN precursor is supplemented by our joint venture with Mitsubishi Chemical Corp., (Japan).

Graphite Materials & Systems (GMS) business unit
The reporting segment 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. There is currently high demand for product developments for efficient energy supply and storage, such as our anode material for lithium-ion batteries. In addition, revenues in the GMS business unit are primarily generated with customers in the solar, semiconductor, LED and chemicals industries as well as the automotive and transport sector and also for various other industrial 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 graphite-based bearing and pump components as well as seals. So-called expanded graphites based on natural graphite are utilized in a large number of industries such as in chemical and automotive applications. In addition, the Company also offers high quality products and solutions for the chemical and pharmaceutical industries and the environmental sector, particularly with graphite heat exchangers, distillation devices, 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. In some cases, we use long-term agreements with 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.

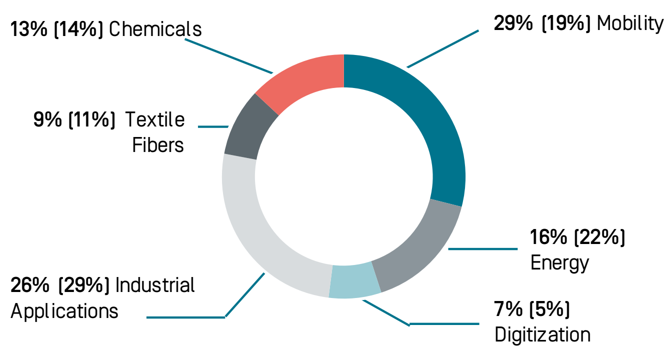
Major sales markets

Our acquisition of the former joint ventures with BMW and Benteler means that mobility (automotive and transport, aerospace market segments) is now the largest market segment in the Group at 29% of revenues (previous year: 19%), followed by industrial applications at 26% (previous year: 29%). The third largest customer segment is the energy industry (includes, in particular, the sectors for batteries and other energy, wind and solar) which accounts for 16% of revenues (previous year: 22%). This downturn is partially due to our sale of the former joint venture with Kümpers in the wind segment.

There was a slight downturn in revenues with the chemicals industry at 13% (previous year: 14%) and textile fibers at 9% (previous year: 11%). As a result of the strong growth, the proportion of sales revenues from digitization (includes the semiconductor and LED industries) increased to 7% compared to 5% in the previous year.

The revenues accounted for by market segments in the CFM and GMS business units are detailed in the section on Financial performance of the reporting segments.

Sales revenue by market segments 2018 (2017) (Group)



Targets and strategies

Financial targets

Our most important KPI, both internally and externally, is:

ROCE [1]	at least 9-10%

1) Based on EBIT before non-recurring items to average capital employed - continuing operations (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

Additional significant financial targets in the medium term are:

Gearing [1]	≤ 0.5
Equity ratio	≥ 30%
Consolidated net result - continuing operations	Positive
Leverage ratio [2]	≤ 2.5
Free cash flow	Positive
Sales growth CAGR [3]	8-9%
Return on sales of the business units (BU), based on EBIT	≥ 12%

1) Net financial debt to equity attributable to the shareholders of the parent company
2) Net financial debt to EBITDA before non-recurring charges
3) Based on the period 2017 - 2022

Growth strategy

Aim is for constant increase in revenues through to 2022
The business units CFM and GMS are already experiencing dynamic market and product developments with growth potential that is considerably above average. SGL Carbon is an enabler for its customers' production processes and products with its innovative carbon fiber and specialty graphite products, helping them to serve global megatrends such as mobility, digitization and energy efficiency. We offer our customers tailored applications along the entire material value chain.

The CFM and GMS business units operate on markets with varying maturities. Our CFM business unit serves what is still a young industry with its tailor-made solutions based on carbon fibers and fiber composites for use on an industrial scale. Correspondingly, business is still at the start of its lifecycle and does not yet meet the Group's financial targets as a result of limited capacity utilization. Although we have been able to acquire a large number of future-proof projects during the past twelve months, development periods mean that these will only be perceptibly reflected in sales and earnings over the medium to long-term. Our GMS business unit supplies solutions for both traditional customer industries as well as structural growth industries based on well-established specialty graphite, and thus already meets its sales growth and profit targets.

As a result, we are confident that consolidated sales revenues will be able to grow by 8-9% per year over the medium term, supported by the various drivers in both business units. Our Group-wide higher capacity utilization and an improved product mix towards applications and solutions with higher returns means that we are expecting a more than proportional improvement in earnings and we expect to reach our Group ROCE target.

Strong growth in the past few years, in particular in the GMS business segment, means that we are gradually reaching our capacity limits in production for some market segments. As a result, in December 2018 we decided to increase our capacity for the anode material for lithium-ion batteries as well as for the LED industry with higher capital expenditure in 2019 to 2021 in order to be able to continue to serve these high-growth customer markets. We are forecasting additional sales and earnings potential from 2022 from this additional capital expenditure.

New brand concept underscores strategic reorientation

The new brand symbolizes the Group's orientation to and focus on the future-proof topics of mobility, energy and digitization and was presented to the public for the first time at the General Meeting on May 29, 2018. It combines the brand name "SGL Carbon" - previously: "SGL Group - The Carbon Company" - with a newly developed figurative trade mark. This also visually underscores the strategic reorientation.

The return to "SGL Carbon" as the new name expresses our Company's core competence and origins. The brand core "smart solutions" describes the new SGL's claim and orientation. Together with the newly developed brand name and figurative trade mark, this highlights the link between our origins and our future.

The newly developed logo is based on the hexagonal form of carbon's chemical structure. Splitting and opening the hexagon results in a stylized "C", the chemical symbol for carbon, and an arrow which symbolizes the Company's orientation to major issues for the future. The Company's new color is petrol, linking the elements of reliability, modernism and sustainability.

Ongoing projects to improve efficiency

At the end of 2017 SGL Carbon decided to introduce the SGL Operations Management System (SGL OMS), which is a uniform and standardized management system across all sites and businesses. With the SGL OMS we aim to streamline processes, increase efficiency, and ensure highest product quality. By 2020, all of our local sites will be managed using uniform standards and KPIs.

In September 2016, project CORE (COrporate REstructuring) was launched. The project CORE focuses SGL Carbon's business model 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 service and administrative tasks are bundled in the corporate functions. Simultaneously, our company's organizational structures have been aligned to the new SGL Carbon following the sale of the former business unit Performance Products. By the end of 2018, sustainable savings of around €25 million compared to the figure as of 2015 have thus been recorded.

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.

Control system

Management and control

A description of the cooperation between the Board of Management and the Supervisory Board can be found in the Corporate Governance and Compliance Report.

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. 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 Carbon's Code of Business Conduct and Ethics. The Code underscores SGL Carbon'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 and the business units 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. 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.

Internal management system

Above all, our goal is to sustainably increase SGL Carbon's enterprise value. SGL Carbon's internal management system seeks to fulfill this goal. The system comprises regular meetings of appointed committees, monthly management reporting which covers both actual developments and also the intrinsically linked target/actual comparisons, as well as 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. Accordingly, the course of business for these activities could 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 aerospace, automotive and wind industries.

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

Research and development

Central 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 "Central Innovation". New technologies are developed and tested in our laboratories and pilot plants, as well as in alliances with external partners. This work serves to increase revenues with new and improved products over the medium to long term, and improve our cost situation. The development portfolio comprises both products and methods which are used in established business units over the medium to long term, as well as projects which open up new business opportunities for SGL Carbon. We had a total of 89 employees at the end of 2018 (2017: 84) in SGL Innovation.

Highlights from our development areas

During the year under review, the "Air Carbon" program in the mobility market segment was continued with "Air Carbon III", in which we develop next generation carbon fibers, for example for the aerospace industry, together with well-known partners from universities and industry. These carbon fibers will offer higher performance compared to the current state of technology.

The development of Advanced Modulus (AM) fibers is a major success for our carbon fiber development. This is a new type of carbon fiber launched on the market in the spring of 2018 at the world's largest composites trade fair JEC. This AM carbon fiber has substantially improved characteristics such as mechanical strength and rigidity. As a result, addition weight savings are possible in vehicles or in aerospace, thus cutting fuel consumption and CO_2 emissions.

In the energy market segment work continued on the next generation of anode materials for lithium-ion batteries. These materials will increase the storage capacity of lithium-ion batteries and thus, for example, significantly increase the range of electric cars.

In our start-up for the production of fuel cell components production for a new, larger customer program has been successfully rolled out, thus realizing a renewed double-digit percentage increase in sales revenues.

In 2018 we continued to strengthen our research and development work in the future growth areas defined in 2015. In the additive manufacturing area ("3D printing") with carbon materials we substantially extended our research infrastructure by investing in 3D printing technology such as printers and finishing processes. At the same time, projects with development partners were continued in this area and initial components were shipped for applications. In the future-proof composites area we continued our work on the use of carbon fibers in the construction industry and new types of composites in hybrid construction. These materials allow us to integrate new functions in components or to significantly simplify production chains, thus cutting costs. In the future-proof coatings and future-proof textiles areas we worked on developing new products and manufacturing processes, which are used to enable more effective and efficient processes, for example in filtration in environmental technology or in water treatment.

In fiscal year 2018 we continued to further drive the protection of our expertise using new patent registrations, in particular for future growth areas.

Talents for SGL Carbon

Last year, Central Innovation also fulfilled its task of winning new talents for the Company. Central Innovation supported a total of 61 diploma students, interns and student trainees in 2018.

We are thus developing junior talents, in particular for technical management functions.

Strategic industry alliances and research networks are the key to success

SGL Carbon continues to be 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 work together with companies including BASF, Bosch, Daimler, BMW and other companies on the development of lithium-ion batteries for e-mobility and stationary energy storage, and also chair the board of that network.

SGL Carbon 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.

SGL Carbon is a member of the Working Group for Carbon (Arbeitskreis Kohlenstoff - AKK) and is a member of its board. This group is an independent association to support industry interests in both the German Ceramics Company (Deutsche Keramische Gesellschaft) as well as in the European Carbon Association, and aims to promote the exchange of experience and information as well as carbon research.

Economic Report

Overall economic and industry-specific underlying conditions

Economic conditions

According to the IMF (International Monetary Fund) the global economy grew by 3.7% in 2018. The original forecast by the IMF was for 3.9%. As a result of the US trade war with China insecurity has grown around the world. Other contributing factors were the uncertain Brexit process and Italy's budget conflict with the EU. Private consumption remained robust in industrialized nations, however industrial production increasingly started to stutter. The cyclical high was exceeded in the late summer of 2018. According to information from the IMF, industrialized nations enjoyed robust growth of 2.3% as originally forecast. The pace of growth in emerging and developing nations was almost as high as in the previous year at 4.6%, however less than originally expected (+4.9%).

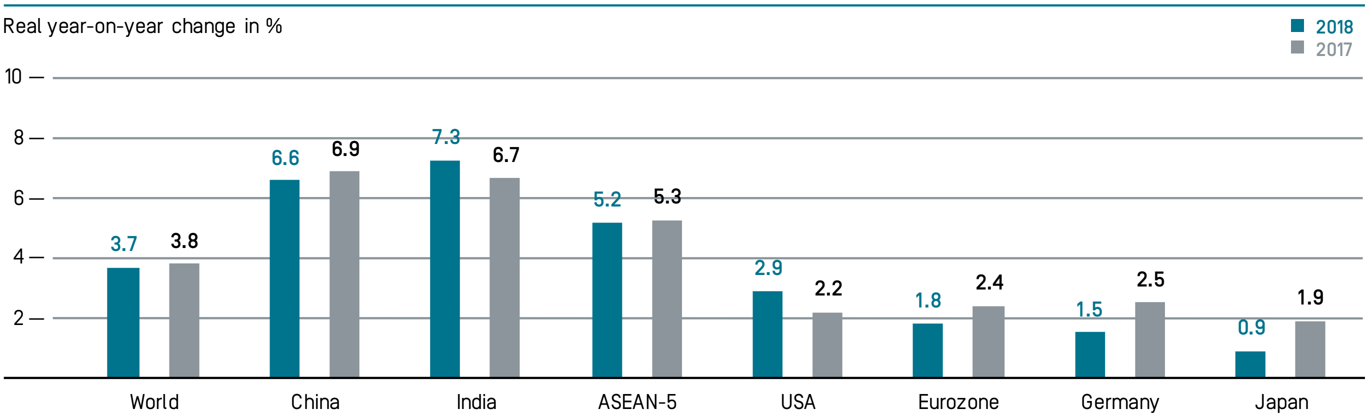
Strong upswing in Asia and the USA, Eurozone with solid growth

In the USA growth was perceptibly stronger, stimulated by substantial tax cuts and higher government spending. The main factors behind this growth were private consumption and capital expenditure. Industrial production grew substantially. According to IMF data, the US economy enjoyed accelerated growth of 2.9% in 2018. As expected, the US FED increased interest rates again in moderate steps.

The Eurozone enjoyed an upswing in 2018, however the pace of growth has recently slowed. Exports offered less of an impetus. Private consumption remained robust, supported by the increase in employment. Investment activities were also lively, as order books are solid, capacity utilization is high and financing conditions were also favorable. The ECB confirmed its zero-interest policy, however it ended the bond buying program at the end of the year as announced. Germany was in the late phase of an economic boom with robust domestic demand. There was production downtime in the automotive industry as a result of the conversion to WLTP admission process. This dented the economy in the third quarter.

Pace of expansion in China slowed in 2018. In addition to the structural changes in the economy, this was also due to more cautious lending to limit debt. In addition, initial strain could be felt from the trade war with the USA. However, industrial production and investment activities remained robust. India recovered from the dip caused by reforms in the previous year, and once again enjoyed dynamic growth. In South-East Asia (ASEAN-5) the economy remained strong thanks to a high level of infrastructure investments and robust exports. Russia and Brazil enjoyed moderate growth.

Gross domestic product in 2018 (2017) at a glance



Source: IMF, World Economic Outlook (Update) from January 2019

Development of key customer industries

Market segment mobility

Automotive industry stagnated in 2018 during its technology revolution - lightweight construction mandatory

According to information from the industry experts LMC Automotive, in 2018 global sales of light vehicles stagnated at 94.8 million units (-0.5%). The VDA (Verband der Automobilindustrie - German Automotive Industry Association) also sketched zero growth with around 85 million cars in its tight definition of the market. China's sales also slumped as a result of the US trade dispute. According to the VDA, this market fell by 3.8%, and the US market stagnated (+0.5%). Western Europe's car sales fell by 0.8%, sales in Germany were stable. Irrespective of the current market data the automotive industry is changing at a rapid pace. Sales of cars with alternative engines surged in 2018 (see lithium-ion batteries). Reducing weight using lightweight construction is mandatory in order to ensure higher reaches for electric cars, and to reduce CO_2 emissions for cars and trucks with combustion engines. Lightweight construction is growing at around 6% per year, and increasing importance is attached to carbon composite materials.

Aerospace: Carbon fibers are increasingly being used in new builds and for fleet modernization.

In lightweight aerospace construction carbon fibers and carbon composites (CC) are already indispensable. Aerospace uses 36% of the quantities of CC produced and is the largest customer. In terms of sales it accounts for 56% of the CC market. The key driver in this regard is commercial aviation. The core models Boeing B787 (Dreamliner) and Airbus A350 XWB are mostly built of CCs. In 2018 a total of 145 (previous year: 136) Dreamliners and 93 Airbus A350 XWB (previous year: 78) were shipped. The high-volume models from Airbus (A319/320/321neo) and Boeing (737 MAX 7/8/9) use CCs in several assemblies. Our carbon fiber business with the aerospace industry is geared towards non-structurally relevant niche applications (components and elements for interior cabin fittings, brake systems). As a result, we benefit from the production of new aircraft and also from the modernization and conversion of existing models and fleets.

Market segment energy

Lithium-ion batteries: Moderate increase in IT requirements in 2018, eMobility drove demand

The two end markets which previously dominated lithium-ion batteries (Li-Ion) (IT, automotive) also displayed diverging growth in 2018. Thanks to the dynamic increase in demand for high-performance large batteries for eMobility the automotive industry is the most important end market for Li-ion batteries. Around the world the sale of electric cars (including hybrids) grew by 40% to 1.7 million units in 2018 according to the industry forum InsideEV. According to various market studies the total global demand for Li-ion batteries is believed to have grown by between 15% and 17%. The market research institute Gartner put sales of consumer and business electronics (IT) at a high level, up by 0.9%. This was driven by high-volume sales of mobile phones (+1.4%). Demand for mobile computers (notebooks, tablets) grew by 1.9%, stimulated by the transition to Windows 10. In addition, Gartner estimates that the sales of portable small devices (smart watches, headsets, etc.) grew by 27%. These are positive drivers for our graphite anode materials in the battery and other energy market segment.

Wind industry: Slight upswing despite changed market conditions in 2018

The wind energy industry continued to grow in 2018, although the concept-based market conditions caused in the previous year from the reduction in subsidies and the increased transition to auction systems continued to have an impact, in Germany in particular. In 2018 as a whole, 51.3 GW (+3.6%) was newly installed according to information from the Global Wind Energy Council. The total capacity of all of the wind energy plants installed worldwide thus increased to 591 GW (+9.6%) in 2018. The three markets which by far dominate this segment in terms of the capacity installed are China, the USA and Germany. In 2018 these markets once again accounted for the lion's share of all global new installations with 65% of new construction. Global sales of rotor blades for wind energy turbines is expected to have increased by 2.7% in 2018 (Technavio). Our carbon fiber business can benefit from this over the medium term.

Solar/polysilicon: Booming PV market drives capacity expansion at polysilicon manufacturers

The photovoltaic industry (PV) is by far the most important user of polysilicon, accounting for around 85% of this market. The PV market broke new records in 2018 despite the trade restrictions imposed by the US against China and although demand abruptly slumped on the dominating Chinese market as a result of reductions to subsidies from May ("531 policy").

Solar experts at TrendForce estimate that global PV capacity increased by around 5% to around 103 GW in 2018. BNEF is even forecasting an increase to 109 GW (+10%). The reductions to subsidies in China led to prices for solar modules falling, which boosted demand on other markets. Based on the very positive perspectives for solar energy, PV producers and the upstream, high-capital production of polysilicon operate in cycles with free capacity, into which the market's structures grow gradually. The major polysilicon manufacturers also invested in expanding their capacity in 2018. The GMS business unit serves this market with a large number of products and solutions.

Market segment digitization

Semiconductors/polysilicon: Further growth in all regions and segments

The semiconductor industry is the second largest customer group for polysilicon. The market again enjoyed double-digit growth worldwide in 2018. The industry association World Semiconductor Trade Statistics (WSTS) expects that revenues for semiconductor manufacturers increased by 15.9% in 2018. The market researchers IHS Markit (+15.8%) and Gartner (+13.4%) sketched a similarly strong increase. According to WSTS growth was double-digit in all regions. In terms of products the Windows 10 upgrade for computers and in particular the memory segment, which accounts for at least a third of the semiconductor market, had a stimulating effect. Memory continues to be by far the most dynamic segment (2018: Gartner +27%, WSTS +33%). In this segment, however, manufacturers are increasingly being faced with overcapacity and pressure on margins (NAND Flash). According to the SEMI industry association the investment market for production lines and equipment for the semiconductor industry has still grown. Sales are expected to have increased by 9.7% to USD 62.1 billion in 2018. Demand for our graphite products is also enjoying correspondingly strong growth.

LED: Dynamic end market growth - high capacity dampens upstream investments

The market for LEDs is enjoying faster-than-average growth thanks to their high efficiency and falling production costs. There is strong growth in demand for lighting (private, commercial, industrial, public). The penetration rate for LEDs on the total lighting market in Europe was higher than 50% according to information from TrendForce (LEDinside). Sales growth amounted to 9.5%. World-wide, sales on the market for LED lighting grew by 10.4% in 2018 according to the industry experts at Technavio. In addition, LEDs are increasingly being used in many other areas. An increasing number of vehicles are being fitted with LEDs and sensors. In addition to consumer electronics, infrared technology is a key segment. Sales growth is double-digit in many segments. We have an excellent position on this high-growth market with our graphite-based susceptors for silicon epitaxy.

Market segment chemicals

Getting back to normal after strong production growth in H1 2018 - slower environment for investments

The German chemical industry association VCI (Verband der Chemischen Industrie) estimates that global production in the chemicals and pharmaceuticals sector grew by 4.0% (previous year: +3.9%). However, during the course of the year growth abruptly started to falter as a result of weaker industrial production, in particular in Europe and China. The largest production growth in 2018 was recorded in China (+5.5%), South Korea (+5.0%) and India (+4.0%). Production in this industry increased by an anticipated 3.5% in the USA. In the EU production recovered, up 2.5% (previous year: +1.7%). However, without the strong growth in pharmaceuticals of 6.0% output fell by 0.5% (previous year: +2.0%). Chemical production in Germany grew by 2.5%, however without the strong growth for pharmaceuticals (+11.5%) this fell by 1.5% (previous year: +1.7%). According to information from VCI capacity utilization continued to be high (Q3: 84.9%). Capacity utilization in the chemicals sector in the USA increased to around 77% at the end of 2018. There was a strong readiness to make investments in this environment, until the first tendencies that the market was weakening started to be seen. Our business activities with process technology benefited to a substantial extent as a result.

Key events during the fiscal year

Issue of a new convertible bond

SGL Carbon SE issued a convertible bond with a principle amount of €159.3 million and a five-year maturity through to September 2023 on September 20, 2018. The convertible bond is based on a volume of 12.2 million shares and an interest coupon of 3.0% p.a. The initial conversion price is €13.022. This corresponds to a 30% premium on the volume-weighted average price of SGL Carbon SE shares during the placement.

The convertible bond is a non-subordinated and unsecured convertible bond with a conversion right to shares. The fair value of the share conversion rights of €13.7 million was recognized separately in capital reserves at the date the bond was issued and therefore deducted from the bond liability.

Repayment of the convertible bond 2012/2018

We fully repaid our convertible bond in the amount of €239.2 million upon maturity in January 2018 with the proceeds received from the PP sale in 2017.

Change in the scope of consolidation

After the acquisition of the former joint venture Benteler SGL in December 2017, in mid-January 2018 we also concluded the acquisition of the remaining 49% interest in SGL Automotive Carbon Fibers & Co. KG (SGL ACF) in Wackersdorf (Germany). After a change of this company's name it is now known as SGL Composites GmbH & Co. KG (SGL Composites Deutschland). As a result of the acquisition of control by SGL Carbon, SGL ACF's US company (SGL Composites USA) has already been fully consolidated since January 11, 2018. Additional details on the acquisitions can be found in the Group Business Model section.

The transition of the former joint operation with the BMW Group (SGL ACF) to full consolidation required an adjustment to the fair value of the net assets of the previously proportionally consolidated joint operation on the acquisition date. This resulted in a positive, non-cash contribution to earnings of €28.4 million for EBIT after non-recurring items in fiscal year 2018.

In fiscal year 2018 the additional amortization on the amounts capitalized or carried as a liability for the acquired SGL composites companies in the USA, Austria and Germany totaled €11.2 million.

The sale of the 51% shareholding in SGL Kümpers GmbH & Co KG, Rheine (Germany) was completed on January 10, 2018. The related disposal of the assets and liabilities of SGL Kümpers did not result in any effect on profit or loss in fiscal 2018 as this was already taken into account in fiscal year 2017.

New IFRS 15 accounting standard

Initial application of IFRS 15 led to an increase in revenues in fiscal year 2018 of €30.6 million and an increase in EBIT before non-recurring items of €17.4 million, mostly in the GMS Business Unit. Details of this and additional transition effects in the opening financial statements are presented in segment reporting and in the notes.

Business overview

Disclosures concerning the net assets, financial position and results of operations of SGL Carbon are made in part on the basis of the following key financial indicators, which, although they are not derived directly from the consolidated financial statements, are used to control SGL Carbon. The following overview shows how those financial indicators are calculated.

	2018	2017
Operating profit/loss (EBIT)	**80.9**	**49.0**
Plus / minus: restructuring expenses	0.9	–4.9
Minus: reversal of impairment losses	–17.2	–4.0
Operating profit/loss (EBIT) before non-recurring items	**64.6**	**40.1**
Plus: amortization/depreciation expense on other intangible assets and property, plant and equipment	62.6	50.6
EBITDA before non-recurring items	**127.2**	**90.7**
Capital employed [3]		
Capital employed as of 31.12. of the prior year	896.0	829.9
Plus: IFRS 15 and IFRS 9 conversion	19.9	0.0
Plus: changes in scope of consolidation	250.5	0.0
Adjusted capital employed as of 31.12. of the prior year	**1,166.4**	**829.9**
Adjusted capital employed as of 31.12. of the financial year	**1,244.5**	**896.0**
Average capital employed [4]	**1,205.4**	**863.0**
ROCE $_{EBIT}$ [1]	5.4%	4.6%
ROCE $_{EBITDA}$ [2]	10.5%	10.5%

[1] EBIT before non-recurring items to average capital employed
[2] EBITDA before non-recurring items to average capital employed
[3] Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity, inventories, trade receivables and contract assets less trade payables
[4] 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

What follows is a comparison of the outlook for fiscal 2018, as originally published in the 2017 annual report, with the actual results for the year under review.

Outlook for 2018 as published in 2017 Annual Report	Actual for fiscal year 2018
Sales revenue about 10% over prior year	Organic revenue growth 11% over prior year
EBIT before non-recurring items to increase slightly more than proportional to sales revenue	EBIT before non-recurring items: €65 million (2017: €40 million)
ROCE $_{(EBIT)}$ before non-recurring items on prior year level	ROCE $_{(EBIT)}$ continuing operations at 5.4% (2017: 4.6%)
ROCE $_{(EBITDA)}$ before non-recurring items on prior year level	ROCE $_{(EBITDA)}$ at 10.5% (2017: 10.5%);
Result from continuing operations will be a black zero	Result from continuing operations of €50 million (2017: minus €16 million)
Significant increase in net financial debt due to full consolidation of SGL ACF	Free cashflow at minus €0.5 million (2017: €314 million) and net financial debt at €242.2 million (2017: €139 million)
Capex €15-25 million above level of depreciation & amortization	Capex of €78 million (2017: €53 million) Depreciation & amortization of €63 million (2017: €51 million)

Sales revenue increases significantly by 22%

Sales revenue for continuing operations increased significantly by almost 22% to €1,047.5 million (2017: €860.1 million). Around half of this increase was driven by organic growth, as expected. In operating terms, the favorable revenue growth was reflected, in particular, in the GMS reporting segment.

EBIT and EBITDA before non-recurring items, ROCE$_{EBIT}$, and ROCE$_{EBITDA}$ improve significantly

EBIT before non-recurring items improved by 61% to €64.6 million in the year under review, up from €40.1 million in the previous year, and thus at a significantly stronger rate than expected a year ago. This is due, in particular, to the favorable growth in the GMS reporting segment. Accordingly, the EBITDA development in SGL Carbon's continuing operations was also positive, increasing noticeably by 40% from €90.7 million to €127.2 million, with the corresponding improvement in the EBITDA margin.

Result from continuing operations improves significantly

The improvement to SGL Carbon's operating result together with the positive growth in the financial result led to a significantly better than expected result from continuing operations of €50.3 million (2017: minus €16.2 million).

Target-oriented expansion of production capacity

At approximately €78 million, capital expenditure for intangible assets and property, plant and equipment was higher than the previous year's figure of €53 million, and as projected it was €15 million higher than the level of amortization and depreciation of €63 million. Details can be found in the section on capital expenditure, depreciation and amortization.

Net financial debt increases due to consolidation

Net financial debt increases by €103 million to €242 million. This increase is mostly due, as expected, to the changes in the scope of consolidation, in particular from the full consolidation of SGL Composites USA by €94 million.

Financial performance of the Group

Income statement

€m	2018	2017	Change
Sales revenue	1,047.5	860.1	21.8%
Cost of sales	–827.9	–684.0	–21.0%
Gross profit	**219.6**	**176.1**	**24.7%**
Selling expenses	–100.2	–91.6	–9.4%
Research and development costs	–33.0	–30.7	–7.5%
General and administrative expenses	–54.5	–46.5	–17.2%
Other operating income/expense	15.9	20.0	–20.5%
Result from investments accounted for At-Equity	16.8	12.8	31.3%
Operating profit/loss (EBIT) before non-recurring items	**64.6**	**40.1**	**61.1%**
Restructuring expenses	–0.9	4.9	> –100%
Reversals / effects from purchase price allocation	17.2	4.0	> 100%
Operating profit/loss (EBIT)	**80.9**	**49.0**	**65.1%**
Financial result	–29.6	–56.8	47.9%
Result from continuing operations before income taxes	**51.3**	**–7.8**	**> 100%**
Income tax expense	–0.6	–5.8	89.7%
Non-controlling interests	–0.4	–2.6	84.6%
Consolidated net result - continuing operations	**50.3**	**–16.2**	**> 100%**
Result from discontinued operations, net of income taxes	–9.0	155.1	> –100%
Consolidated net result (attributable to the shareholders of the parent company)	**41.3**	**138.9**	**–70.3%**
Earnings per share, basic (in €)	0.34	1.14	–70.2%
Earnings per share continuing operations, basic and diluted (in €)	0.41	–0.13	> 100%

Noticeable increase in sales revenue

Sales revenue generated by the continuing operations of SGL Carbon increased noticeably by €187.4 million, or 21.8%, year on year. The average exchange rates of the US dollar and Japanese yen dropped year on year in 2018. Overall, currency differences negatively impacted our sales trend by €11 million. Around half of the increase in sales can be attributed to the increase in delivery volumes. The other half of SGL Carbon's sales increase can be attributed to changes in the scope of consolidation and the first-time application of IFRS 15 in fiscal year 2018. The latter was driven by increases in customer-specific production volumes, as well as price increases involving individual customers.

Sales revenue by region: Europe remains largest sales market

SGL Carbon's business activities continued to focus on Europe (€551.8 million; share in sales: 53%), in which Germany was the largest individual market with revenue of €358.4 million, equating to a 34% share in sales. Asia continues to be the Group's second-most important sales region, with the region's share in sales remaining at 28% (2017: 28%). Although sales in the North American region increased somewhat in absolute terms year on year, the region's share in sales decreased slightly to 16% (2017: 18%), due to the noticeable increase in consolidated group revenue.

The strong sales trend in Germany was primarily due to changes to the scope of consolidation and the resulting increase in sales revenues with German automobile manufacturers. The continued positive sales trend in Asia was the result of higher sales revenue from the lithium-ion battery industry, and in the digitization market segment of our reporting segment GMS.

Sales revenue by destination

€m	2018	Share	2017	Share	Change
Germany	358.4	34.2%	226.2	26.3%	+ 58.4%
Europe excluding Germany	193.4	18.5%	188.3	21.9%	+ 2.7%
North America	164.1	15.7%	153.2	17.8%	+ 7.1%
Asia	291.8	27.8%	243.3	28.3%	+ 19.9%
Rest of world [1]	39.8	3.8%	49.1	5.7%	–18.9%
Total	**1,047.5**	**100.0%**	**860.1**	**100.0%**	**+ 21.8%**

[1] Latin America, Africa, Australia

Gross margin increases slightly

The percentage increase in the cost of sales was limited to slightly below the increase in sales. The personnel expenses included in the cost of sales increased noticeably due to tariff increases included in salary and wage costs and the increase in headcount. As a result of the changes to the scope of consolidation, the ratio of material costs to cost of sales also increased overall year on year in fiscal 2018. As a result, the gross margin improved only slightly to 21.0% during the reporting period (2017: 20.5%). In absolute terms, gross profit improved considerably to €219.6 million during the reporting period, up from €176.1 million in the prior-year period.

Selling, R&D, and administrative expenses

Other functional costs (selling expenses, research and development expenses, and general and administrative expenses) increased by 11.2% to €187.7 million in comparison to the previous year (2017: €168.8 million). Consequently, functional costs increased significantly less than sales revenues.

The 9.4% increase in selling expenses to €100.2 million (2017: €91.6 million) was particularly due to noticeably higher delivery volumes and higher freight rates.

The increase in research and development expenses year on year in fiscal 2018 was due to the first-time full consolidation of SGL Composites in Austria, and amounted to €33.0 million (2017: €30.7 million). Further details concerning our research and development projects can be found in the chapter of the Management Report titled "Central Innovation".

General and administrative expenses increased noticeably by 17.2% to €54.5 million in fiscal year 2018, up from €46.5 million in the previous year. The increase was the result of higher salaries, higher expenses for management incentive plans, and the expanded scope of consolidation.

Other operating income and expenses

The other operating income and expenses that cannot be attributed to functional costs equated to net income of €15.9 million in fiscal year 2018 (2017: net income of €20.0 million). Effects from Foreign currencies resulted in a net income of €1.7 million in 2018 (2017: net income of €2.6 million). The figure for the year under review also comprised income from the sale of fixed assets of €4.1 million (2017: €0.7 million), income from government grants for projects of €2.9 million (2017: €1.5 million), and insurance compensations of €0.5 million (2017: €0.4 million). Other income in the previous year included compensation of €10.0 million from customers with minimum purchasing requirements, which is shown under sales revenue as from fiscal year 2018 as part of the transition to IFRS 15 (2018: €22.4 million).

Income from investments accounted for At-Equity increases once again

The income from investments accounted for At-Equity increased significantly once again to €16.8 million during fiscal year 2018, up from €12.8 million in 2017. Due to the full consolidation of SGL Composites Austria (formerly: Benteler SGL) at the end of the previous year, the improvement can be attributed exclusively to the excellent results at Brembo SGL (ceramic brake discs).

Non-recurring items

In view of its continued positive business development, restructuring provisions of €0.6 million were reversed in our business unit GMS (2017: income of €2.3 million). In contrast, additional restructuring expenses of €1.4 million were incurred in our business unit CFM, particularly in Portugal. In our Corporate segment, further additions to provisions of €3.1 million for the shutdown of the Griesheim site were largely offset by income of €2.4 million from the sale of a parcel of land and the adjustment of restructuring provisions in Italy, as well as additional adjustments to restructuring provisions of €0.5 million (2017: income of €0.9 million). All in all, the above changes resulted in a net restructuring expense of €0.9 million in fiscal year 2018. The net restructuring income of €4.9 million in fiscal year 2017 was mainly due to the adjustment of €3.2 million to the provision for the CORE and Bonn2020 projects, as well as the sale of non-current assets totaling €1.7 million.

Other non-recurring items totaling €17.2 million during the period under review comprised the adjustment of the fair value of the joint operation with BMW Group, which was previously proportionally consolidated, in the amount of €28.4 million at the time of acquisition, which was partly offset by additional amortization of €11.2 million to the fair values of the assets and liabilities identified as a result of the purchase price allocation of the SGL Composites companies acquired in the US, Austria, and Germany.

The items "impairment losses" and "reversal of impairment losses" in the prior year comprised a positive earnings impact of €3.6 million from the reversal of impairment losses of the Gardena site, after its reclassification from assets held for sale to fixed assets. For further details regarding the above, please refer to Note 9 of the notes to the consolidated financial statements.

Operating profit (EBIT) before non-recurring items improves significantly to €65 million

EBIT before non-recurring items improved significantly to €64.6 million in the period under review, up from €40.1 million in 2017. The corresponding EBIT margin increased to 6.2% in the reporting year, up from 4.7% in 2017. After taking into account non-recurring income of €16.3 million in 2018, and €8.9 million in 2017, operating profit for fiscal year 2018 amounted to €80.9 million, up from €49.0 million in 2017.

Net financing costs impacted by repayment of financial liabilities

€m	2018	2017	Change
Interest income	1.6	1.3	23.1%
Interest expense	–14.1	–29.8	52.7%
Imputed interest convertible bonds (non-cash)	–5.1	–8.5	40.0%
Imputed interest financing lease (non-cash)	–2.6	–1.5	–73.3%
Interest expense on pensions	–5.8	–6.5	10.8%
Interest expense, net	**–26.0**	**–45.0**	**42.2%**
Amortization of refinancing costs (non-cash)	–2.7	–6.3	57.1%
Foreign currency valuation of Group loans (non-cash)	–0.4	0.4	> –100%
Other financial income/expense	–0.5	–5.9	91.5%
Other financing result	**–3.6**	**–11.8**	**69.5%**
Financial result	**–29.6**	**–56.8**	**47.9%**

Despite continuing low interest rates in the Eurozone, interest income increased to €1.6 million in 2018 (2017: €1.3 million), in particular due to time deposits in US-Dollar.

Interest expense particularly reflects the cash interest component (coupon) for both of the convertible bonds (2015/2020: interest rate of 3.5%; 2018/2023: interest rate of 3.0%). As a result of the early repayment of the corporate bond that was carried out in October 2017, as well as the repayment of the convertible bond 2012/2018 in January 2018, interest expense decreased significantly year on year, by €15.7 million to €14.1 million (2017: €29.8 million). The average cash interest rate was 3.7% p.a. in 2018 (2017: 3.7% p.a.).

The non-cash imputed interest on the convertible bonds is established by approximating the below-market coupon with the comparable market interest rate at the time the convertible bonds are issued. Non-cash interest expense of €2.6 million (2017: €1.5 million), which is shown separately in the net financing result, also resulted from the imputed interest of a financial liability related to a capitalized heritable building right and non-current provisions and liabilities. Due to the decrease in discount rates, interest expense on pensions of €5.8 million was lower than in the previous year (2017: interest expense of €6.5 million). All in all, net interest expense improved by about 42.2% to €26.0 million, compared with the prior-year expense of €45.0 million.

In addition to the non-cash expense for the amortization of refinancing costs, the other financing result includes currency translation income and expenses arising from intercompany and external loans, as well as other financing income and expenses. Overall, the other financing result amounted to a net expense of €3.6 million in fiscal year 2018 (2017: net expense of €11.8 million). The amortization of accrued refinancing costs resulted in an expense of €2.7 million during the year under review (2017: expense of €6.3 million). In fiscal year 2017, this item included the expense for the remaining transaction costs of €4.2 million that were incurred in connection with the early repayment of our corporate bond in 2017. Other financial expense totaled €0.5 million in fiscal year 2018 (2017: expense of €5.9 million). In the previous year, this item primarily consisted of the penalty costs of €6.1 million associated with the early repayment of our corporate bond.

The financing result thus improved significantly by 47.9% during the period under review to a net expense of €29.6 million (2017: net expense of €56.8 million).

Group income tax expense at €0.6 million

The income tax expense amounted to €0.6 million in the reporting period, down significantly from €5.8 million during the previous year. Earnings before taxes in fiscal year 2018 were impacted by non-tax effective income from an adjustment to the fair value of the net assets of the previously proportionally consolidated joint operation SGL ACF (see Note 5 of the notes to the consolidated financial statements) as well as the At-Equity valuation of Ceramic Brake Discs. Adjusted for these tax neutral earnings components results in an effective tax expense of €5.1 million on the reduced earnings before tax. This effective tax expense was nearly entirely compensated by an adjustment in deferred taxes in Germany in the fiscal year 2018. Tax expenses in fiscal year 2017 included, on the one hand, an impairment resulting from a changed estimation of deferred tax assets of €11.6 million, which mainly relate to the former PP site in Frankfurt-Griesheim. On the other hand, it was possible to capitalize deferred taxes on loss carryforwards to a limited extend of €8.2 million in the prior year due to the favorable business development in the carbon fiber business and the improved earnings forecasts in the relevant forecast period. In the year under review, cash tax payments amounted to €3.3 million (2017: €3.5 million).

For more information, please refer to Note 12 of the notes to the consolidated financial statements.

Non-controlling interests decrease significantly

Non-controlling interests (minority interests) comprise our minority partners' share in the consolidated net result. Within SGL Carbon, minority shareholders in fiscal year 2018 relate in particular to SGL Gelter and SGL A&R Immobiliengesellschaft in Lemwerder. Due to the disposal of SGL Kümpers at the beginning of the fiscal year, our minority interests have decreased significantly. Altogether, our minority interests amounted to €0.4 million in fiscal year 2018 (2017: €2.6 million).

Discontinued operations

The result from discontinued operations after income taxes from the previous year consists of income and expenses from our discontinued business units Performance Products (PP) and Aerostructures (AS). The sale of PP was completed in 2017, and of Aerostructures in 2015. The result during the period under review was mainly characterized by further additions to tax provisions of €3.6 million in connection with the sale of PP, as well as settlement expenses of €4.0 million from the sale of our AS business. During the previous year, in addition to PP's operating result of €34.1 million, the result from discontinued operations consisted mainly of a profit of €128 million from the sale of PP.

Consolidated net income

Including non-controlling interests, the consolidated net income for the year attributable to shareholders of the parent company amounted to €41.3 million, compared with consolidated net income of €138.9 million in 2017. Based on the average number of shares of 122.3 million, basic earnings per share amounted to €0.34 in 2018 (2017: €1.14). When calculating the diluted earnings per share, the new shares that could potentially be issued from the convertible bonds 2015/2020 and 2018/2023 are also taken into account. At the same time, as the result must also be adjusted for interest expenses, there was no increase to the average number of shares for 2018. The diluted earnings per share for the year under review were also €0.34 (2017: minus €1.12).

Net result of SGL Carbon SE

SGL Carbon SE, the parent company of SGL Group, reported a net loss for the year of €43.5 million in fiscal 2018 (2017: net profit of €169.3 million), in accordance with the German Commercial Code (HGB). The loss was primarily the result of an impairment of €29.7 million to the lower fair value of the Austrian holding company that holds the shares of SGL Composites S.A. (formerly: Fisipe) in Portugal. Income transferred from subsidiaries did not entirely compensate for the impairment. The net loss for the year, together with the accumulated loss of €887.5 million from 2017, resulted in a total accumulated loss of €931.0 million in fiscal year 2018.

Financial performance of the reporting segments

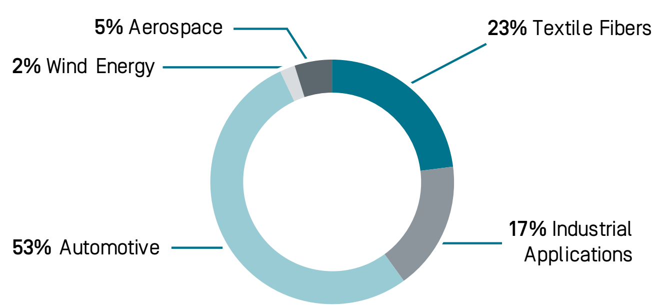
Composites – Fibers & Materials (CFM): Positive growth in the automotive and aerospace market segments overshadowed by downturn in wind energy and textile fibers

€m	2018	2017	Change
Sales revenue	422.5	331.9	27.3%
EBITDA before non-recurring items[1]	54.2	44.2	22.6%
Operating profit/loss (EBIT) before non-recurring items [1]	20.8	22.7	–8.4%
Operating profit/loss (EBIT)	36.6	23.1	58.4%
Return on sales (EBIT margin) [2]	4.9%	6.8%	-1.9% points
Payments to purchase intangible assets and property, plant and equipment	21.5	11.7	83.8%
Cash Generation [1] [3]	23.4	0.7	>100%
Depreciation/amortization expense	33.4	21.5	55.3%
Return on capital employed (ROCE EBIT) [1] [4]	3.2%	5.8%	-2.6% points
Headcount (Year end)	1,722	1,404	22.6%

[1] Non-recurring items include the reversals of impairment / effects from purchase price allocation of €17.2 million in 2018 and €0.4 million in 2017 and restructuring expenses of €1.4 million in 2018
[2] EBIT before non-recurring items to sales revenue
[3] EBITDA less payments to purchase intangible assets and property, plant and equipment as well as changes in working capital
[4] EBIT before non-recurring items 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 increased by about 27% (currency adjusted: 28%) in the past year to €422.5 million (2017: €331.9 million). This was primarily due to structural effects as a result of the first-time consolidation of our Bentler SGL joint venture, which was previously carried at equity, as well as the full consolidation of the SGL ACF joint venture, which was previously partially consolidated. These effects more than compensated for the sale of our interests in the formerly fully consolidated SGL Kümpers joint venture. As a result, revenues in the automotive market segment more than doubled, while revenues in the wind energy industry fell significantly. In operating terms, the increase in revenue was mostly driven by the automotive and aerospace market segments. In the industrial applications and textile fibers market segments, revenues were roughly on a par with the previous year's figures, while wind industry revenues were perceptibly lower than in the previous year due to the substantially lower volume of business at our customers.

Sales revenue by market segments 2018 (CFM)



With the full acquisition of Benteler SGL at the end of 2017, our business with carbon-ceramic brake disks (Brembo SGL: development and production of ceramic brake disks) has remained as the major participating interest accounted for at equity and reported under the automotive market segment. Revenues for our companies accounted for at equity fell by 9% in the year under review to €251.7 million (the previous year's figure of €275.6 million still included Benteler SGL; each 100% of the values of the companies) and are not included in the consolidated group revenues. On a comparable basis, revenues with companies accounted for at equity increased by 14%. Our joint venture with Brembo for the production of carbon ceramic brake discs continued to increase its deliveries in fiscal 2018, leading to substantial sales and earnings growth compared with the prior year period.

EBIT before non-recurring items in the reporting segment CFM fell slightly to €20.8 million in the reporting period, down from €22.7 million in the previous year. Return on sales therefore totaled 4.9% after 6.8% in the previous year. Earnings in the automotive market segment almost doubled. This was due to the full consolidation of the former SGL ACF as well as increased demand for our products. The aviation market segment also recorded a slight increase in earnings. This excellent growth on our core markets was consumed by the strong downturn on the wind energy, textile fibers and industrial applications market segments. This also caused the downturn in the return on sales.

After considering non-recurring items in the amount of €15.8 million (previous year €0.4 million) EBIT in the CFM reporting segment increased substantially in fiscal year 2018 to €36.6 million compared to €23.1 million in the previous year. These non-recurring items include a positive effect from the full consolidation of the former joint venture with the BMW Group (SGL ACF) as a result of the adjustment to fair value of the partially consolidated participating interest on the acquisition date in the amount of €28.4 million. This was offset by restructuring expenses in the amount of €1.4 million, mainly for textile fibers, an increase in amortization and depreciation by €11.7 million from purchase price allocation (PPA), a negative effect from the subsequent valuation of inventories at SGL ACF of €3.1 million as well as positive effects from the amortization of amounts carried as liabilities from the purchase price allocation for SGL Composites (Austria) of €3.7 million.

During the year under review investments in the CFM business unit almost doubled at €21.5 million (2017: €11.7 million). Investments focused, in particular, on expanding leaf spring production, the technological further development of the lightweight and application center as well as expanding the product range for carbon composites.

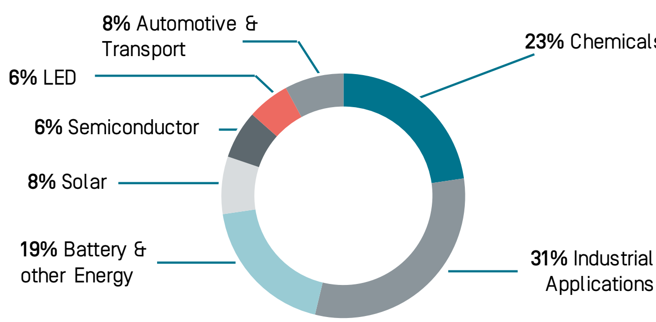
Graphite Materials & Systems (GMS): Double digit growth rates in almost all market segments

€m	2018	2017	Change
Sales revenue	589.9	510.2	15.6%
EBITDA before non-recurring items[1]	98.9	70.8	39.7%
Operating profit/loss (EBIT) before non-recurring items [1]	76.0	47.8	59.0%
Operating profit/loss (EBIT)	76.6	50.1	52.9%
Return on sales (EBIT margin) [2]	12.9%	9.4%	3.5% points
Payments to purchase intangible assets and property, plant and equipment	47.0	29.1	61.5%
Cash Generation [1] [3]	6.5	26.1	–75.1%
Depreciation/amortization expense	22.9	23.0	–0.4%
Return on capital employed (ROCE EBIT) [1] [4]	16.5%	12.2%	4.4% points
Headcount (Year end)	3,008	2,558	17.6%

[1] Non-recurring items of €0.6 million in 2018 und €2.3 million in 2017
[2] EBIT before non-recurring items to sales revenues
[3] EBITDA less payments to purchase intangible assets and property, plant and equipment as well as changes in working capital
[4] EBIT before non-recurring items to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)

In fiscal year 2018, almost all of the market segments grew, with battery and other energy, LEDs, semiconductors, automotive and transport as well as chemicals and industrial applications enjoying double-digit growth rates. The only exception was the solar market segment, where we specifically kept sales at less than the previous year's level. In contrast, as a result of the high demand for isostatic graphite specialties, we are increasingly serving customers from the semiconductor and LED segments, which means that we were able to increase the combined revenues in these segments by 50%. We are successfully implementing our strategy of serving high-growth markets with products and solutions that offer a high percentage of value added. In total, sales revenue in the GMS reporting segment increased substantially by almost 16% to €589.9 million compared to €510.2 million in the previous year (currency adjusted 17%). Initial application of IFRS 15 led to sales revenue increasing by €24.9 million. After adjustment for this and currency translation, sales revenues in the GMS segment increased by 12%.

Sales revenue by market segments 2018 (GMS)



In total, EBIT before non-recurring items improved by a disproportionate 59% to €76.0 million (previous year: €47.8 million) and led to a significantly higher EBIT margin of 12.9% (2017: 9.4%). This was driven by improved earnings in almost all market segments. Due to higher costs of raw materials, we already started negotiations with our customers at the start of 2018. As a result, we have already been able to implement some price increases. In particular in the battery and other energy market segment we have thus been able to stabilize earnings at the previous year's level. EBIT before non-recurring items includes an effect from first-time application of IFRS 15 in the amount of €16.2 million, which is mostly due to the price increases described above. After adjustment for this, EBIT increased by 26%.

In fiscal year 2018, there were minor non-recurring items in the GMS reporting segment in the amount of €0.6 million (2017: €2.3 million). EBIT after non-recurring items thus improved to €76.6 million (2017: € 50.1 million).

Investments in the year under review also increased significantly in the GMS business unit by 62% to €47.0 million, compared to €29.1 million in the previous year. Investment activities focused on, for example, expanding production capacity for the LED, automotive as well as battery and other energy market segments (anode material for lithium-ion batteries).

Corporate: Earnings down slightly year-on-year

€m	2018	2017	Change
Sales revenue	35.1	18.0	95.0%
EBITDA before non-recurring items[1]	–25.9	–24.3	–6.6%
Operating profit/loss (EBIT) before non-recurring items [1]	–32.2	–30.4	–5.9%
thereof Central Innovation	–8.0	–9.4	14.9%
Operating profit/loss (EBIT)	–32.3	–24.2	–33.5%
Headcount (Year end)	301	231	30.3%

[1] Non-recurring items of minus €0.1 million and €6.2 million in 2018 and 2017, respectively

Sales revenue in the Corporate reporting segment practically doubled to €35.1 million (no currency translation effect, previous year: €18.0 million). The primary reason for this was the sale of the former performance products (PP) activities. Services from PP were booked as internal revenues prior to the sale in the fourth quarter of 2017, and after the sale as revenues with external customers.

EBIT before non-recurring items was minus €32.2 million (2017: minus €30.4 million) in the reporting segment Corporate, slightly lower than last year. This included a positive effect in the amount of €3.9 million from the sale of land in Canada, which practically compensated for the implementation costs for the operations management system (OMS), higher costs for central projects as well as the termination of cost allocations to the now sold PP. Expenses for our central research activities totaled €8.0 million and were thus lower than the previous year's figure (€9.4 million) due to the higher subsidies for the Air Carbon III Program.

In fiscal year 2018, there were minor non-recurring items in the Corporate reporting segment in the amount of minus €0.1 million. In contrast, in the previous year income of €6.2 million was recorded. This was mostly due to a write-up for non-current assets and the sale of non-current assets which had previously been written down. EBIT after non-recurring items thus fell to minus €32.3 million compared to minus €24.2 million in the previous year.

Financial position

Financial management

SGL Carbon'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 our financial management is to maintain SGL Carbon's financial strength and to ensure solvency at all times. Group Treasury, a centralized function at SGL Carbon SE, the management 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 the process. The number of companies that participate in the centralized in-house cash center increased to 30 as of December 31, 2018, up from 26 at the end of fiscal year 2017. 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 2018, an average of approximately 83% of global supplier payments were handled centrally (2017: 90%). The decrease can be attributed to changes in the scope of consolidation. In order to safeguard the standards, we have attained and to increase efficiency, 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 Carbon has adequate liquidity reserves at all times. Those reserves allow SGL Carbon to respond flexibly to cash flow fluctuations during the year and to meet all payment obligations on time at all times.

Cash funds are invested by means of ensuring there is 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 business partners in recent years into account (core bank concept).

Market price risks

In order to limit financial market price risks, particularly currency and interest rate risk, SGL Carbon 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 Carbon 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 forward and, on a case-by-case basis, 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 2018. The anticipated risk from currency fluctuations has been adequately hedged for fiscal year 2019. 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 31 of the notes to the consolidated financial statements.

Debt financing analysis

Group financing is focused both on the strategic business plans of operating units and centralized Group planning. SGL Carbon's financing is primarily composed of the outstanding amount of the convertible bond 2015/2020 in the amount of €167 million (coupon: 3.50%, maturing in 2020), and the convertible bond in the amount of €159.3 million that was newly issued in fiscal year 2018 (coupon: 3.00%, maturing in 2023). The convertible bond that matured in January 2018 was fully repaid in the amount of €239.2 million. In addition, as of the reporting date the Group had a credit facility in the amount of €50 million, which ran until the end of 2019. That credit facility was replaced with a new syndicated credit facility with seven banks in the amount of €175 million on February 13, 2019. The new facility runs for four years with the option to extend it for an additional year. After assuming control of our former joint operations with BMW (SGL Composites Germany and USA) in January 2018, the existing loans from BMW Group corresponding to the shareholding of SGL Carbon were repaid in the amount of €111.8 million in fiscal year 2018, meaning that financing of only €86.4 million remained as of December 31, 2018, corresponding to the shareholding of BMW Group in SGL Composites USA.

All in all, undrawn credit facilities amounting to €51.2 million (2017: €51.4 million) were available to SGL Carbon at year-end 2018 to cover working capital and capital expenditure. Cash and cash equivalents totaled €181.6 million as of December 31, 2018 (2017: €382.9 million).

In past years, selected properties, IT equipment, and vehicles were financed in part via operating leases. Further details can be found in Note 29 of the notes to the consolidated financial statements.

SGL Carbon commissions 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 Carbon has ratings of B3 with a stable outlook (Moody's), and B- with a positive outlook (Standard & Poor's).

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

Rating agency	Rating	Date of rating
Moody's	B3 (Outlook: stable)	May 2018
Standard & Poor's	B- (Outlook: stable)	December 2018

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

Significant improvement to free cash flow provided by continuing operations

The cash flow statement shows the change in cash and cash equivalents of SGL Carbon 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 (2018: €58.1 million; 2017: €0.0 million). The cash flow statements for the reporting period and the previous year have been adjusted to reflect the reclassification of the Performance Products (PP) and Aerostructures (AS) businesses as discontinued operations, which are shown separately.

Free cash flow from continuing operations improved to minus €58.5 million, compared with minus €144.7 million in the previous year. Together with the free cash flow provided by discontinued operations in the amount of €58.0 million (2017: net cash provided of €458.7 million), the total free cash flow was close to balance at minus €0.5 million, compared with €314.0 million in 2017. For more details, please see the consolidated cash flow statement in the consolidated financial statements.

Liquidity and capital resources

€m	2018	2017	Change
Cash flow from operating activities			
Result from continuing operations before income taxes	51.3	–7.8	> 100%
Non-recurring charges	–16.3	–8.9	–83.1%
Depreciation/amortization expense	62.6	50.6	23.7%
IFRS 15 Earnings effect	–17.6	0.0	> –100%
Changes in working capital	–34.1	–89.2	61.8%
Income taxes paid	–3.3	–3.5	5.7%
Paid interest	–17.1	–35.6	52.0%
Miscellaneous items	–1.9	12.1	> –100%
Cash flow from operating activities - continuing operations	**23.6**	**–82.3**	**> 100%**
Cash flow from investing activities			
Payments to purchase intangible assets and property, plant and equipment	–78.1	–52.9	–47.6%
Dividend payments and capital repayments from investments accounted for At-Equity	11.0	6.0	83.3%
Payments for capital contributions concerning investments accounted for At-Equity and investments in other financial assets	0.0	–5.0	100.0%
Payments for the acquisition / disposal of subsidiaries, net of cash acquired	–19.7	–33.4	41.0%
Proceeds from the sale of intangible assets and property, plant & equipment	4.7	22.9	–79.5%
Cash flow from investing activities - continuing operations	**–82.1**	**–62.4**	**–31.6%**
Free Cash flow [1]	**–58.5**	**–144.7**	**59.6%**
Changes in time deposits	–58.1	5.0	> –100%
Cash flow from financing activities - continuing operations	–200.9	–263.1	–23.6%
Free cash flow from discontinued operations [2]	58.0	458.7	–87.4%
Effect of foreign exchange rate changes and other changes	0.1	–1.0	> 100%
Cash and cash equivalents at beginning of year	382.9	328.0	16.7%
Cash and cash equivalents at end of year - continuing and discontinued operations	**123.5**	**382.9**	**–67.7%**
Time deposits at end of year	58.1	0.0	> 100%
Total liquidity	181.6	382.9	–52.6%
Net change in total liquidity - continuing and discontinued operations	**–201.3**	**49.9**	**> –100%**

[1] Cash flow from operating activities - continuing operations, minus cash flow from investing activities - continuing operations
[2] Cash flow from operating activities - discontinued operations, minus cash flow from investing activities - discontinued operations

Net cash provided by continuing operating activities amounts to €23.6 million

In fiscal 2018, the cash flow from operating activities (continuing operations) improved noticeably to €23.6 million, up from net cash used of €82.3 million in the prior-year period. The increase was mainly due to the significant improvement to our operating result and the reduction in working capital to €34.1 million (2017: €89.2 million).

Working capital shown on the balance sheet increased by 24.2%, or €100.6 million, to €419.1 million (December 31, 2017: €318.5 million), and was characterized by non-cash effects. These included, in particular, consolidation and currency effects totaling €30.0 million, as well as effects of €36.5 million resulting from the first-time application of IFRS 15 and IFRS 9 in fiscal year 2018. Adjusted for these effects, the operational increase in working capital amounted to €34.1 million (2017: operational increase of €89.2 million). That increase reflects required adjustments to our inventory pipeline in reaction to increased demand. In contrast, tax payments decreased slightly by €0.2 million to €3.3 million (2017: €3.5 million).

The noticeable decrease in interest payments of €17.1 million (2017: €35.6 million) contributed to the improved cash flow from continuing operations.

Net cash used in continuing investing activities comprises purchase price for the acquisition of SGL Composites

This item reflects payments for intangible assets and property, plant and equipment, cash generated by or used for equity-accounted investments, payments for company acquisitions, and proceeds from the disposal of non-current assets. Capital expenditure amounted to €78.1 million in fiscal 2018, which was significantly above the prior-year level (€52.9 million). For further details concerning capital expenditure, please refer to the section titled "Capital expenditure, depreciation and amortization". The figures for fiscal year 2018 include cash inflows in connection with investments accounted for At-Equity of €11.0 million from dividends received from a joint venture (2017: €1.0 million cash inflow from dividends less payments for capital increases).

Payments for acquisitions of subsidiaries include the purchase price of €23.1 million paid for the acquisition of 50% of the shares in SGL Composites (formerly: SGL ACF), located in Wackersdorf (Germany), as well as cash inflows of €3.4 million from the sale of SGL Kümpers. In the previous year, this item included payments of €33.4 million for the acquisition of 50% of the shares in SGL Composites (formerly: Benteler SGL), located in Ried (Austria) and Paderborn (Germany).

Payments received for the disposal of intangible assets and property, plant and equipment particularly comprise cash inflows of €3.9 million from the sale of a parcel of land in Lachute (Canada). Cash inflows in fiscal 2017 comprised the inflow of liquidity resulting from the sale of the carbon fiber plant in Evanston, as well as payment received for the sale of land in Banting (Malaysia), which took place in fiscal 2016. Consequently, the net cash used in investing activities increased noticeably by €19.7 million to €82.1 million during the year under review, up from €62.4 million in fiscal 2017.

Capital expenditure, depreciation and amortization [1]

€m	2018	2017
Payments to purchase intangible assets and property, plant and equipment	78	53
Depreciation/amortization expense	63	51

[1] Including proportionate consolidated SGL ACF in 2017, excluding discontinued operations

Capital expenditure for intangible assets and property, plant and equipment was distributed as follows in fiscal year 2018: 28% for CFM (€21.5 million; 2017: €11.7 million), 60% for GMS (€47.0 million; 2017: €29.1 million), and 12% for central projects (€9.6 million; 2017: €12.1 million). The comparative figures for the previous year were 22% for CFM, 55% for GMS, and 23% for central projects. Payments for significant capital expenditure projects during fiscal year 2018 related to:

- capacity expansion for pressed-to-size (PTS) technology in Bonn in the automotive & transport market segment
- capacity expansion for SiC-coated isostatic graphite in St. Marys (USA), in the LED market segment
- production capacity expansion for composite leaf springs in Ort (Austria), in the automotive market segment
- capacity expansion for graphite anode materials in Morganton (USA) and Novy Sacz (Poland), in the battery & other energy market segment
- new exhaust gas cleaning equipment in Chedde (France), in the industrial applications market segment
- a new logistics center in Meitingen (Germany)

For more details concerning capital expenditure, please refer to the explanations provided in the sections relating to our reporting segments.

Net cash used in continuing financing activities

In the year under review, net cash used in financing activities (continuing operations) amounted to €200.9 million, down from net cash used of €263.1 million in 2017. In fiscal year 2018, cash of €239.2 million was used in January 2018 to repay the convertible bond 2012/2018, and €111.8 million was repaid to BMW Group for loans to SGL Composites USA and Germany (formerly: SGL ACF). In addition, cash was provided by issuing the convertible bond 2018/2023 in the amount of €159.3 million in September 2018. Total transaction costs of €4.4 million were paid for the issue of the new convertible bond and for the new syndicated credit facility. Cash was also used during the year under review to repay bank debt of €3.8 million (2017: cash provided of €0.5 million). During the previous year, the outflow of liquidity was primarily caused by the early repayment of our corporate bond in October 2017 in the amount of €250.0 million, which resulted in an early redemption penalty of €6.1 million.

Net cash used in continuing financing activities also includes share purchase payments for subsidiaries that are already consolidated. For that purpose, a total of €1.9 million was paid in fiscal year 2017 for the acquisition of an additional 49% of the shares in SGL Tokai Process Technology (Singapore), as well as the final installment of €2.4 million on the purchase price for the acquisition of shares in SGL Composites Portugal (Fisipe).

Other financing activities primarily comprise dividend payments of €1.0 million to minority shareholders in fully consolidated subsidiaries (2017: €0.5 million).

Free cash flow from discontinued operations

The free cash flow from discontinued operations primarily relates to the sale of our former PP business, and consists of the cash outflow from operating activities and the cash inflow from investing activities, which includes the purchase price payments and the payments made in connection with the sale. The cash outflow from operating activities for discontinued operations amounted to €4.7 million in fiscal year 2018, compared with cash inflow of €34.2 million in the previous year. In fiscal 2018, tax payments were made in connection with the disposal of PP, while in fiscal 2017 the item was still included the operating cash flows of PP until disposal.

The cash inflow from investing activities for discontinued operations in fiscal year 2018, which consist of the purchase price payments for the disposal of PP activities, amounted to €62.6 million (2017: cash inflow of €424.5 million). All in all, the free cash flow from discontinued operations thus decreased to €58.0 million, down from €458.7 million in the previous year.

Liquidity amounts to €182 million

Primarily as a result of the aforementioned balance of borrowings and repayments of financial liabilities (convertible bonds and the pro-rata financing of our former joint venture with BMW, SGL ACF), available liquidity decreased to €181.6 million at the end of fiscal year 2018 (2017: €382.9 million). At the end of fiscal year 2018, liquidity included short-term deposits of €58.1 million (2017: €0.0 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 and settlement obligations was €423.8 million in 2018 (2017: €521.9 million). Of that amount, the financial liabilities of SGL Composites USA (formerly: SGL ACF) of €86.4 million will be repaid in installments from the free cash flow of SGL Composites USA and Germany. The remaining amount is due for repayment by SGL Composites by the end of 2020. The outstanding amount of the convertible bond issued in 2015 in a principal amount of €167 million is due for repayment in 2020, and the convertible bond issued in 2018 in a principal amount of €159.3 million is due for repayment in 2023, unless the bondholders exercise their conversion rights before maturity up to 9.8 million and 12.2 million, respectively, new bearer shares will be created.

As of December 31, 2018, trade payables, derivative financial instruments and other financial liabilities totaled €194.8 million (2017: €116.1 million). Of that amount, liabilities totaling €67.9 million (2017: €21.2 million) were due after one year. Income tax liabilities and other liabilities amounted to an additional €24.1 million at the end of 2018 (2017: €21.1 million). Further details can be found in Note 31 of the notes to the consolidated financial statements.

As of the reporting date, commitments arising from purchase orders in connection with capital expenditure projects totaled €25 million.

Net assets

The net asset situation of SGL Carbon is tracked by way of the following key figures, which are used to manage the Group.

Overview of net assets

€m	Dec. 31, 18	Dec. 31, 17
Total assets	1,585.1	1,541.7
Equity attributable to the shareholders of the parent company	531.6	457.0
Equity ratio	33.5%	29.6%
Working capital [1]	419.1	318.5
Capital employed [2]	1,244.5	896.0
Return of capital employed (ROCE $_{EBIT}$) [3]	5.4%	4.6%
Net financial debt	242.2	139.0
Gearing [4]	0.46	0.30

[1] Continuing Operations:Total of inventories and trade receivables and contract assets less trade payables
[2] Continuing Operations: Total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital
[3] Operating profit/loss (EBIT) before non-recurring items to average capital employed - continuing operations
[4] Net financial debt to equity attributable to the shareholders of the parent company

Balance sheet structure

€m	Dec. 31, 18	Dec. 31, 17	Change
ASSETS			
Non-current assets	841.2	641.0	31.2%
Current assets	742.2	882.8	–15.9%
Assets held for sale	1.7	17.9	–90.5%
Total assets	**1,585.1**	**1,541.7**	**2.8%**
EQUITY AND LIABILITIES			
Equity attributable to the shareholders of the parent company	531.6	457.0	16.3%
Non-controlling interests	10.7	11.3	–5.3%
Non-current liabilities	798.0	616.0	29.5%
Current liabilities	244.3	446.1	–45.2%
Liabilities in connection with assets held for sale	0.5	11.3	–95.6%
Total equity and liabilities	**1,585.1**	**1,541.7**	**2.8%**

Changes to individual balance sheet items, total assets, working capital, shareholders' equity, the equity ratio, and net financial debt are explained below in the sections referring to assets, and equity and liabilities.

The return on capital employed – ROCE $_{EBIT}$ – defined as the ratio of operating profit (EBIT) before non-recurring items to average capital employed – improved to 5.4% in the year under review (2017: 4.6%).

Gearing – the ratio of net financial debt to equity attributable to the shareholders of the parent company – deteriorated slightly to 0.46 during the year under review (2017: 0.30), primarily as a result of the full consolidation of SGL Composites (formerly: SGL ACF) and the financial debt assumed along with it.

Assets

Non-current assets increased by a total of €200.2 million to €841.2 million in the reporting year (2017: €641.0 million). The full consolidation of SGL Composites Germany and USA in particular led to an increase in non-current assets of €187.5 million. As part of that consolidation, goodwill increased by €19.5 million, other intangible assets by €41.8 million, and property, plant and equipment by €126.2 million. In contrast, offsetting deferred tax assets and liabilities resulted in a total reduction of €9.4 million in deferred tax assets to €11.3 million (2017: minus €36.0 million). Currency translation increased non-current assets by €11.5 million, particularly due to the appreciation of the US dollar (2017: decrease of €32.7 million). At €75.0 million, depreciation and amortization on non-current assets, including amortizations of purchase price allocations, were below the level of capital expenditure in fiscal year 2018, and led to a minor increase in non-current assets of €3.1 million (2017: increase of €2.3 million). The carrying amount of investments accounted for At-Equity increased by €7.2 million due to the positive pro-rata earnings of associates (2017: increase of €5.6 million).

Current assets decreased by €140.6 million to €742.2 million (2017: €882.8 million). After adjustment for currency effects, current assets decreased by €146.8 million. Cash funds used for the repayment of financial debt decreased in particular, by €198.7 million. In contrast, other current assets increased, which related on the one hand to the €90.4 million increase in trade receivables. In addition to the noticeable increase in the business volume of GMS, €81.1 million of the increase to other current assets was due to the first-time application of IFRS 15 in fiscal year 2018. Adjusted for the effects of IFRS 15, the increase in trade receivables amounts to 23%, and is at the level of the increase in sales of 22%. On the other hand, after adjusting for currency and consolidation effects, inventories increased by 15.6%, or €43.9 million year on year, due to the higher inventory of semi-finished and finished products as a result of the increase in business volume.

Assets held for sale decreased from €17.9 million in the previous year to €1.7 million as of the end of 2018. At the end of 2018, this balance sheet item still contained the assets held for sale pertaining to a company in Korea. In contrast, in 2017 the item still included the land held for sale at the Lachute site (Canada) and the assets of SGL Kümpers, which were sold during the first quarter of 2018.

As of December 31, 2018, total assets increased by €43.4 million, or 2.8%, to €1,585.1 million (2017: €1,541.7 million). The increase in total assets as of December 31, 2018, was primarily the result of the full consolidation of SGL Composites in Germany and the US (formerly: SGL ACF), which contributed to an increase in total assets of €208 million. Currency effects, in particular due to the appreciation of the US dollar, also contributed to an increase in total assets of €17.7 million (2017: decrease of €54.3 million). In contrast, the €198.7 million drop in cash and cash equivalents of the continuing operations led to a decrease in total assets.

Equity and liabilities

Shareholders' equity increased by €74.6 million to €531.6 million as of December 31, 2018 (2017: €457.0 million). The increase mainly related to the positive consolidated net result of €41.3 million. The fair value of the conversion right of the convertible bond was allocated to capital reserves and increased equity by €13.7 million. Additional factors that increased equity were the adjustments made to the parameters for calculating the provision for pensions in Germany and the US, which increased equity by €0.2 million (after tax effects; 2017: €0.7 million), as well as currency gains of €6.5 million, primarily due to the appreciation of the US dollar (2017: €19.1 million). In contrast, changes in cash flow hedges of €2.0 million directly decreased equity (2017: increase of €0.5 million).

Overall, the above factors improved the equity ratio (excluding non-controlling interests) to 33.5% at the end of the year under review (2017: 29.6%).

€m	Equity attributable to the shareholders of the parent company	Non-controlling interests	Total equity
December 31, 2017	**457.0**	**11.3**	**468.3**
Conversion effect from IFRS 9 / IFRS 15	**14.9**	**0.0**	**14.9**
January 1, 2018	**471.9**	**11.3**	**483.2**
Dividends	**0.0**	**–1.0**	**–1.0**
Equity component of the convertible bonds	13.7	0.0	13.7
Net result for the year	41.3	0.4	41.7
Other comprehensive income	4.7	0.0	4.7
Comprehensive income	**46.0**	**0.4**	**46.4**
December 31, 2018	**531.6**	**10.7**	**542.3**

Non-current liabilities increased by €182.0 million to €798.0 million (2017: €616.0 million). The increase in non-current liabilities is primarily connected with the newly issued convertible bond in the amount of €159.3 million (maturing in 2023), and the purchase price liability of €52.1 million for the acquisition of SGL Composites USA, which must be paid by the year 2020.

In contrast, the pension provisions included under non-current liabilities remained largely unchanged at €293.2 million. A decrease of €9.4 million and €6.9 million was primarily the result of adjusting discount rates for pension provisions in Germany (by 0.2 percentage points to 1.9%) and the US (by 0.6 percentage points to 4.2%), respectively, to reflect the higher anticipated long-term interest rate climate. On the other hand, the increase in the rate for pension payment from 1.5% to 1.9% and the adjustment of mortality tables in Germany both had an opposite effect, increasing pension provisions by €14.1 million and €1.1 million, respectively.

Current liabilities decreased by €201.8 million to €244.3 million (2017: €446.1 million) at the end of fiscal year 2018, primarily due to the repayment of the convertible bond 2012/2018 in the amount of €239.2 million. In contrast, trade payables increased by €18.8 million to €108.1 million year on year (2017: €89.3 million). Adjusting for currency effects of €0.6 million and consolidation impacts of €3.5 million results in an operational increase in trade payables of €14.7 million. The

€16.8 million increase in other current liabilities was primarily the result of the final settlement for the sale of our AS business.

Net financial debt

€m	Dec. 31, 18	Dec. 31, 17	Change
Carrying amount of current and non-current financial liabilities	398.8	503.4	–20.8%
Book value of debt held for sale	-	2.8	-
Remaining imputed interest for the convertible bonds	20.8	12.0	73.3%
Accrued refinancing cost	4.2	3.7	13.5%
Total financial debt (nominal amount)	**423.8**	**521.9**	**–18.8%**
Liquidity - continuing operations	180.6	379.3	–52.4%
Liquidity - Assets held for sale	1.0	3.6	–72.2%
Total liquidity - continuing and discontinued operations	**181.6**	**382.9**	**–52.6%**
Net financial debt - continuing and discontinued operations	**242.2**	**139.0**	**74.2%**
thereof: SGL ACF			
Non-current financial liabilities	86.4	98.1	–11.9%
Cash and cash equivalents	1.5	1.2	25.0%
Net financial debt SGL ACF	84.9	96.9	–12.4%
Net financial debt excluding SGL ACF	**157.3**	**42.1**	**> 100%**

The carrying amounts of the financial liabilities recorded on the consolidated balance sheet at the end of 2018 were as follows:

- Convertible bond 2015/2020 of €167.0 million
- Convertible bond 2018/2023 of €159.3 million
- Financial liabilities of SGL Composites USA of €86.4 million
- Liabilities to banks of €11.1 million
- the remaining imputed interest components for the outstanding convertible bonds (minus €20.8 million), together with refinancing costs (minus €4.2 million)

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 full consolidation of SGL Composites USA and Germany (formerly: SGL ACF), net financial debt of €84.9 million is included as of December 31, 2018 (2017: proportional consolidation; €96.9 million). As from fiscal year 2018, the financial liabilities of both companies will be shown on a pro rata basis, in accordance with the proportionate shareholdings in SGL Composites USA as a result of shareholder loans from SGL Carbon and BMW Group, while in the previous year the company was financed entirely by BMW Group.

As of December 31, 2018, liquidity had decreased to €181.6 million (2017: €382.9 million), mainly due to the repayment of financial debt. Taking into account liquidity, current and non-current financial liabilities shown on the balance sheet of €398.8 million (2017: €503.4 million), the remaining imputed interest components of the convertible bonds in the amount of €20.8 million (2017: €12.0 million), and the remaining refinancing costs of €4.2 million (2017: €3.7 million), the net financial debt of SGL Carbon amounted to €242.2 million at year-end 2018 (2017: €139.0 million). Net financial debt thus increased by €103.2 million compared with December 31, 2017, corresponding largely to the net financial debt of €94.3 million assumed upon full consolidation of SGL Composites USA and Germany.

Assets not recognized and off-balance sheet financial instruments

Various assets of the SGL Carbon 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 29 of the notes to the consolidated financial statements.

The off-balance sheet intangible assets also include the company's brand name and the brand names for our products. 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 €290.2 million as of December 31, 2018, compared with minus €290.0 as of December 31, 2017. As of December 31, 2018, the Group's pension obligations totaled €400.5 million, compared with €397.2 million at the end of 2017. The slight change was primarily due to adjustments to the mortality tables in Germany, as well as to pension increases. The increase was largely compensated by the increases to discount rates in Germany and the US. The actuarial gains from defined benefit pension plans recognized in equity (under retained earnings) increased by €0.2 million after taxes. The status of the plan assets designated to fund the pension obligations rose from €107.2 million at the end of the previous year to €110.3 million as of December 31, 2018, due to increased market values.

Further information on the effects in the balance sheet and the income statement and on pensions and similar obligations can be found in Note 26 of the notes to the consolidated financial statements.

General statement on the current financial situation

Business overview fiscal year 2018

We successfully further developed the new SGL in fiscal 2018 in both operating and strategic terms.

The former joint ventures with Benteler and BMW now form part of SGL - and integration went very well and proceeded quickly in both directions. We are right on schedule with introducing our operations management system (OMS) into production. This is a uniform and standardized management system across all sites and businesses. We have expanded our production capacity in a target-oriented manner at many locations to meet our customers' requirements. Activities to increase sales prices were successful. We are expanding our technology competence with an eye to the future with our 3D-printing investment, the battery application laboratory, the fiber placement center and other projects.

The go-ahead has been given for the faster "digitalization of SGL". In many places we are working intensely to move our data and processes, our production and customer contacts into the digital world at a rapid pace.

We have given the new SGL a sympathetic, unmistakable and smart identity with our new brand.

We have reached the financial targets we had set for fiscal year 2018. A new convertible bond was successfully placed on the market and our financial structure was improved. In total our EBIT and EBITDA in 2018 were once again significantly higher than in the previous year. The GMS business unit in particular reported another substantially higher earnings contribution. In the CFM business unit, earnings were slightly lower than in the previous year. In total, we have been able to substantially improve our earnings from continuing operations, and after a loss in the previous year we have now recorded a profit.

New order development

Order intake grew positively in both business units at the end of 2018. All in all, the value of the order book for both business units at the end of 2018 was above that of the prior year.

Order backlog in the reporting segment CFM continued to develop positively, this applied in particular for the automotive, aerospace and industrial applications market segments.

In the GMS business unit the positive growth recorded in the previous year also continued in the first half of 2018. Order intake grew in particular in the LED, semiconductors, automotive and transport and chemicals market segments.

Order intake in the GMS market segment for industrial applications also enjoyed positive growth as a result of higher demand, in particular in the EMEA and Asia regions. The GMS market segment battery and other energy continued to record positive growth due to the continuing demand.

Assessment of the financial situation by company management

The businesses of SGL Carbon began fiscal 2019 with overall favorable developments. Revenues invoiced in the first few weeks of 2019 were higher than the prior-year level.

In the Composites – Fibers & Materials (CFM) reporting segment, we are expecting nearly constant revenues for the first quarter of 2019, and a deterioration in earnings compared to the very strong first quarter of the previous year which was characterized by strong invoicing. The anticipated downturn in earnings in the first quarter of 2019 is due to the textile fibers market segment, where raw material prices have fallen substantially since the start of the year. This has reduced our selling prices and as a result of the inventory level of higher-priced raw materials it leads to a temporary downturn in margins. However, during the remainder of the year the lower prices for raw materials are expected to have a positive impact on our business.

In the Graphite Materials & Systems (GMS) reporting segment we are expecting revenues with graphite specialties to be substantially[1] higher in Q1 2019 than in the same period of the previous year. EBIT in Q1 2019 is expected to be substantially[1] above the level in Q1 2018.

Altogether, Group sales revenues in the first quarter 2019 should be a mid single digit percentage above the prior year level. Adjusted for the positive one-time effect from the sale of land of €3.9 million in the prior year, Group EBIT should reach the prior year level, as the positive development in the reporting segment GMS will compensate for the temporary margin decline in the reporting segment CFM, as described above.

In fiscal 2019 we are expecting the purchase price allocation effects to continue and we are not expecting any material negative impact on earnings from non-recurring expenses.

In fiscal 2018 we already increased capital expenditure to a level exceeding amortization and depreciation. In order to exploit our opportunities for growth we have initiated a series of projects which will lead to a further increase in capital expenditure in 2019.

We have improved our maturities profile with the new convertible bond and a new syndicated credit line. The new financial instruments will lead to higher interest charges and increased expenses in the financial result in fiscal 2019.

[1] Adjustment to the audited version dated March 4, 2019

Accounting principles used and significant estimates made

SGL Carbon 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 Carbon'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 Carbon'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 several 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 Carbon. In such case, SGL Carbon would be required to adjust its accounting practices.

Non-financial performance indicators

In addition to financial KPIs, SGL Carbon's enterprise value is also essentially determined using non-financial performance indicators. The following non-financial performance indicators play an important role in the ongoing successful development of our Company:

- Number of employees
- R&D activities
- Production, and especially accident frequency rate

Our employee trend is presented under Note 6 of the notes to the consolidated financial statements. As a result of the current favorable volume of incoming orders, the number of employees will continue to increase slightly during the coming fiscal year. Our R&D activities are outlined in the Group Management Report under the heading Central Innovation. The way SGL Carbon experiences sustainable management is being explained under the section titled Corporate Social Responsibility in this annual report.

Responsibility for the safety and health of our employees is an inherent part of the corporate culture at SGL Carbon. As a result, our employees' health and safety is one of the core values of our Company. SGL Carbon has set itself the goal to consistently prevent work-related injuries and illnesses. It is the responsibility of the Company's management and each individual employee to ensure a safe work environment. The aim is also to permanently improve the existing safety measures. After the expansion of the group of consolidated companies in 2018 the target frequency for accidents was 3.61 accidents per million working hours. The actual frequency rate of 3.45 was slightly lower than the target (previous year: 2.5 based on the former group of consolidated companies). As a result, accident frequency was once again on a low level. In addition, the severity of accidents is also lower year-on-year, and this figure is also lower than the target. In 2019 activities already initiated, such as the Safety Promise, will be run in order to keep accidents at a low level or to reduce this rate even further.

Declaration concerning non-financial Group report

The separate non-financial Group report of SGL Carbon SE, which we have prepared in accordance with Sections 315b, 315c in conjunction with Sections 289c – 289e of the German Commercial Code (HGB), and shown as a separate section of the Annual Report, will be available on our website, http://www.sglcarbon.com in the section "Company>Sustainability", from March 27, 2019 onwards. In accordance with Section 317 (2) (4) HGB, our auditors (KPMG AG Wirtschaftsprüfungsgesellschaft) have reviewed that the separate non-financial Group report has been presented in accordance with the applicable statutory regulations. The Supervisory Board has also engaged KPMG AG Wirtschaftsprüfungsgesellschaft with the task of providing a limited assurance on the content of the separate non-financial Group report.

Opportunities and Risk Report

Risk strategy and risk policy

Our risk policy is geared toward protecting shareholder value, increasing it systematically and continuously, and achieving financial targets. Making full use of the opportunities arising in the dynamic growth markets we are in, is a fundamental aspect of the corporate strategy. This includes making all significant corporate decisions only after a detailed risk analysis and assessment has been made. In order to increase growth and profitability, we consciously accept a reasonable amount of risk. As a matter of principle, we do not take on unmanageable or unreasonably high risks. The principles of this policy are set out in group-wide guidelines for risk management and represent an integral part of our corporate strategy.

Risk Management System (RMS)

Our risk management system (RMS) is a global management instrument that ensures the implementation of the risk policy. This is achieved through the early identification, analysis and assessment of risks and the immediate introduction and tracking of response measures. This also meets the requirements regarding risk early warning systems as stipulated in the German Stock Corporation Act (AktG). Our opportunity management system is integrated into SGL Carbon'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 and risks for our Company.

The identified opportunities and risks are recorded group-wide from the bottom up by those responsible as part of the five-year plan. The risk assessment is updated as part of the quarterly reporting process. Once Group Controlling completes the assessment, it is reported to the Board of Management and summarized for the Supervisory Board. 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.

Furthermore, any significant new risks or the imminent occurrence of existing risks are reported immediately to the Board of Management and Group Controlling, independent of the normal reporting intervals.

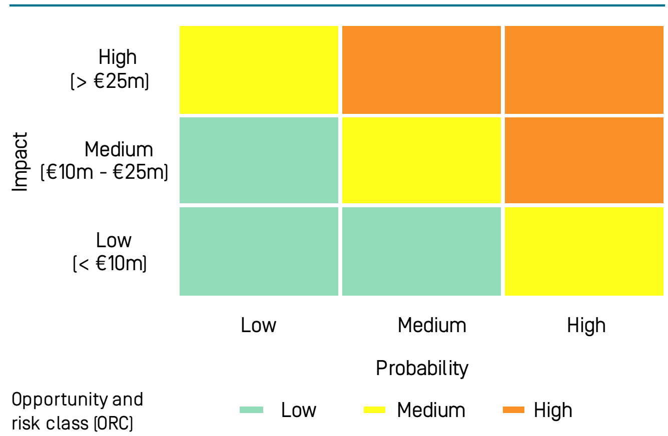
Opportunity and risk officers are positioned in all areas of the Company and throughout SGL's entire organizational structure – there where the risks arise and where they are managed. This includes plants, segment and sales organizations, and corporate functions.

The Chief Financial Officer (CFO) is the Board member responsible for risk management. Group Controlling supports the Board of Management, coordinating the risk management process at the Group level. Group Controlling stipulates the structure and the tools to be used, continually develops the RMS and ensures that the group-wide risk management guidelines remain up to date at all times for all organizational units, including its principles, definitions of terms, reporting channels and responsibilities.

Opportunity and risk assessment

Identified opportunities and risks are assessed according to group-wide risk management standards. 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.

Classification chart



These opportunities and risks are classified in the opportunity and risk classes (ORCs) high, medium and low based on their impact on the results of operations, financial position and net assets. The opportunity and risk classes are calculated based on impact and probability of occurrence. Here we distinguish between low-impact risks (under €10 million), medium-impact risks (€10-25 million) and high-impact risks (over €25 million).

The examination and presentation of the risk impact accounts for measures to reduce risk (net impact).

Internal Control System (ICS)

We define an internal control system (ICS) as all policies, procedures and measures that have been implemented by management. The aim is to ensure 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. While local controls are in place in all companies, all material companies have established an ICS based on group-wide standardized documentation of the risks and controls for existing process structures. Approximately 295 business processes worldwide are covered by around 820 controls. In addition, automated and IT-supported controls are performed. Together with the process-related controls, process-independent controls and measures at management level form the foundation of a functional ICS.

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.

The effectiveness of our internal accounting controls is assessed by independent auditors for Group companies that are subject to statutory audits. In fiscal year 2017 the ICS of a number of material subsidiaries was for the first time subjected to assessment by independent auditors according to the newly established standard IDW PS 982 and their effectiveness certified. Suggestions to further enhance the effectiveness of the ICS were collected and implemented in fiscal year 2018. SGL intends to continue to externally review and certify according to IDW PS 982 the effectiveness of its Group-wide ICS in regular intervals.

Accounting process

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

The SGL Carbon accounting manual defines the consistent accounting and valuation principles for all subsidiaries that are consolidated in SGL Carbon's 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 throughout the group. Our Group Accounting staff evaluates more complex subjects in detail. In order to reduce the risk of misstatements in the accounting of complex subjects, we consult external service providers and specialists, such as actuaries to prepare expert opinions concerning pensions.

The consolidated financial statements are prepared using SAP-based consolidation software and based on a standardized model chart of accounts. Binding content requirements and group-wide processes minimize the discretion of decentralized units when recording, measuring and presenting assets and liabilities. For the consolidated financial statements, data is recorded and automated at company level, uploaded into the group-wide consolidation software and then validated. Through quarterly internal declarations of completeness from the material companies, issues in agreements made that must be recognized and those that must be disclosed are identified and correctly accounted for.

Monitoring and limiting RMS and ICS

Group Internal Audit routinely monitors the functionality of the RMS and ICS through random sampling and other means. The Supervisory Board and Audit Committee carry out their control functions and receive a quarterly risk report from the Board of Management in which the risk situation is summarized. Furthermore, the effectiveness of SGL Carbon's ICS is reported during Audit Committee meetings.

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 opportunity and risk areas. If these areas also contain opportunities, such opportunities are explicitly mentioned. 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 Carbon 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 either have 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 reporting segments.

The opportunities and risks are categorized in the following clusters:

- Opportunities and risks from external conditions

- Financial opportunities and risks

- Legal opportunities and risks

- Opportunities and risks from operating activities

Opportunities and risks from external framework conditions

Opportunities and risks in the development of growth markets (ORC: medium)
SGL Carbon'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.

The reporting segment Composites – Fibers & Materials (CFM) aims to grow in the automotive, aerospace, wind energy and industrial applications industries. We see opportunities, especially in those areas where customers need a combination of lightweight materials and high strength. Therefore, we expect significant project-based growth in the medium term for structural components, leaf springs and battery boxes based on composites, especially in the automotive market segment. Projects that experience delays or are not implemented as expected can have an impact on our economic development. The future holds considerable growth opportunities in the aerospace industry as well as a result of the need to reduce weight and the significant cost savings from the use of industrial carbon fibers, for example, for the use in materials and components for non-structural applications. However, there is the risk that we will not be able to fully overcome the currently high entry barriers to the aerospace market or that it will take us longer than expected.

In other CFM markets, the industrial use of carbon fibers and fiber composite materials as a replacement for materials like steel, aluminum or fiberglass is still relatively new and the technology will continue to mature in the coming years. In addition, composite components cannot currently be manufactured at competitive costs for many applications. Therefore, 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 automotive and transport industries as well as in the battery & other energy market segment with our anode materials because our products and services are meeting the demands of global megatrends such as mobility, digitization and energy efficiency. Because of the strong growth in recent years, we are operating at full capacity in many areas and are therefore planning growth investments. If our target markets do not develop as positively as expected, we may not fully achieve our growth targets, which could have a negative impact on the results of operations, financial position and net assets.

Opportunities and risks from price and volume development (ORC: medium)
In the reporting segment GMS, we are seeing a strong revival in business in the growth markets energy, digitization and mobility. Exchange rates, oil and sales price developments bear risks with regard to the impact on earnings of individual products and customer industries as well as within different regions. A drop in the sales price, especially due to cooling markets in Asia, could have an impact on the sales and earnings potential of SGL Carbon. In the medium term, our planning faces a risk of stagnating volumes, especially in the solar, industrial applications and chemicals industries. Major

battery projects for the automotive industry may lead to volume growth opportunities; however, this business also involves a high dependency on few customers.

Risks in the CFM business unit may arise from lower growth as a result of delays in the expected rise in volume compared with planning and further capacity expansion by competitors. Here in particular, the volume development in the acrylic fiber business and fierce competitive pressure in the wind energy sector must continue to be monitored carefully.

Opportunities and risks from the future general economic trend (ORC: medium)
As an internationally operating company, global economic developments have a significant impact on SGL Carbon's results of operations, financial position and net assets. The current macroeconomic environment is shaped by continued growth in the global economy but at a slower pace and with high risks. Some of these risks arise from increasing protectionism, political instability and higher debt in many countries. In addition, e.g. fluctuating currencies and revaluations on the real estate and financial markets can have an impact on the real economy.

Europe continues to face major political challenges and risks, such as Brexit and high levels of debt in some EU countries. Furthermore, an escalation in the trade dispute with the USA cannot be ruled out. In the USA, forecasters expect the economy to slow in 2019 because the tax reform stimulus is losing steam and lower earnings on account of trade disputes may have a stronger impact. China's economic expansion rate is expected to level off. In addition, the negative impact of the trade dispute with the USA will be more noticeable throughout the year.

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, if the markets develop significantly differently compared with current expectations (see Outlook), this harbors related opportunities and risks for our business development.

Risks from trade restrictions (ORC: low)
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 or 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.

The structure of the trade relationship between the EU and the UK after Brexit remains unclear. A potential "hard" Brexit could have an especially negative impact on the supply chain in the reporting segment Composites – Fibers & Materials (CFM) because one of our two sites for manufacturing carbon fibers is located in the UK. That is why we are continuously monitoring and assessing the developments in a steering committee led by the CFO, and we have already initiated measures to mitigate our risk exposure.

In addition, further escalation of the trade dispute between the USA and China, the USA and the EU and the introduction of additional customs duties could have a further negative impact on our business.

Financial opportunities and risks

Assessment risks (ORC: 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 on the reported 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.

Opportunities and risks from obligations for pensions and health benefits (ORC: medium)
Changes to the present value of the defined benefit pension plans as well as the plan assets in our pension obligations affect the funding status of our pension plans. A deviation in the actual compared with an expected actuarial development of the pension obligations with regard to the underlying parameters could have an impact on the net assets, financial position and results of operations. In particular, the development of plan assets in the pension interest rate is a significant factor affecting the pension obligations.

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 significantly influence the current level of allocations to these funds, the pension obligations currently accounted for in the form of provisions and the resulting pension payments. Depending on the development, this could have both a negative or a positive impact on the financial performance as well as the ongoing earnings situation.

Risks in the financial position (ORC: low)
As of December 31, 2018, we had liquidity of €182 million. In addition, an unused syndicated credit line in the amount of €50 million was also at our disposal. The credit line was replaced by a new syndicated credit line as of January 15, 2019, with an amount of €175 million, a maturity of four years and the option to extend for another year. No significant due dates for financial liabilities will arise through mid-2020. We intend to refinance the convertible bond scheduled to mature in September 2020 with a new corporate bond.

The financing agreements of SGL Carbon 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 during the term of the financing agreements, it is possible that we might not be able to achieve the relevant financial ratios if business development declines considerably. However, at present we see sufficient financial leeway with regard to the covenants. Furthermore, it must also be noted that as of December 31, 2018, we had still not 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.

We allocate investments in cash and cash equivalents predominantly to institutions among our 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 exchange rate fluctuations (ORC: 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. All our activities in connection with these currency 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.

Legal risks and compliance risks

Tax risks (ORC: medium)
Changes in tax law or taxation practice in individual countries in which we operate may lead to a higher tax expense and higher tax payments. 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 in terms of tax compliance harbor the risk of additional tax expense. Tax risks may also arise in connection with the PP business separation process completed in previous years and the disposal of discontinued operations. The capitalized taxes depend on the performance in the individual companies. If individual companies significantly improve earnings, there is potential in the medium term to further capitalize deferred taxes.

IT Risks (ORC: medium)
In order to appropriately account for the growing importance of IT security, SGL Carbon 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 use 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 Carbon has an integrated and largely standardized group-wide IT infrastructure. Global processes and security measures that adapt to threats protect us from the loss or manipulation of data as well as unexpected downtime. The availability of critical systems and infrastructures is hedged via service level agreements with the various operators. Due to the high importance of IT for proper business operations and the constantly high risks associated with IT attacks, and despite the measures described above, risks associated with our IT systems and IT infrastructure remain.

Legal risks and risks from disposals (ORC: low)
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.

Due to the international nature of our business, we are also confronted with a wide variety of uncertainties. Some of these include the difficulties surrounding enforcement of contracts and recovery of outstanding receivables in foreign legal systems, compliance with foreign trade law, international import and export restrictions and technology transfer law in different countries as well as the difficulties surrounding global enforcement of patent protection of our products.

In the case of disposed businesses, it is normal for sellers to also be liable for transactions completed before the disposal date. This harbors the risk of potential expenses for already disposed areas.

Risks from compliance and regulatory issues (ORC: 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, expanded the compliance risk map to include data protection, money laundering and compliance with human rights as well as 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.

The new EU data protection directive, also known as the EU GDPR (EU General Data Protection Regulation), which has been in force since May 2018, also harbors economic risks in case of potential violations. To address these risks, SGL Carbon has further expanded its data protection organization and established related processes to implement the rules stipulated in the regulation.

Risks from environmental protection laws and regulations (ORC: Low)
The EU legislation on chemicals (REACH) which prescribes the registration, assessment and licensing for certain substances resp. products may lead to in part extensive studies. 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. If the EU adjusts how individual materials are classified, 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 would be 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. Stricter

environmental regulations, such as those documented in the Paris Agreement, could require additional investments.

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

Opportunities and risks from operating activities

Opportunities and risks in production (ORC: medium)
In order to achieve our dynamic growth targets and to seize further growth opportunities in the short term, investments are made in new assets and technologies. Risks such as delays or problems in the investment process, in ramping up new systems or in customer qualification could lead to a delay in realizing sales revenue.

Production downtime at one or more sites could lead to delivery problems with regard to quantity and quality, which could potentially result in compensation paid to customers. Because we are utilizing full capacity in some areas, our growth strategy could lead to higher maintenance and quality costs as well as higher expenditures for ensuring system availability.

Furthermore, our goal is to continue to optimize and reduce our current assets relative to sales revenue. If this goal is not achieved, this could have a negative impact on free cash flow in particular.

Opportunities and risks in the raw material and energy markets (ORC: low)
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. We develop appropriate strategic concepts with our main suppliers based on business relationships built up over many years. However, price fluctuations in important raw materials and energy resources could also have a negative impact on our financial performance if, for example, we cannot pass on increases in raw material prices by adjusting sales prices accordingly. In addition, 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.

Opportunities and risks in human resources (ORC: low)
Our employees and executives constitute a key pillar of SGL Carbon's success. The competition for highly qualified executives, scientists, engineers and technicians is very intense and continues to increase, especially considering the demographic development in many countries where we do business. In order to achieve our strategic goals, we have to hire highly qualified personnel, offer them relevant professional development and retain them permanently. To continuously cover our demand for qualified experts, we use many personnel recruitment tools, such as Active Sourcing. The loss of important knowledge and expertise as well as insufficient attractiveness as an employer could have a negative impact on the results of operations, financial position and net assets of SGL Carbon.

Opportunities and risks from technology (ORC: 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.

Therefore, 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 the CFM business unit, 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. For our graphite-based products, product or process innovations likewise offer many opportunities, as is the case with graphite materials for lithium-ion batteries or coated graphite, which is needed for producing LEDs.

Opportunities arise from the active participation in corporate networks. Examples of such networks, through which we discover trends and customer interests early, are the Carbon Composites e. V. (CCeV) and the "Campus 4.0" initiative as well as the lithium-ion battery expertise network KLiB.

Our portfolio of innovation projects undergoes a routine analysis, which includes the commercial and technical risks for individual projects as well as the entire portfolio. The defined risk response measures are continuously monitored and decisions to continue individual projects are linked to predefined milestones.

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.

Risk transfer via insurance protection (ORC: low)
SGL Carbon 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 Carbon 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.

Overall assessment of risks and opportunities of SGL Carbon

In order to compete in the growth markets energy, digitization and mobility, we will continue to invest in new assets and technologies. This comes with opportunities and risks, which arise from implementing and ramping up our investment projects as well as from the actual market development. In addition, there are particular opportunities and risks in price and volume trends to both sales and procurement. A change to our business rating could have an impact on the value of our assets. Tax risks could affect our financial figures, especially in the medium term.

In summary, we do not currently see any substantial risks that have an impact on SGL Carbon 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 Carbon as a going concern.

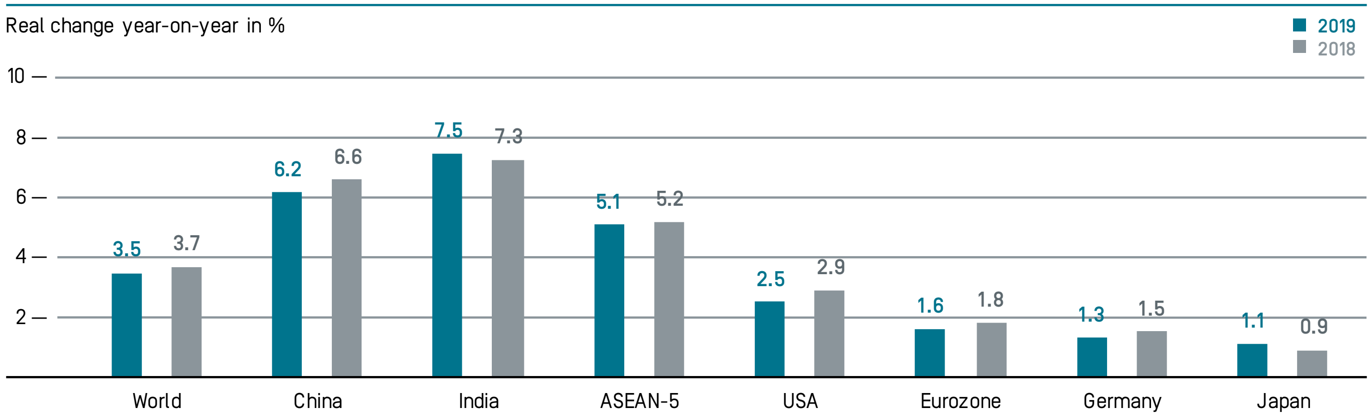
Outlook

Overall economic trend

The global economy will continue to grow in 2019. Important leading indicators are signaling that expansion will weaken, however. Risks stemming from protectionism, political instabilities and higher debt levels are also considerable in many countries. The geopolitical crises are not over yet. In addition, currency turbulences and valuation adjustments could hamper the real economy in the real estate and financial markets. As a result, the global economy is particularly delicate in 2019.

The turnaround on interest rates in the US is impairing the financing environment of many developing countries, which are reacting with interest rate increases to stabilize their own currencies and inflation, curbing their domestic economies. The slowdown in world trade is decreasing momentum for industrial production and investment throughout the world. The economy in industrialized countries continues to be buoyed by robust private consumption due to high employment, however, and fiscal impulses are also being put in place. The IMF (International Monetary Fund) lowered its forecast in January. For 2019, it now expects global growth of only 3.5% instead of 3.7%. Industrialized countries will only grow by 2.0%, and emerging and developing countries only by 4.5%.

Gross domestic product in 2019 (2018) at a glance



Source: IMF, World Economic Outlook (Update) from January 2019.

World economy in upturn in 2019, but with less momentum and high risk

An economic slowdown is expected in the US in 2019, as the impulses from the tax reform run their course and losses stemming from the trade dispute have a stronger impact. Private consumption and investment should lose momentum because of interest rates. According to the IMF, however, growth will remain robust at 2.5%.

Europe is a challenging area of contrasts, with its solid economic base and considerable political challenges and risks. In addition to Brexit, several EU countries are burdened by debt levels owing to structural deficiencies and an absence of reforms. A trade dispute with the US cannot be ruled out either. In contrast, interest levels remain low and fiscal policy appears mildly expansionary. Production and employment should increase moderately. According to the IMF, the Eurozone will grow by 1.6% in 2019. The upturn is continuing in Germany. Capacity utilization is high, growing only slightly despite investment, and the shortage of skilled professionals is putting increasing limits on growth. Private consumption and building investment remain robust, however. For 2019, the IMF estimates growth in Germany of 1.3%.

For China, the IMF expects economic expansion to flatten to 6.2% as a result of structural changes to favor domestic demand, services and high technology. The negative effects of China's trade dispute with the US will also become increasingly visible throughout the year. On the other hand, China is managing by introducing various measures to support its domestic economy. Meanwhile, India and the ASEAN-5 countries should continue to grow at roughly the same high rates.

Industry trends

Market segment Mobility

Automotive industry: lightweight design with carbon fibers has great, drive-independent potential

Slight growth is expected for the automotive industry in 2019. The German automobile industry association (VDA) predicts that global sales should increase by 1% to 85.9 million passenger cars (China: +2%, US and Europe: +0%, Germany: -1%). Forecast risks include Brexit and potential US trade restrictions against the import of European cars. Notwithstanding the above, the industry's technological upheaval will continue to gather pace. In addition to technological advances in cars and batteries, the growth of e-mobility also necessitates huge investments in charging infrastructures, mining raw materials such as cobalt, and battery cell production. There is general expectation that e-cars will significantly increase their market share among new car registrations. Based on a growing overall market, the number of new cars with combustion engines (including hybrids) will also increase. Consequently, weight reduction will become a central issue for both vehicle categories. According to a new lightweight construction study conducted by Lucintel, the market for carbon fibers in automotive construction will grow by 7.9% per year between 2018 and 2023. Additional forecasts for the same time period even assume double-digit growth for carbon fiber composites in automobiles (Research & Markets: +15%).

Aerospace: high growth potential for carbon fibers in cabin components and brakes

The aviation industry continues to expand and lightweight construction continues to gain in importance, as it allows for lower operating costs and reduced emissions. Airbus expects the entire global fleet in operation to more than double by 2037. Growth will be supported by new construction, as well as by rebuilds and modernizations to previously delivered aircraft. According to Airbus, around half of the 21,000 aircraft currently on the global market will remain in use. Due to increasing environmental and noise restrictions and high pressure on costs owing to competition among airlines, such aircraft will need to be retrofitted over the long term with new, more efficient propulsion systems. At the same time, aircraft interiors will also be modernized and rebuilt, which will benefit our aerospace and light construction business. We primarily supply non-structural parts and components such as those required for the interior design of cabins and for braking systems. The total market of all materials for aircraft cabins is set to grow by 5.9% per year up to the year 2025 (Markets & Markets). In the process, carbon fiber composite materials are proving increasingly popular. Growth in the carbon aircraft brake segment is estimated to increase by an average of 4.5% annually (Lucintel). Meanwhile, demand for carbon fibers and composites in the commercial aviation industry as a whole should increase by a good 8% per year.

Market segment energy

Lithium ion batteries: massive increases in demand due to e-mobility and energy storage units

The main growth driver in this market segment is the demand for lithium-ion batteries (Li-Ion) for the automotive industry and the energy sector. Various market researchers assume growth of between 12% and 17% per year up to 2025. At the same time, IHS Markit expects the production of battery cells for e-mobility alone to increase by about 36% per year to 322 GW by the year 2023. According to the International Energy Agency (IEA), the number of new electric cars sold will increase to at least 21.5 million passenger cars by the year 2030 (2018: less than 2 million passenger cars). A large, new market is opening up for the expansion of renewable power generation with energy storage units. According to studies, storage capacities of about 130 GW will be constructed globally by 2025 (IHS Markit), increasing to 942 GW by the year 2040 (BNEF). Due to current technological advances, it can be assumed that anode material based on synthetic graphite will remain the dominant material over the medium term. According to industry experts at Gartner, the market for consumer and business electronics (IT) will grow by 0.9% in 2019, despite increased market saturation. At the same time, sales of mobile devices (notebooks and tablets) will increase by 2.7%. Gartner expects sales to grow by 1.1% for mobile telephones, and by around 26% for portable small devices (smart watches, headsets, etc.).

Wind industry: strong market growth; trend toward larger rotor blades necessitates increased use of carbon fibers

As an efficient technology, wind energy is providing an increasing share of renewable energy production worldwide. Stricter climate protection targets and political guidelines for the reduction of CO_2 are stimulating that trend. In the dominant onshore segment (wind farms on land), repowering (the conversion or replacement of old equipment) is gaining in importance. At the same time, offshore projects at sea are also being heavily invested in. Modern onshore technologies and offshore equipment are focusing on larger and larger rotor diameters, in order to reduce the cost of energy by improving efficiency. Carbon fibers are being used more and more in such rotor blades. According to the Global Wind Energy Council (GWEC), the annual volume of new installations should grow by just under 6% per year to 66.5 GW by the year 2022.

As a result, the cumulative global capacity for wind energy generation will increase to 841 GW by 2022. During the same period, industry experts at Technavio anticipate that sales growth in the global market for wind energy turbine rotor blades will step up by just under 7% per year to USD 9.6 billion. In this high-growth environment, the long-term perspectives for our wind business remain positive.

Solar / polysilicon: continued high investment in the production of polysilicon and wafers

The main driver behind the dynamic growth in the demand for polysilicon is photovoltaics (PV). Despite reductions in PV subsidies in the largest market by far, China, the prospects for the global solar industry remain positive. Falling module prices are stimulating demand worldwide. The PV experts at TrendForce anticipate growth of 7.7% in new installations to 111.3 GW in 2019. China, the US, India and Japan are leading the expansion in 2019. Market researchers at IHS Markit expect new PV installations with an output of 123 GW in 2019 (+18%). According to various forecasts concerning new installations, the global PV market will growth by 9% per year in the next five to seven years. The basis for that growth is the simultaneously strong growth in the production of upstream polysilicon. According to previous market forecasts, polysilicon is increasing by 13% annually, which requires consistently high investment in capacities. As a result, our business with graphite products is very well positioned for the manufacture of polysilicon, silicon crystals and wafers.

Market segment digitization

Semiconductors / polysilicon: only moderate growth in 2019; hard disks stagnate

After two particularly strong years, growth in the semiconductor industry is flattening once again in 2019. The reasons for that are the trade dispute between the US and China, and the downturn in the global economy. In addition, the dominant hard disk segment (NAND flash, DRAM) has also weakened. For 2019, the industry association World Semiconductor Trade Statistics (WSTS) anticipates sales in the semiconductor market to growth by 2.6% worldwide (previous projection: +5.2%). At the same time, WSTS expects moderate growth for all regions and product groups, with the exception of hard disks (2019: -0.3%). Digitization will give a noticeable boost to the demand for semiconductors in the future. Demand in trade and industry (the Internet of Things, Industry 4.0) and in automobile manufacturing (assistance systems, autonomous driving) is growing dynamically. As a result, the semiconductor industry will also continue to grow, despite saturation in the consumer electronics market. The industry association SEMI predicts that the investment market for production facilities and equipment for the semiconductor industry will go through a dip in 2019 (-4.0%), but will already reach a new record volume of approximately USD 72 billion by 2020, following a sharp increase of about 21%.

LED: high growth in lighting market, but investment restraint in China in 2019

LED lamps are increasingly replacing other lighting technologies. Substantial further decreases in production costs are driving that growth. According to a conservative forecast issued by the specialists at TrendForce (LEDinside), global sales of LED lamps will increase by 9% per year to USD 56.6 billion by 2023. LED experts at Technavio even expect sales on the global market to grow by 16% per year between 2018 and 2022. For the LED lighting market in Europe alone, market experts at GMI (Global Market Insights) have announced sales growth of a good 18% per year up to the year 2024. The drivers behind that growth are energy efficiency, high private purchasing power, and the pick-up in the construction industry, which is stimulating the buildings lighting segment (residences, offices, hotels) and exterior lighting segment (streets, parks). In the automotive industry, LED sales are expected to grow by an average of 5.3% between 2017 and 2023 (Yole Development).

Market segment chemicals

Sector economy to slow down again in 2019 – still driven by Asia

The German chemical industry association (Verband der Chemischen Industrie, VCI) expects the increase in global chemical and pharmaceutical production to slow down to 3.6% in 2019. China (+5.0%) and India (+4.0%) will achieve the highest growth. In the US, production will increase robustly by 2.5% in all segments (excluding pharma: +3.0%). In pharmaceutical production alone, the VCI expects growth of 3.5% in Europe and 4.5% in Germany. Excluding pharmaceuticals, growth will stagnate (EU: +0.5%; Germany: +0.0%). In Europe, investment confidence in the chemicals industry should focus more on targeted projects, despite higher capacity utilization in light of economic risks. Demand for more substantial investment is expected in Asia in particular. Short-term industry trends are of limited importance to our business, however, as SGL Carbon operates primarily in a niche focused on the investment cycle of the chemicals industry (project business, special segments, graphite).

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 Corporate, in which central functions are consolidated (for information on our organizational and reporting structure, please refer to the Management Report under the section titled "SGL Carbon – the Group").

The Group outlook and the outlook for our business 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 planning year 2019. Irrespective of this, changes in net positions (e.g. due to sales trends that differ from our projections) and further upheavals to 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. Further clarification on this can be found in the Opportunity and Risk Report. The following table provides an overview of relevant financial Group targets and the respective outlook for 2019:

Group financial targets

€m	Actuals 2018	Outlook 2019
Sales revenue	1,047.5	Mid single digit percentage increase
EBIT [1]	64.6	Close to prior year level
Return on capital employed (ROCE $_{EBIT}$) [1]	5.4%	Close to prior year level
Consolidated net result - continuing operations	50.3	Balanced result

[1] before non-recurring items

Group performance

Fiscal year 2018 was characterized by the positive effects of the first-time application of IFRS 15, as well as positive non-recurring items stemming from the full consolidation of the former SGL ACF. Due to the high figures involved, those effects have influenced our outlook for the current fiscal year. In addition, we must also acknowledge the reports of a global slowdown in the overall economy. Nevertheless, we expect consolidated sales revenue to post a mid single digit percentage increase in 2019, and to be primarily volume-driven. After the very steep increase in 2018, Group EBIT (before non-recurring items and purchase price allocation) is expected to stabilize on the level of the prior year. Positive price and volume effects, and savings, should largely be offset by higher personnel costs, higher research expenditure, and higher material and factor costs.

After a consolidated net profit of about €41 million in fiscal year 2018, the Group's consolidated net result should break even in 2019. It should be noted, however, that the previous year benefited from a non-cash positive special item of about €28 million, resulting from the full consolidation of SGL ACF. In addition, for 2019 we are projecting higher financing costs in our financial result, mainly due to the intended issue of a corporate bond to refinance debt maturities at the end of 2020.

Business trends in reporting segments

	KPI	Actuals 2018	Outlook 2019
CFM	Sales revenue	422.5	Mid single digit percentage increase [1]
	EBIT [2]	20.8	Close to prior year level
GMS	Sales revenue	589.9	Close to prior year level
	EBIT [2]	76.0	Close to prior year level
Corporate	EBIT [2]	−32.2	Close to prior year level

[1] Adjustment to the audited version dated March 4, 2019
[2] before non-recurring items

In our reporting segment Composites – Fibers & Materials (CFM), we expect sales to increase in the mid single digit percent range, primarily driven by higher volume growth. Sales revenue in the aerospace industries should remain on the level of the previous year, and sales revenue with the automotive industry should be close to the prior year level. Slight sales revenue growth is anticipated for the industrial applications and textile fibers market segments. The latter is also dependent upon the development of raw material prices. We expect noticeable growth in sales revenue in the wind energy industry compared with the relatively low prior-year figure, which was influenced by the sale of SGL Kümpers and weak demand from our customers. EBIT before non-recurring items should remain on the level of the previous year in this area, as newly acquired projects will not positively influence our result until the medium term.

Sales revenue in our reporting segment Graphite Materials & Systems (GMS) was heavily influenced in the previous year by the first-time application of IFRS 15. In light of this, we expect sales revenue in fiscal year 2019 to be around the level of the previous year, as higher price and volume trends should be offset by negative currency effects. Despite a short-term slowdown in the market environment, in terms of individual market segments, noticeable sales growth is once again expected in the LED and semiconductor industries, as we can still gain additional market share as a result of our technological leadership. The automotive and transport market segment should record a double digit increase in sales revenue, while the chemicals and industrial applications market segments should remain on the level of the previous year. As in the previous year, we will limit sales revenue with the solar industry to below the prior year level in order to prioritise supply to the market segments LED and semiconductors. The battery and other energy market segment should be close to the prior year level. This development should be assessed in view of the positive impact of IFRS 15 in the previous year. The same is true for EBIT in our GMS business unit, which we expect to remain on a similar level to that seen in the previous year, which also benefitted from the positive impact of IFRS 15. As a result, GMS should once again exceed its target EBIT margin of 12% (before non-recurring items), reinforcing the fact that its business model is also stable in a weakening global economy.

EBIT in our reporting segment Corporate in fiscal 2019 should be close to the level seen in the previous year, which benefitted from one-time positive income in the amount of about €4 million from the sale of a parcel of land.

Higher capital expenditure between 2019 and 2021 in order to seize additional growth opportunities

At the end of 2018, we adopted our new five-year projections, which provide for an increase of about €80 million in capital expenditure during the period 2019 to 2021, particularly in our GMS business unit, in order to seize additional growth opportunities, especially in the rapidly growing LED and battery and other energy market segments. That increase should lead to additional sales and earnings contributions starting in the year 2022. Accordingly, we currently anticipate our capital expenditure budget for fiscal year 2019 to be approx. €100 million, up from €78 million in the past year. In addition to the market segments mentioned above, capital expenditure in our GMS business unit will focus on the automotive and transport, and semiconductor market segments. The focus of capital expenditure in our reporting segment CFM, which should only make up about half of the capital expenditure in GMS, will mainly continue to be the automotive segment. In this area, we will continue to strengthen the value chain, particularly for fabrics and components, and will adapt acrylic textile fiber lines to PAN precursor to serve our carbon fiber production.

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. Favorable balance sheet ratios, our available financing framework, and our operating cash flow all mean that we have sufficient means to cover our anticipated liquidity requirements for 2019.

Our net financial debt at the end of 2019 should increase in the mid-double-digit million-euro range compared with the end of 2018, primarily due to higher capital expenditure and increased interest expenses. Nevertheless, we will remain within our target leverage ratio of under 2.5. As mentioned above, our target gearing level of about 0.5 may be temporarily exceeded due to additional capital expenditure during the years 2019 to 2021.

Dividend performance

Due to the accumulated losses of our parent company SGL Carbon SE in fiscal year 2018, the company has no capacity for the distribution of dividends. Additional growth will allow our company to operate more profitably on a sustainable basis. Only then will the payment of earnings-related dividends be possible. At the same time, however, we will also carefully consider whether priority should be given – as it is at the moment – to capital expenditure in order to participate in the strong growth in many of our market segments

Remuneration Report

Remuneration for the Board of Management in fiscal year 2018

The remuneration system applicable to members of the Board of Management was restructured 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. To fulfill the regulatory requirements, the following objectives were given particular consideration when restructuring the system:

- harmonization of the remuneration system for Board members;
- reduction in complexity;
- focus on sustained effectiveness of the remuneration systems.

In the past, the Annual General Meeting of SGL Carbon SE approved the remuneration system by 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 non-performance related salary and non-cash payments as well as retirement benefit obligations and performance-related (variable) components.

The non-performance related 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. Köhler receives €650,000 per year, and Dr. Majerus receives €500,000 per year. The fringe benefits primarily comprise the use of a company car, including a shared chauffeur, and contributions to health insurance. The latter was cancelled in connection with the October 1, 2017 adjustment. 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. Membership in an accident insurance plan was included until the end of 2017 and was cancelled effective January 1, 2018.

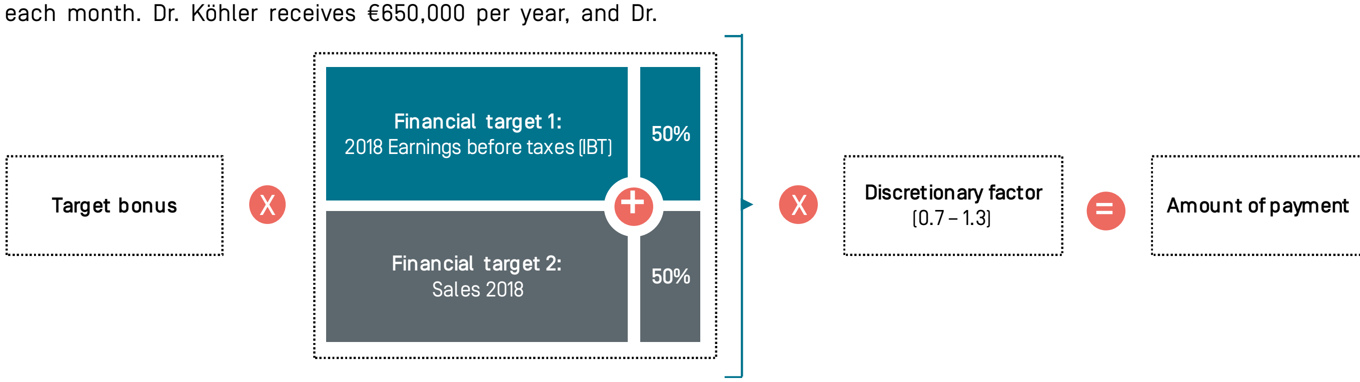
The performance-related components comprise the annual variable remuneration (SGL Carbon Bonus Plan) and a multiyear variable remuneration component (SGL Carbon Long Term Incentive Plan, LTI).

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. The target bonus for Dr. Köhler has been set at €450,000 and for Dr. Majerus at €400,000 p.a. The amount paid out depends on the financial and individual performance targets 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 illustration).



The Supervisory Board determines the discretionary performance factor on the basis of the individual level of achievement of the various personal targets set at the start of the year for each Board member, among other factors.

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 $\text{ROCE}_{(\text{EBIT})}$ trend (performance target) and the share price. One tranche from the plan is granted each year. The Supervisory Board sets the target $\text{ROCE}_{(\text{EBIT})}$, 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, with Dr. Köhler and Dr. Majerus each receiving €700,000 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 relevant performance period by dividing the allocation amounts by the share price calculated to reflect a fixed moving-average period before the start of the performance period.

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 share price calculated to reflect a fixed moving-average period at the end 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.

Final number PSUs × Avg. share price = Amount of payment

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 average share price calculated 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. Köhler and €3,100,000 for Dr. Majerus.

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 bonus of 50% of their annual remuneration for the duration of the non-competition 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 bonus.

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

Since fiscal year 2014, a detailed breakdown of the remuneration paid to each member of the Board of Management has been presented in accordance with the German Corporate Governance Code. 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 2018 must include:

- 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 in 2018 (benefits granted)

Total remuneration for the members of the Board of Management in fiscal year 2018 (based on benefits granted) was €4,481,835 (2017: €5,153,558). Of the total remuneration, €1,150,000 (2017: €1,108,750) was attributable to fixed remuneration, €36,502 to non-cash benefits (2017: €53,051), €1,544,875 to the one-year variable remuneration (2017, including special payments: €2,380,000), €1,400,000 to the multi-year variable remuneration (2017: €1,245,000), and €350,458 to retirement benefits (2017: €366,757). As of the date of preparation of these financial statements, the Supervisory Board had not yet decided on the annual performance-related amounts to be paid out for 2018. The annual performance-related amounts are presented on the basis of the preliminary figures and assumptions regarding performance factors and represent the amount expected to be paid out in each subsequent fiscal year. The members of the Board of Management were granted PSUs from the LTI as their multi-year variable remuneration. In October 2017, a special payment of €400,000 was made to each of the two Board members in recognition of the results achieved by each of them in connection with restructuring the Company.

The LTI tranches granted in fiscal year 2018 was based on a four-year performance period for both Board members. The following remuneration was extended to the active members of the Board of Management in the 2018 reporting year (individualized presentation):

Benefits granted (€)				Dr. Jürgen Köhler Chief Executive Officer				Dr. Michael Majerus Chief Financial Officer
	2017	2018	Min.	Max.	2017	2018	Min.	Max.
Fixed remuneration	635,000	650,000	650,000	650,000	473,750	500,000	500,000	500,000
Fringe benefits	31,313	18,795	18,795	18,795	21,738	17,707	17,707	17,707
Total	**666,313**	**668,795**	**668,795**	**668,795**	**495,488**	**517,707**	**517,707**	**517,707**
Annual variable remuneration [2]	1,255,000	817,875	0	900,000	1,125,000	727,000	0	800,000
Multi-year variable remuneration [1]	**700,000**	**700,000**	**0**	**1,400,000**	**545,000**	**700,000**	**0**	**1,400,000**
LTI 2017-2020	700,000	0	0	0	545,000		0	0
LTI 2018-2021		700,000	0	1,400,000		700,000	0	1,400,000
Total	**2,621,313**	**2,186,670**	**668,795**	**2,968,795**	**2,165,488**	**1,944,707**	**517,707**	**2,717,707**
Retirement benefits	213,006	205,681	205,681	205,681	153,751	144,777	144,777	144,777
Total remuneration (German Corporate Governance Code) [3]	**2,834,319**	**2,392,351**	**874,476**	**3,600,000**	**2,319,239**	**2,089,484**	**662,484**	**3,100,000**

1) The figures relating to the multi-year remuneration for fiscal years 2018 and 2017 correspond to the allotment values of 100%
2) The amounts of the one-year variable remuneration represent the expected payout amounts in the following financial year and include in 2017 the special payment received in October 2017.
3) The maximum total remuneration in the "Max" column does not correspond to the sum of the individual components but to the maximum remuneration in accordance with the Executive Board contract.

Total remuneration for the Board of Management in 2018 (amounts received)

The payments made to the Board of Management in fiscal year 2018 totaled €3,116,960 (2017: €3,630,012). Of the total remuneration paid, €1,150,000 (2017: €1,108,750) was attributable to fixed remuneration, €36,502 to non-cash benefits (2017: €53,051), €1,580,000 to the one-year variable remuneration (2017, including special payments: €2,101,454), €0 to the multi-year variable remuneration (2017: €0), and €350,458 to retirement benefits (2017: €366,757).

The following table of currently active Board of Management members shows the effective amounts received in the respective calendar year, broken down into fixed remuneration, fringe benefits, one-year variable remuneration, multi-year remuneration, and retirement benefit expenses.

Cash method (€)	Dr. Jürgen Köhler Chief Executive Officer		Dr. Michael Majerus Chief Financial Officer	
	2018	2017	2018	2017
Fixed remuneration	650,000	635,000	500,000	473,750
Fringe benefits	18,795	31,313	17,707	21,738
Total	**668,795**	**666,313**	**517,707**	**495,488**
Annual variable remuneration [1]	855,000	1,098,544	725,000	1,002,910
Multi-year variable remuneration	0	0	0	0
Total	**1,523,795**	**1,764,857**	**1,242,707**	**1,498,398**
Retirement benefits	205,681	213,006	144,777	153,751
Total remuneration	**1,729,476**	**1,977,863**	**1,387,484**	**1,652,149**

[1] The payout amount for the one-year variable compensation in the 2018 financial year will only be determined at the Supervisory Board meeting on March 26, 2019. The figure for 2018 shown here corresponds to the amount paid out in 2018 for the 2017 financial year, taking into account a discretionary performance factor of 1.2; the value for 2017 corresponds to the payment in 2017 for the 2016 financial year.

Additional disclosures on share-based payment instruments in fiscal year 2018

The remuneration system for the Board of Management was restructured in 2014 as described above. The following table shows the status of the SAR plans being phased out:

SAR	Balance as of Dec. 31, 2017		Forfeited 2018	Balance at Dec. 31, 2018	
	Number	Weighted base price		Number	Weighted base price
Dr. Köhler	46,000	30.77	0	46,000	30.77

The SARs existing as of December 31, 2018 were not exercisable.

The table below shows the performance share units (PSUs) granted from the LTI in in the last years. Based on the results posted by SGL Carbon and the performance of ROCE, it is expected that the targets relating to the LTI plans granted in 2015 to 2018 will be met at the end of the three- or four-year performance period.

The table below depicts the LTI plans that were outstanding at year-end 2018:

LTI	Tranche	Allocation value €	Price € [1]	No. of PSUs	Performance 0% –150% [2]	Fair value € [3]
Dr. Köhler	LTI 2015-2018	350,000	14.01	27,484	1.6%	3,654
	LTI 2016-2018	175,000	12.26	15,704	60.8%	79,383
	LTI 2016-2019	525,000	12.26	47,111	81.7%	319,732
	LTI 2017-2020	700,000	8.49	82,450	80.8%	553,609
	LTI 2018-2021	700,000	11.34	61,728	86.4%	443,200
Dr. Majerus	LTI 2015-2018	545,000	14.01	42,796	1.6%	5,690
	LTI 2016-2019	545,000	12.26	48,905	81.7%	331,907
	LTI 2017-2020	545,000	8.49	64,194	80.8%	431,029
	LTI 2018-2021	700,000	11.34	61,728	86.4%	443,200
Total		**4,785,000**		**452,101**	**69.5%**	**2,611,405**

[1] Fair value on grant date before dilution
[2] Estimated attainment
[3] Number of PSUs weighted against the performance achieved and an average share price of €8.31 for the last 60 days of fiscal year 2018

Remuneration in accordance with DRS 17

The total remuneration paid to Dr. Jürgen Köhler in fiscal year 2018 within the meaning of DRS 17 amounted to €2,186,670 (2017: €2,621,313) and consisted of a non-performance related component in the amount of €668,795 (2017: €666,313), a one-year variable component in the amount of €817,875 (2017: €1,255,000), and the multi-year variable component awarded for 2018 in the amount of €700,000 (2017: €700,000).

The total remuneration paid to Dr. Michael Majerus in fiscal year 2018 within the meaning of DRS 17 amounted to €1,944,707 (2017: €2,165,487) and consisted of a non-performance related component in the amount of €517,707 (2017: €495,488), a one-year variable component in the amount of €727,000 (2017: €1,125,000), and the multi-year variable component awarded for 2018 in the amount of €700,000 (2017: €545,000).

The total remuneration accruing to Dr. Jürgen Köhler for fiscal year 2018 amounted to €1,775,383 (2017: €2,134,319) and consisted of a non-performance related component in the amount of €668,795 (2017: €666,313), a one-year variable component in the amount of €817,875 (2017: €1,255,000), and a multi-year variable component of €83,032 (2017: €0) as well as retirement benefits of €205,681 (2017: €213,006).

The total remuneration accruing to Dr. Michael Majerus for fiscal year 2018 amounted to €1,395,174 (2017: €1,774,239) and consisted of a non-performance related component in the amount of €517,707 (2017: €495,488), a one-year variable component in the amount of €727,000 (2017: €1,125,000), and a multi-year variable component of €5,690 (2017: €0) as well as retirement benefits of €144,777 (2017: €153,751).

Company retirement benefits

Board of Management members 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 benefits account is interest bearing until benefits start being paid out, at which time any extra interest generated due to the investments in the benefits account having earned interest at a higher rate than the applicable guaranteed interest rate for the life insurance sector is credited to the benefits 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 present values of the defined benefit obligations for each of the two active Board members (shown in the table below) are secured by reinsurance policies measured at €3,360,910.

Active members of the Board of Management as of Dec. 31, 2018	Present value of defined benefit obligation		Service costs	
€ thousand	2018	2017	2018	2017
Dr. Köhler	2,962	2,750	206	213
Dr. Majerus	649	514	145	154
Total	**3,611**	**3,264**	**351**	**367**

The total remuneration paid to former members of the Board of Management, executive management, and their surviving dependants, amounted to €2.3 million in fiscal 2018 (2017: €2.0 million). Provisions of €60.1 million (2017: €59.4 million) were recognized in 2018 to cover pension obligations to former members of executive management and their surviving dependants. Of that amount €26.3 million was covered by reinsurance policies (2017: €26.7 million).

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.

				Remuneration		
€ thousand	Board member since	Age as of the date of the release of the 2018 Annual Report	Period of service (appointed up to)	Basic remuneration	Additional remuneration	Total
Susanne Klatten (Chairwoman) [1] [2]	2009	56	2020	125.0	7.6	132.6
Georg Denoke (Deputy Chairman) [3]	2015	54	2020	64.9	19.6	84.5
Helmut Jodl (Deputy Chairman)	2008	57	2023	75.0	5.6	80.6
Dr. Ing. Hubert H. Lienhard (Deputy Chairman; until 30.4.2018)	1996	68	2018	24.7	2.4	27.1
Dr. Christine Bortenlänger (until 25.6.2018)	2013	52	2018	24.1	5.8	29.9
Petra Brosowski (from 29.5.2018 until 25.6.2018)	2018	--	2018	3.84	0.4	4.24
Arnhild Broszio (from 29.5.2018 until 25.6.2018)	2018	--	2018	3.84	0.4	4.24
Dr. Daniel Camus (until 25.6.2018)	2008	66	2018	24.1	5.8	29.9
Ana Cristina Ferreira Cruz	2013	55	2023	50.0	1.6	51.6
Edwin Eichler	2010	60	2020	50.0	4.6	54.6
Michael Leppek (until 30.4.2018)	2013	48	2018	16.4	0.0	16.4
Ingeborg Neumann (from 29.5.2018)	2018	61	2023	29.7	9.2	38.9
Marcin Rzemiński (until 30.4.2018)	2013	58	2018	16.4	2.4	18.8
Markus Stettberger	2013	47	2023	50.0	12.6	62.6
Dieter Züllighofen	2016	52	2023	50.0	9.6	59.6
Total				**608.0**	**87.6**	**695.6**

[1] Chairwoman of the Personnel Committee
[2] Chairwoman of the Nomination Committee
[3] Chairman of the Audit Committee

Disclosures pursuant to Sections 289a (1), 315a (1) HGB as well as Sections 289f, 315d of the German Commercial Code (HGB)

The following outlines the disclosures required in accordance with Sections 289a (1) and 315a (1) of the HGB:

Composition of subscribed capital

As of December 31, 2018, 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 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 2018 by way of voting rights notifications 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 2018.

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 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 authorized or conditional capital (see Section 3 of the Articles of Incorporation as well as Note 23 of the notes to the financial statements).

Significant agreements subject to the condition of a change in control following a takeover bid

As of December 31, 2018, the Company had issued two convertible bonds maturing in 2020 and 2023, respectively. Each of the convertible bonds entitles the bondholders to repayment of their outstanding notes at the principal amount in the event of a change in control (plus any interest accrued up to this date), 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. In addition, the notes could be converted into shares up to the reference date, resulting 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 convertible bond 2015/2020, maturing in 2020, 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. For the purposes of the convertible bond 2018/2023, maturing in 2023, a change in control exists if one or more individuals acquires control over the Company, with control being direct or indirect ownership of more than 30% of the voting shares. In addition, in the case of the convertible bond 2018/2023, maturing in 2023, in the case of a public acquisition offer the improved conversion ratio already applies if the acceptance rate for the acquisition offer exceeds the control threshold of 30% of voting shares at the end of the acceptance period, any minimum acceptance threshold for the offer in excess of this amount has also been achieved on this date and if there are also no further offer conditions open (with the exception of conditions which can legally occur after the expiration of the acceptance period).

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 289f, 315d of the HGB

As required by Section 289f and 315d of the HGB, we have published a corporate governance declaration on our website at www.sglcarbon.com under Investor Relations/Corporate Governance.

Wiesbaden, March 26, 2019

SGL Carbon SE

The Board of Management of SGL Carbon

Dr. Jürgen Köhler **Dr. Michael Majerus**

Consolidated Financial Statements

Consolidated Income Statement

for the period from January 1 to December 31

€m	Note	2018	2017
Sales revenue	**6, 32**	**1,047.5**	**860.1**
Cost of sales		−839.1	−684.0
Gross profit		**208.4**	**176.1**
Selling expenses		−100.2	−91.6
Research and development costs	6	−33.0	−30.7
General and administrative expenses	6	−54.5	−46.5
Other operating income	7	50.3	35.0
Other operating expenses	7	−6.0	−18.7
Result from investments accounted for At-Equity	8	16.8	16.9
Restructuring expenses	9	−0.9	4.9
Reversal of impairment losses	10	0.0	3.6
Operating profit/loss		**80.9**	**49.0**
Interest income	11	1.6	1.3
Interest expense	11	−27.6	−46.3
Other financing result	11	−3.6	−11.8
Result from continuing operations before income taxes		**51.3**	**−7.8**
Income tax expense	12	−0.6	−5.8
Result from continuing operations		**50.7**	**−13.6**
Result from discontinued operations, net of income taxes	13	−9.0	155.1
Net result for the year		**41.7**	**141.5**
Thereof attributable to:			
Non-controlling interests		0.4	2.6
Consolidated net result (attributable to the shareholders of the parent company)		41.3	138.9
Earnings per share basic (in €)	14	0.34	1.14
Earnings per share, diluted (in €)	14	0.34	1.12
Earnings per share continuing operations, basic and diluted (in €)		0.41	−0.13

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31

€m	Note	2018	2017
Net result for the year		**41.7**	**141.5**
Items that may be reclassified subsequently to profit or loss			
Changes in the fair value of securities available for sale [1]		-	−0.1
Cash flow hedges [2]		−2.0	0.5
Currency translation		6.5	18.3
Items that will not be reclassified to profit and loss			
Actuarial gains/losses on pensions and similar obligations [3]	26	0.2	−35.7
Other comprehensive income		**4.7**	**−17.0**
Comprehensive income		**46.4**	**124.5**
Thereof attributable to:			
Non-controlling interests		0.4	1.8
Consolidated net result (attributable to the shareholders of the parent company)		46.0	122.7

[1] Prior year includes tax effects of €0.0 million
[2] Includes tax effects of €0.6 million (2017: €0.0 million)
[3] Includes tax effects of €2.7 million (2017: minus €41.4 million)

Consolidated Balance Sheet

as of December 31

ASSETS €m	Note	Dec 31, 18	Dec. 31, 17
Non-current assets			
Goodwill	15	41.3	21.1
Other intangible assets	15	56.5	25.4
Property, plant and equipment	16	675.5	524.0
Investments accounted for At-Equity	8	52.3	45.1
Other non-current assets	17	4.3	4.7
Deferred tax assets	24	11.3	20.7
		841.2	**641.0**
Current assets			
Inventories	18	310.4	281.4
Trade receivables and contract asssets	19	216.8	126.4
Other financial assets	20	3.0	62.4
Other receivables and other assets	21	31.4	33.3
Liquidity	22	180.6	379.3
Time deposits		*58.1*	*0.0*
Cash and cash equivalents		*122.5*	*379.3*
		742.2	**882.8**
Assets held for sale	23	**1.7**	**17.9**
Total assets		**1,585.1**	**1,541.7**

EQUITY AND LIABILITIES €m	Note	Dec 31, 18	Dec. 31, 17
Equity			
Issued capital	25	313.2	313.2
Capital reserves	25	1,046.6	1,032.9
Accumulated losses		–828.2	–889.1
Equity attributable to the shareholders of the parent company		**531.6**	**457.0**
Non-controlling interests		10.7	11.3
Total Equity		**542.3**	**468.3**
Non-current liabilities			
Provisions for pensions and similar employee benefits	26	293.2	293.0
Other provisions	27	36.3	37.6
Interest-bearing loans	28	396.5	262.1
Other financial liabilities	28	67.9	21.2
Deferred tax liabilities	24	4.1	2.1
		798.0	**616.0**
Current liabilities			
Other provisions	27	91.1	88.8
Current portion of interest-bearing loans	28	2.2	241.3
Trade payables	28	108.1	89.3
Other liabilities	28	42.9	26.7
		244.3	**446.1**
Liabilities in connection with assets held for sale	23	**0.5**	**11.3**
Total equity and liabilities		**1,585.1**	**1,541.7**

Consolidated Cash Flow Statement

for the period from January 1 to December 31

€m	Note	2018	2017
Cash flow from operating activities			
Result from continuing operations before income taxes		51.3	−7.8
Adjustments to reconcile the result from continuing operations to cash flow from operating activities:			
Interest expense (net)		26.0	45.0
Change in value of contract assets (IFRS 15)		−17.6	
Result from the disposal of property, plant and equipment		−3.6	−0.5
Depreciation/amortization expense		75.0	50.6
Income from business combination achieved in stages	5	−28.4	-
Reversal of impairment losses	10	0.0	−3.6
Restructuring expenses	9	0.9	−4.9
Result from investments accounted for At-Equity	8	−16.8	−16.9
Amortization of refinancing costs		2.7	12.4
Interests received		1.1	1.3
Interests paid		−18.2	−36.9
Income taxes paid	12	−3.3	−3.5
Changes in provisions, net		−9.4	−11.8
Changes in working capital			
Inventories		−43.8	−26.2
Trade receivables		−5.0	−48.1
Trade payables		14.7	−14.9
Changes in other operating assets/liabilities		−2.0	−16.5
Cash flow from operating activities – continuing operations		**23.6**	**−82.3**
Cash flow from operating activities – discontinued operations		−4.6	34.2
Cash flow from operating activities – continuing and discontinued operations		**19.0**	**−48.1**

€m	Note	2018	2017
Cash flow from investing activities			
Payments to purchase intangible assets and property, plant and equipment		–78.1	–52.9
Proceeds from the sale of intangible assets and property, plant and equipment		4.7	8.4
Payments received for divestitures		3.4	14.5
Dividend payments from investments accounted for At-Equity		11.0	6.0
Payments for the acquisition of subsidiaries, net of cash acquired	5	–23.1	–33.4
Payments for capital contributions concerning investments accounted for At-Equity and investments in other financial assets		0.0	–5.0
Cash flow from investing activities – continuing operations		**–82.1**	**–62.4**
Changes in time deposits		–58.1	5.0
Cash flow from investing activities and cash management activities – continuing operations		**–140.2**	**–57.4**
Cash flow from investing activities and cash management activities – discontinued operations		62.6	424.5
Cash flow from investing activities and cash management activities – continuing and discontinued operations		**–77.6**	**367.1**
Cash flow from financing activities			
Proceeds from the issuance of financial liabilities		159.3	8.9
Repayment of financial liabilities		–354.8	–259.2
Payments in connection with financing activities		–4.4	–8.2
Other financing activities		–1.0	–4.6
Cash flow from financing activities – continuing operations		**–200.9**	**–263.1**
Cash flow from financing activities – discontinued operations		0.0	0.0
Cash flow from financing activities – continuing and discontinued operations		**–200.9**	**–263.1**
Effect of foreign exchange rate changes		0.1	–1.0
Net change in cash and cash equivalents		**–259.4**	**54.9**
Cash and cash equivalents at beginning of year		382.9	328.0
Cash and cash equivalents at end of year		123.5	382.9
Time deposits at end of year		58.1	0.0
Total liquidity		181.6	382.9
Less: Cash and cash equivalents of discontinued operations at end of year		1.0	3.6
Liquidity	**22**	**180.6**	**379.3**

Consolidated Statement of Changes in Equity

for the period from January 1 to December 31

€m	Issued capital	Capital reserves	Accumulated profit/loss	
		Equity attributable		
Balance at Jan. 1, 17	313.2	1,032.7	−952.7	
Net result for the year			138.9	
Other comprehensive income			−35.7	
Comprehensive income			**103.2**	
Dividends				
Other changes in equity		0.2	2.3	
Balance at Dec. 31, 17	**313.2**	**1,032.9**	**−847.2**	
Cumulative adjustment on initial application of IFRS 15 and IFRS 9			15.4	
Balace at Jan. 1, 18	**313.2**	**1,032.9**	**−831.8**	
Net result for the year			41.3	
Other comprehensive income			0.2	
Comprehensive income			**41.5**	
Dividends				
Equity component of convertible bonds [1]		13.7		
Balance at Dec 31, 18	**313.2**	**1,046.6**	**−790.3**	

[1] After deduction of transaction costs of €0.2 million

	to the shareholders of the parent company						
	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	Total equity
	−63.1	1.1	0.6	−1,014.1	331.8	16.1	347.9
				138.9	138.9	2.6	141.5
	19.1	0.5	−0.1	−16.2	−16.2	−0.8	−17.0
	19.1	**0.5**	**−0.1**	**122.7**	**122.7**	**1.8**	**124.5**
				0.0	0.0	−0.5	−0.5
				2.3	2.5	−6.1	−3.6
	−44.0	**1.6**	**0.5**	**−889.1**	**457.0**	**11.3**	**468.3**
			−0.5	14.9	14.9	0.0	14.9
	−44.0	**1.6**	**0.0**	**−874.2**	**471.9**	**11.3**	**483.2**
				41.3	41.3	0.4	41.7
	6.5	−2.0		4.7	4.7		4.7
	6.5	**−2.0**	**-**	**46.0**	**46.0**	**0.4**	**46.4**
				0.0	0.0	−1.0	−1.0
				0.0	13.7		13.7
	−37.5	**−0.4**	**-**	**−828.2**	**531.6**	**10.7**	**542.3**

Notes to the Consolidated Financial Statements

1. General information

SGL Carbon SE, with registered offices at Wiesbaden, Germany (commercial register number: HRB 23960 Wiesbaden), together with its subsidiaries (the Company or SGL Carbon), is a global manufacturer of products and solutions based on carbon fibers and specialty graphites. SGL Carbon 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 315e (1) of the German Commercial Code (Handelsgesetzbuch, HGB). The consolidated financial statements for the period ended December 31, 2018 were authorized for issue by the Board of Management on March 4, 2019.

The consolidated financial statements are generally prepared on the basis of historical cost, unless otherwise stated in Note 2. 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.

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 Carbon´s financial position and performance. The accounting principles used by SGL Carbon that are sensitive to estimates are set out in this Note (e.g. revenue recognition, recognition of deferred taxes, impairment tests as well as provisions for pensions and similar employee benefits) and also, in particular, in Notes 6, 24, 26 and 27.

These are the first consolidated financial statements of SGL Carbon in which IFRS 15 *Revenue from Contracts with Customers* and IFRS 9 *Financial Instruments* are applied. Changes in significant accounting methods are presented in Note 3.

Consolidation principles

The consolidated financial statements include SGL Carbon SE and its subsidiaries over which SGL Carbon exercises control. SGL Carbon controls a company if it has the power over the investee. In addition, SGL Carbon 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, 2018, the scope of consolidation included 15 German (2017: 15) and 35 (2017: 34) foreign subsidiaries in addition to SGL Carbon SE. One (2017: two) jointly controlled company and two (2017: two) associates were accounted for At-Equity. In the previous year, 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 Carbon in accordance with Section 313 (2) HGB can be found in Note 35. 2 companies were disposed of.

Business combinations

The cost of an acquisition is measured on the basis of the fair values of the assets transferred and the liabilities assumed as of the date of acquisition. The identifiable assets acquired and the liabilities assumed in a business combination, including contingent liabilities, are measured by SGL Carbon at their fair values as of the date of acquisition, regardless of any non-controlling interests. Non-controlling interests are measured at the pro-rata fair value of the assets acquired and liabilities assumed (partial goodwill method).

Associates and joint ventures

Associates are companies where SGL Carbon can exercise a significant influence over financial and operating policies. Joint ventures are companies where SGL Carbon and at least one other 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 Carbon in the profit or loss of the joint venture or associate is recognized in the consolidated income statement, and its share in the other comprehensive income and 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 Carbon correspond to or exceed the value of the interest in such company, no further shares in losses are recognized in the financial statements. The share held in an associate or a joint venture is the carrying amount of the investment plus any long-term loans that, in substance, are allocated to the net investment of SGL Carbon in the associate or joint venture, respectively.

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.

In the previous year, SGL Carbon, as joint operator, recognized its share in the assets and liabilities that are controlled by SGL Carbon in its interest in a joint operation, and also its share of any assets held jointly or of any liabilities incurred jointly. In addition, SGL Carbon recognized sales revenue from the sale of its products, including any related expenses, and also its share of the revenue arising from the joint operation and the jointly controlled expenses. The following two companies were classified by SGL Carbon as joint operations until January 11, 2018: SGL Automotive Carbon Fibers, Moses Lake, Washington (USA) and SGL Automotive Carbon Fibers GmbH & Co. KG, Munich, (Germany), which, together with BMW AG, Munich ("BMW Group"), are operated to produce carbon fibers and carbon fiber fabrics (hereafter "SGL ACF"). Until January 11, 2018, SGL Carbon held a 51% stake in each company and controlled the companies together with BMW as a joint operation. The companies sell their products directly to the partners and have no external financing sources. Therefore, the companies were previously consolidated on a proportional basis as joint operations within the meaning of IFRS 11. After SGL Carbon obtained control, SGL ACF was fully consolidated at the beginning of 2018 (see Note 5 "Acquisitions and disposals").

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 differences on non-current intercompany receivables are treated as net investments in foreign operations and recognized directly in equity (currency translation).

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 until the foreign operation is disposed of.

Sales revenue, contract assets and trade receivables

Upon the first-time application of IFRS 15 as of January 1, 2018, SGL Carbon recognizes revenue as soon as control of the goods is transferred or the service is provided, i. e. when the customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the goods or services. A prerequisite for this is that a contract exists with enforceable rights and obligations and that, amongst other things, it is probable that SGL will collect the consideration, taking into account the customer's credit quality. Revenue comprises the equivalent value that SGL Carbon expects to receive for the transfer of goods or the provision of services. In the case of the sale of standard products, revenue is recognized from the date on which control is transferred to the purchaser, which normally occurs when the goods are delivered. Invoices are issued as of this date. In contrast, in the case of order-related production where contract work has to be delivered and the final product cannot be sold to (any) other customers (third parties) as it is a customer-specific asset with no alternative use, revenue is recognized over a specific time period in accordance with IFRS 15. The production of goods at SGL Carbon is generally based on standardized manufacturing processes which are conducted in relation to specific orders.

The manufacturing period is normally short (a few days), and manufacturing is predominantly serial production (standardized manufacturing based on customer-specific requirements). Therefore, SGL Carbon focuses on the output for the customer. Accordingly, revenue recognition based on manufacturing units is considered suitable for appropriately measuring progress at SGL Carbon. As such, the finished products represent the basis for revenue recognition and revenue is recognized earlier compared to the previous revenue recognition criteria in accordance with IAS 18 Revenue since, as of each balance sheet date, revenue has to be recognized for finished customer-specific products, rather than upon delivery.

In this case, a contract asset has to be recognized since SGL Carbon has recognized revenue due to the satisfaction of the contractual performance obligation before the prerequisites for issuing an invoice and hence the recognition of a trade receivable are met. Contract assets are reported as current assets since they are incurred within the normal operating cycle. Loss allowances on contract assets and trade receivables for credit risks are recognized in accordance with the measurement method used for financial assets measured at amortized cost.

The assessment whether an asset is highly tailored to a specific customer is particularly important for revenue recognition over a specific period, as is the estimate of the consideration that SGL Carbon expects to receive. This estimate includes subjective measurements as well as the use of assumptions that are inherently characterized by uncertainty and may be subject to change.

SGL Carbon agrees upon payment terms that are common industry practice; contracts with customers do not include material financing components.

Warranty obligations do not constitute separate performance obligations and are recorded as provisions in accordance with IAS 37.

Services are generally provided in connection with the sale of products and are recognized once the services have been rendered. The amount of revenue from the provision of services plays a minor role in comparison to revenue from the transfer of goods.

For information on opening and closing balances as well as on impairment losses on receivables from contracts with customers, please refer to Note 3 “Recently adopted accounting pronouncements” and Note 31 “Additional disclosures on financial instruments–Credit risks.”

The breakdown of revenue in accordance with IFRS 15.114 et seq. is shown in the Group segment reporting by customer industries.

SGL Carbon opts for the practical expedient set out in IFRS 15.121 and does not disclose information on transaction prices of remaining performance obligations since the underlying contracts have an original term of not more than one year.

The prior year figures were not adjusted; thus, they correspond to the accounting treatment under IAS 18. In accordance with IAS 18, revenue from sales of goods were reported as soon as the material risks and rewards from ownership were transferred to the buyer and the amount of revenue to be realized could be reliably measured. Revenue from services are recognized when the service is rendered. In addition, revenue is recognized after deducting reductions of revenue such as bonuses, cash discounts or rebates.

Income and expenses

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 in profit or loss as incurred. Provisions for estimated expenses for statutory warranty obligations are recognized upon sale of the product concerned in the amount of the estimated utilization based on past experience.

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 Carbon, the CGUs are defined one level below the segment. An impairment loss is recognized if the carrying amount of the CGU to which goodwill has been allocated is higher than the recoverable amount. At SGL Carbon, 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, other intangible assets and investment property

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. 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 SGL Carbon as the basis for calculating depreciation on property, plant and equipment on a straight-line basis:

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

The other intangible assets are amortized on a straight-line basis over a useful life of up to 12 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 Carbon as lessee are classified as finance leases. In such cases, SGL Carbon 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 Carbon is the lessee and the lessor retains the risks and rewards with respect to the leased asset (operating leases), SGL Carbon 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 test of property, plant and equipment and other intangible assets

SGL Carbon 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 by SGL Carbon. If this amount is higher than the carrying amount, the net selling price will not be calculated. SGL Carbon determines these values using a generally accepted measurement model on the basis of discounted future cash flows; this corresponds 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 by the Board of Management of SGL Carbon and approved by the Supervisory Board. 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 in the reporting year, the steady state is determined on the basis of the last (generally the fifth) forecast year; if justified, the detailed planning period may be extended. 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 value 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 Carbon 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.” If the intention to sell is abandoned, the assets are reclassified to the original balance sheet item at the lower of amortized cost or recoverable amount at the time of the subsequent decision not to sell.

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.

In accordance with the new classification provisions set out in IFRS 9, SGL Carbon allocates financial assets to the following three measurement categories: measured at amortized cost, measured at fair value through other comprehensive income (FVOCI), and measured at fair value through profit or loss (FVPL). The classification of financial assets upon initial recognition depends on the contractual cash flow characteristics of the financial assets and on the Group's business model to manage its financial assets. Financial assets held under a business model of holding assets to collect the contractually agreed cash flows are measured at amortized cost. At SGL Carbon, these assets primarily include cash and cash equivalents, time deposits, trade receivables, and contract assets. If the asset is held within a business model whose objective is to hold the assets, but also allows for the sale of such assets and whose cash flows are solely payments of principal and interest, these assets are measured at fair value through other comprehensive income. This measurement category is not used at SGL Carbon. Financial assets with cash flows that are solely payments of principal and interest, but that are not held within one of the aforementioned business models, are recognized at fair value through profit or loss. Equity instruments may, alternatively, be measured at fair value through other comprehensive income in accordance with IFRS 9. SGL Carbon currently does not apply this option to measure individual instruments at fair value through other comprehensive income. Therefore, equity instruments, such as securities, are measured at fair value through profit or loss. IFRS 9 eliminates the previous IAS 39 categories for financial assets: held to maturity, loans and receivables, and available for sale. In contrast, the existing requirements of IAS 39 regarding the classification of financial liabilities continue to apply to a large extent under IFRS 9. The first-time application of IFRS 9 did not have any effects on the accounting methods of SGL Carbon in relation to financial liabilities and derivative financial instruments. A reconciliation of the original IAS 39 measurement categories to the new IFRS 9 measurement categories can be found in the Note "Recently adopted accounting pronouncements."

Financial instruments are recognized as soon as SGL Carbon 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 issued at below-market interest rates are determined using the capitalized difference to the market interest rate level. 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 calculated interest and the interest actually paid leads to an increase in 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 IFRS 9, all derivative financial instruments are recognized in the balance sheet at their fair value. Financial instruments are recognized as soon as SGL Carbon 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. The documentation of the hedging relationship includes the aims and the strategy of risk management, the type of the hedging relationship, the hedged risk, a description of the hedging instrument and of the hedged item as well as an assessment of the effectiveness criteria. The hedging relationships are reviewed on a regular basis to ascertain whether they were effective during the entire reporting period for which they were designated. Individual derivatives do not fulfill the hedge accounting criteria stipulated by IFRS 9 although, in substance, they represent a hedge. Changes in the fair value of derivatives are recognized as follows:

1. Cash flow hedge: only the changes in the fair values of the currency forwards are designated as the hedging instrument in the case of 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. The ineffective portion of the fair value changes of the hedge is recognized in profit or loss. The changes in the fair value of cross currency basis spreads of the derivatives is not reported separately since they are immaterial. All amounts recognized in equity are subsequently transferred to profit or loss when the hedged item is taken to profit or loss.

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 profit or loss.
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 31 for further information on financial instruments.

Impairment of financial assets

IFRS 9 introduces an impairment model based on expected credit losses which is applicable for all financial assets (debt instruments) that are either measured at amortized cost or measured at fair value through other comprehensive income. While only incurred losses were recognized as an impairment of financial assets under IAS 39, the new approach also takes into account expectations regarding future development. IFRS 9 follows a 3-stage model for the determination of expected credit losses and the allocation of loss allowances; this can be summarized as follows:

Stage 1: All financial assets are allocated to Stage 1 upon initial recognition. A loss allowance is recognized in the amount of the credit losses expected within the next twelve months.

Stage 2: When the credit risk of a financial asset has increased significantly, but the credit quality is not impaired, the financial asset is transferred from Stage 1 to Stage 2. The recognized loss allowances correspond to the lifetime expected credit losses in relation to the financial asset.

Stage 3: If a financial asset is credit-impaired or in default, it is transferred to Stage 3. The recognized loss allowances correspond to the lifetime expected credit losses in relation to the financial asset. The effective interest income is calculated based on the net amount (gross amount less loss allowance).

Objective evidence indicating that a financial asset is credit-impaired include a past due status of at least 45 days as well as additional information on significant financial difficulties of the debtor.

Cash and cash equivalents as well as time deposits (liquidity) are allocated to Stage 1 since cash funds are mainly invested at banks and financial institutions with a low default risk (investment grade rating: S&P AAA to BBB-).

The simplified approach is used for trade receivables and contract assets. Under this approach, an assessment of whether there has been a significant increase in credit risk need not be made.

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), depreciation/amortization, 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 determined 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 recognized if sufficient future taxable profit is available, including income from forecasted operating earnings, the reversal of existing taxable temporary differences and possible tax strategies. To the extent that the company or the tax group has a history of recent losses, deferred tax assets arising from tax loss carry-forwards are recognized only to the extent that the enterprise has sufficient taxable temporary differences or there is convincing substantial evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized. Deferred tax assets are impaired to the extent that convincing substantial evidence for the usability cannot be provided. Estimates are revised in the period in which there is sufficient evidence to revise the assumption. The existence of a number of losses is substantial evidence that has to be offset with several equivalent or more important positive indicators. Due to the existence of a history of tax losses, the observation period of the detailed planning period is cut after three years since it is not possible to plan the usability of deferred tax assets at company level or tax group level with sufficient accuracy and the required necessary and sufficient particularly high certainty. If a company or a fiscal unity begins to report a sustainable positive tax result in the future, but the recent past still contains losses over the last three years, the planning horizon is extended from three years to five years, assuming appropriate planning accuracy. If a company or a tax group has overcome its history of losses on a sustainable and verifiable basis, i.e. there have been continuous profits over at least the last three years, the limitation of the observation period for the recognition of deferred tax assets is completely waived. Changes in deferred taxes recognized in the balance sheet generally lead to tax expense or tax income. However, in the event that items resulting in a change in deferred taxes are recognized directly in a component of equity, the change in deferred taxes is also recorded directly in this component of 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 and accumulated profit/loss (Consolidated Statement of Changes in Equity)

Accumulated other comprehensive income includes currency translation differences as well as unrealized gains or losses from 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 IFRS 9. 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 abovementioned items are also recorded directly in equity in the relevant component of accumulated other comprehensive income.

Provision for pensions and similar employee benefits

SGL Carbon'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 Carbon offsets the fair value of plan assets with the present value of the defined benefit obligation (DBO) and reports the net amount thus 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 to profit or loss 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. Long-term provisions are discounted at the risk-free interest rate. The accounting treatment and recognition of provisions for obligations in connection with incentive plans for management and employees is described in Note 33.

SGL Carbon 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 Carbon 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.

3. Recently adopted accounting pronouncements

IFRS 15 Revenue from Contracts with Customers
SGL Carbon applies IFRS 15 on the basis of the modified retrospective method, i. e. the previous year's figures are not adjusted. The cumulative effects from the first-time application are recorded in retained earnings as of January 1, 2018. IFRS 15 particularly replaces IAS 18 *Revenue from Contracts with Customers* and IAS 11 *Construction Contracts* and has major effects on the presentation of SGL Carbon’s financial position and financial performance. The Company elected to apply the simplified first-time application, thus limiting the retrospective application of IFRS 15 to contracts that are not fully satisfied as of the date of first-time application.

IFRS 9 Financial Instruments
The standard changes the accounting policies for the classification and measurement of financial assets, for the impairment of financial assets and for hedge accounting and particularly replaces IAS 39. The standard is required to be applied for periods beginning on or after January 1, 2018. IFRS 9 continues to use the previous measurement category of “amortized cost” and “fair value” for the measurement of financial instruments and continues to make a distinction between the recognition of fair value changes through profit or loss or through other comprehensive income. The following table and the related disclosures present the original measurement category in accordance with IAS 39 and the new measurement category in accordance with IFRS 9 as of January 1, 2018 for each of the classes of financial assets and financial liabilities established by the Group:

€m	Previous measurement category in accordance with IAS 39	New measurement category in accordance with IFRS 9	Previous carrying amount in accordance with IAS 39	New carrying amount in accordance with IFRS 9
Financial assets				
Cash and cash equivalents	Loans and receivables	Amortized cost	379.3	379.3
Time deposits	Loans and receivables	Amortized cost	0.0	0.0
Trade receivables	Loans and receivables	Amortized cost	126.4	125.1
Investment securities and similar securities	Available for sale	FVTPL	4.4	4.4
Other financial assets	Loans and receivables	Amortized cost	62.4	62.2
Derivative financial assets: Derivatives without a hedging relationship	Held for trading	FVTPL	0.8	0.8
Derivative financial assets: Derivatives with a hedging relationship	n.a.	n.a.	2.0	2.0
Total financial assets			**575.3**	**573.8**

€m	Previous measurement category in accordance with IAS 39	New measurement category in accordance with IFRS 9	Previous carrying amount in accordance with IAS 39	New carrying amount in accordance with IFRS 9
Financial liabilities				
Convertible bonds	Amortized cost	Amortized cost	394.2	394.2
Bank loans, overdrafts and other financial liabilities	Amortized cost	Amortized cost	112.9	112.9
Refinancing costs	Amortized cost	Amortized cost	–3.7	–3.7
Finance lease liabilities	n.a.	n.a.	22.4	22.4
Trade payables	Amortized cost	Amortized cost	89.3	89.3
Miscellaneous other financial liabilities	Amortized cost	Amortized cost	4.4	4.4
Derivative financial liabilities: Derivatives without a hedging relationship	Held for trading	FVTPL	0.0	0.0
Derivative financial liabilities: Derivatives with a hedging relationship	n.a.	n.a.	0.0	0.0
Total financial liabilities			**619.5**	**619.5**

The transitional effects on the carrying amounts resulted from the application of the simplified impairment model based on the expected credit losses, especially as regards trade receivables.

Securities and similar cash investments were classified as available for sale under IAS 39 and measured at fair value through other comprehensive income. The instruments concerned are debt and equity instruments. Equity instruments may, alternatively, be measured at fair value through other comprehensive income in accordance with IFRS 9. SGL Carbon does not apply this option to measure individual instruments at fair value through other comprehensive income. Therefore, these equity instruments are measured at fair value through profit or loss. Debt instruments of this category are also measured at fair value since their contractual cash flows are not solely payment of principal and interest on the principal amount outstanding.

Impairment model based on expected credit losses
The model used to determine impairment losses for financial assets not measured at fair value through profit or loss is changed from a model of credit losses already incurred to a model of expected credit losses and leads to a slight increase in loss allowances. A simplified approach applies to the determination of impairment losses for trade receivables and contract assets.

The following table presents the loss allowances on financial assets as of January 1, 2018:

€m	Trade receivables	Contract Assets	Other financial assets	Total
Valuation allowances as of December 31, 2017 in accordance with IAS 39	**5.4**	**0.0**	**0.0**	**5.4**
Application of the new impairment model	1.3	0.3	0.2	1.8
Valuation allowances as of January 1, 2018 in accordance with IFRS 9	**6.7**	**0.3**	**0.2**	**7.2**

In terms of hedge accounting rules under IFRS 9, there were no quantitative effects from the first-time application compared to IAS 39 rules.

The cumulative effect from the transition to IFRS 9 was recognized directly in equity; in accordance with the transitional provisions laid out in IFRS 9, prior-year figures were not adjusted.

The following tables show the effects of the amended accounting principles:

Adjustments to balance sheet amounts as of January 1, 2018:

€m	Dec. 31, 17	IFRS 15 adjustments	IFRS 9 adjustments	Netting	Jan. 1, 18
Assets					
Investments accounted for At-Equity	45.1	1.1			46.2
Inventories	281.4	−29.3			252.1
Trade receivables and contract assets	126.4	49.8	−1.6		174.6
thereof: trade receivables	*126.4*	*0.0*	*−1.3*		*125.1*
thereof: contract assets	*0.0*	*49.8*	*−0.3*		*49.5*
Other financial assets	62.4		−0.2		62.2
Deferred tax assets	20.7		0.5	−4.6	16.6
Liabilities					
Deferred tax liabilities	2.1	5.4		−4.6	2.9
Equity					
Accumulated losses	−889.1	16.2	−1.3		−874.2

The IFRS 15 effects in comparison to IAS 18 result from the earlier revenue recognition of tailored customer products.

The effects from IFRS 9 exclusively resulted from the application of the simplified impairment model based on expected credit losses, in particular for trade receivables as well as for contract assets required to be stated in accordance with IFRS 15 since January 1, 2018.

The following tables summarize the effects from the introduction of IFRS 15 and IFRS 9 on the Group's financial position and financial performance as presented in the consolidated financial statements as of December 31, 2018. The cash flow statement was not affected:

Impacts on the consolidated income statement and other comprehensive income

€m	Amounts without adoption of IFRS 15 and IFRS 9	IFRS 15 adjustments	IFRS 9 adjustments	As reported
				2018
Sales revenue	1,016.9	30.6		1047.5
Cost of sales	–826.1	–13.0		–839.1
Gross profit	**190.8**	**17.6**		**208.4**
Valuation allowances on trade receivables, contract assets and other financial assets			0.6	0.6
Result from investments accounted for At-Equity	17.0	–0.2		16.8
Operating profit/loss	**62.9**	**17.4**	**0.6**	**80.9**
Result from continuing operations before income taxes	**33.3**	**17.4**	**0.6**	**51.3**
Income tax expense	4.6	–5.0	–0.2	–0.6
Net result for the year	**28.9**	**12.4**	**0.4**	**41.7**
Other comprehensive income	**–8.1**	**12.4**	**0.4**	**4.7**

Impacts on the consolidated balance sheet:

€m	Amounts without adoption of IFRS 15 and IFRS 9	IFRS 15 adjustments	IFRS 9 adjustments	Netting	As reported
					Dec. 31, 18
Assets					
Investments accounted for At-Equity	51.4	0.9			52.3
Inventories	353.4	–43.0			310.4
Trade receivables and contract assets	136.8	81.1	–1.1		216.8
thereof: trade receivables	*136.8*	*0.0*	*–0.9*		*135.9*
thereof: contract assets	-	*81.1*	*–0.2*		*80.9*
Deferred tax assets	17.3		0.3	–6.3	11.3
Liabilities					
Deferred tax liabilities	0.0	10.4		–6.3	4.1
Equity					
Accumulated losses	–856.0	28.6	–0.8		–828.2

4. Recent accounting pronouncements, not yet adopted

The financial reporting standards issued by the IASB listed below are not yet effective and have not yet been adopted by SGL Carbon.

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 right-of-use assets in relation to the leased assets as well as a lease liability upon lease inception. Based on present knowledge, SGL Carbon estimates that the new standard will result in an increase of property, plant and equipment in the consolidated balance sheet as of January 1, 2019 in the amount of approximately €35–37 million (largely properties leased by SGL Group); at the same time, financial liabilities will also rise. As a result of the application of IFRS 16, straight-line expenses for operating leases are replaced by expenses for the amortization of right-of-use assets and interest expenses for lease liabilities. This leads to an improvement in EBITDA, a deterioration of the cash flow from financing activities and an improvement of the cash flow from operating activities. SGL will adopt IFRS 16 using the modified retrospective method so that any effects from transition are recorded on a cumulative basis in retained earnings as of January 1, 2019 and that the comparative period is presented based on the previous rules. It is intended to use the practical expedients existing under IFRS 16, i. e. short-term leases with a term of less than one year and leases regarding low-value assets continue to be recognized as expenses outside the balance sheet.

IFRIC 23 Uncertainty over Income Tax Treatments was issued by the IASB in May 2017. The interpretation clarifies the requirements for the recognition and measurement of uncertain income tax positions. Within the scope of the assessment in relation to such uncertainty, a company has to assess whether it is probable that the taxation authority will accept the income tax treatment. IFRIC 23 is required to be applied for fiscal years beginning on or after January 1, 2019. Earlier application is permitted. SGL Carbon is currently evaluating which impact the application of IFRIC 23 will have on the consolidated financial statements.

5. Acquisitions and disposals

Fiscal year 2018

The acquisition of SGL Automotive Carbon Fibers GmbH & Co. KG (SGL ACF), Munich (Germany) was completed on January 11, 2018. Accordingly, SGL is the sole owner of the former joint venture with BMW Group (renamed in SGL Composites GmbH & Co. KG). The U.S. company of SGL ACF will, in a next step, be transferred to SGL not later than by the end of 2020; in this context, SGL Carbon exercises full control over the U.S. company based on the voting majority of 51% already upon the acquisition of the German shares. For SGL Carbon, the acquisition constitutes the key activities in the value chain, from carbon fibers and materials through to components, under the sole responsibility of SGL Carbon. Both companies were integrated into the CFM business unit. The shares in SGL ACF existing prior to obtaining control were previously accounted for by proportionate consolidation in accordance with IFRS 11. In a business combination achieved in stages, obtaining a controlling majority is recognized under the assumption of a cash payment (for the new shares of 49%) and an exchange (of the previously held shares at fair value of 51%). The difference between the carrying amount and the fair value of the previously held shares of EUR 48.3 million and EUR 76.2 million, respectively, led to an increase of the item "Other operating income" in the amount of EUR 28.4 million (after taking into account the positive effect on profit or loss from attributable cumulative translation differences of EUR 0.5 million). The following disclosures show the final purchase price allocation and the acquisition-date values of the assets acquired and liabilities assumed for each of the main groups on a 100% basis. For information purposes, the column "Values pursuant to IFRS 11" includes the proportionate (51%) carrying amounts of SGL ACF as derived from the consolidated financial statements of SGL Carbon directly before the acquisition date

€m	Fair Values at acquisition date (100%)	Carrying amounts according to IFRS 11 (51%) [1]
Assets		
Other intangible assets	41.9	0.1
Property, plant and equipment	248.1	121.9
Deferred tax assets	0.0	2.5
Inventories	46.3	23.6
Trade receivables and contract assets	12.4	6.7
Other receivables and other assets	2.5	1.3
Cash and cash equivalents	2.4	1.2
Liabilities		
Non-current liabilities		
Provisions for pensions and similar employee benefits	0.1	0.1
Interest-bearing loans	192.4	98.1
Deferred tax liabilities	11.0	0.0
Current liabilities		
Other provisions	4.7	2.4
Trade payables	7.8	4.4
Other liabilities	8.0	4.0
Net assets	**129.6**	**48.3**
Goodwill from business combination	19.5	
Purchase price	149.1	

[1] Values immediately prior to the acquisition date

The other intangible assets consist of customer relationships with an estimated useful life of 51 months. Of the total purchase price, an amount of USD 62.2 million was deferred until the end of 2020 and an amount of €24.3 million (less cash acquired in the amount of €1.2 million) was paid upon closing in January 2018.

As a result of the transition from proportionate consolidation to full consolidation, both acquired companies have contributed revenues of €126.7 million and an operating result of €10.8 million (including the additional reductions in the value of the identified and recognized assets within the framework of the purchase price allocation) to the consolidated net result in the period from the acquisition date (January 11, 2018) to December 31, 2018.

The sale of the 51% shareholding in SGL Kümpers GmbH & Co KG, Rheine (Germany) was completed on January 10, 2018. The related disposal of the assets of Kümpers did not result in any effect on profit or loss in fiscal year 2018.

Fiscal year 2017

On November 8, 2017, SGL Carbon signed an agreement to **purchase** the 50% share of BENTELER Carbon Composites Beteiligungs-GmbH in the joint venture Benteler SGL GmbH & Co. KG, Paderborn. The transaction was completed on December 19, 2017, resulting in SGL Carbon being the sole owner of the company. With this transaction, SGL Carbon strengthens its serial production capabilities for components made from fiber-reinforced composites. The total purchase price amounts to €12.6 million and consists of a fixed purchase price, an adjustment payment as well as payments pursuant to a patent transfer and license contract. In addition, financial liabilities with a nominal amount of €28.0 million were redeemed by SGL Carbon. Prior to obtaining control, the shares in Benteler SGL were accounted for At-Equity. In a business combination achieved in stages, obtaining a controlling majority is recognized under the assumption of a cash payment (for the new shares) and an exchange (of the previously held shares at fair value). The difference between the carrying amount and the fair value of the previously held shares led to an increase of the result from investments accounted for At-Equity in the amount of €4.1 million. The following values result from the purchase price allocation as of the date of acquisition: other intangible assets (€12.1 million), property, plant and equipment (€41.3 million), trade receivables and other assets (€7.0 million), cash and cash equivalents (€7.6 million), inventories (€4.6 million), other non-current financial assets (€0.7 million), current financial liabilities (€2.5 million), provisions (€10.3 million; current and non-current), trade payables (€4.5 million), other current liabilities (€2.3 million), and deferred tax liabilities (€1.1 million). The intangible assets consist in particular of patents and technology amounting to €4.0 million and customer relationships amounting to €8.1 million. The acquired business is allocated to SGL Carbon's BU CFM. Due to the short time between the acquisition (end of December 2017) and December 31, 2017, the acquired business has not contributed to sales revenue or profit or loss. In 2017, Benteler SGL reported sales of €54.3 million and net loss for the year of €3.6 million (based on 100%).

The **disposal** of the graphite electrodes (GE) business (reported as a discontinued operation) to Showa Denko at a business value of €350 million was completed on October 2, 2017. After deducting liabilities (in particular provisions for pensions and restructuring), cash proceeds amount to €285 million based on the closing date balance sheet as of September 30, 2017. Of this amount, an instalment payment of €230 million was made in October 2017. The remaining amount was transferred after the mutual agreement on the final price reached in the first half of 2018. SGL Carbon recorded a gain on disposal of €2.7 million in the item "discontinued operations." The proceeds from the capital increase made in December 2016 as well as the proceeds from the GE disposal were used by SGL Carbon to fully repay the corporate bond in the amount of €250 million as of October 30, 2017.

The **disposal** of the cathodes (CFL/CE) business (reported as a discontinued operation) to Triton at a business value of €250 million was completed on November 2, 2017. After deducting liabilities (in particular provisions for pensions), cash proceeds amount to €238 million based on the closing date balance sheet as of October 31, 2017. Of this amount, an instalment payment of €231 million was made in November 2017. The remaining amount was transferred to SGL Carbon after the mutual agreement on the final price reached in the first half of 2018. SGL Carbon recorded a gain on disposal of €124.6 million in the item "discontinued operations." The proceeds from the disposal of the CFL/CE business were used by SGL Carbon to repay the convertible bond in an original amount of €240 million at maturity in January 2018. The purchase price components outstanding as of December 31, 2017 from both sales in the amount of €62.4 million were reported under other financial assets.

6. Sales revenue, functional costs

The breakdown of sales revenues by segment, intersegmental revenues, and the regional distribution of sales revenue are presented in Note 32 "Segment reporting."

The future competitiveness of SGL Carbon is guaranteed through sustained development of new products, applications and processes. This is also reflected in SGL Carbon´s research and development costs, which remained high at €33.0 million (2017: €30.7 million). Broken down by business segment, research and development costs were as follows: €11.3 million (2017: €8.5 million) in the reporting segment Graphite Materials & Systems (GMS), and €12.8 million (2017: €11.7 million) in the reporting segment Carbon Fibers & Materials (CFM). Research and development costs on a corporate level amounted to €8.9 million (2017: €10.5 million).

General and administrative expenses grew by 17% compared to the prior year. This increase results from salary increases and higher expenses for management incentive plans as well as from the expanded scope of consolidation.

Additional disclosures in connection with the nature-of-expense method are provided below:

€m	2018	2017
Wages and salaries (including bonus)	–270.4	–239.0
Social security contributions, post-employment and other employee benefit costs (thereof for pensions: 2017 minus €16.9 million: 2017: minus €13.6 million)	–70.6	–63.6
Total	**–341.0**	**–302.6**

Depreciation and amortization

At €75.0 million, amortization and depreciation of intangible assets and property, plant and equipment were significantly above the prior-year level (2017: €50.6 million) and include carry forwards of hidden reserves realized as part of the purchase price allocations of Benteler SGL and SGL ACF in a total amount of €11.7 million. Amortization of intangible assets in the amount €14.2 million (2017: €3.9 million) primarily relate to the depreciation of the customer base from the purchase price allocation of SGL ACF. Depreciation of property, plant and equipment totaled €60.8 million in 2018 (2017: €46.7 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 2018, the number of SGL Group employees had increased significantly compared with the prior year. This number includes 517 employees with fixed-term contracts (2017: 539). The full consolidation of the SGL Composites companies in Germany and the USA (former SGL ACF) led to an increase in the number of employees at CFM by 184 employees over the previous year; the disposal of SGL Kümpers reduced the number of employees by 115. In our reporting segment GMS, the number of employees rose due to the continued strong demand, in particular in production-related areas. In contrast, the number of employees in administrative functions declined further. Employees from shared functions are allocated to the business Units using performance-based allocation keys. The number of employees for Corporate also include employees that provide services to the disposed business unit PP.

The tables below provide an overview of the number of employees by reporting segment and region

Headcount	Dec. 31, 18	Dec. 31, 17	Change
Graphite Materials & Systems	3,008	2,815	6.9%
Composites – Fibers & Materials	1,722	1,592	8.2%
Corporate	301	325	–7.4%
Total continuing operations	**5,031**	**4,732**	**6.3%**

Headcount	Dec. 31, 18	Dec. 31, 17
Germany	2,271	2,161
Europe excluding Germany	1,448	1,436
North America	824	704
Asia	488	431
Total continuing operations	**5,031**	**4,732**

The average number of employees in the individual functional areas was as follows:

Headcount	2018	2017
Production and auxiliary plants	3,590	3,335
Sales and marketing	342	297
Research and development	155	125
Administration, other functions	840	759
Total continuing operations	**4,927**	**4,516**

7. Other operating income/expense

Other operating income

€m	2018	2017
Income from business combination achieved in stages	28.4	-
Currency hedges/exchange-rate gains	4.1	8.6
Gains on the sale of intangible assets and property, plant and equipment	4.1	0.7
Grants received	2.9	1.5
Insurance compensations	0.5	0.4
Costs allocated to investments accounted for At-Equity	0.2	5.7
Increase in value arising in the measurement of assets included in the disposal group at fair value	-	2.3
Miscellaneous other operating income	10.1	15.8
Total	**50.3**	**35.0**

The income from business combinations achieved in stages refers to the excess of the fair value of the previously held shares over the carrying amount of SGL ACF as of the acquisition date (see Note 5 "Acquisitions").

The value increase in the prior year refers to the fair value adjustment in relation to the sale of SGL Kümpers GmbH & Co. KG which was signed in December 2017. For more information, please refer to Note 23. In 2017, miscellaneous other operating income included compensation received from customers for satisfying contractual delivery and service obligations in the amount of €10.0 million which, starting in the fiscal year 2018, are reported in sales revenue as a result of the transition to IFRS 15 (2018: €22.4 million).

Other operating expenses

€m	2018	2017
Currency hedges/exchange-rate losses	–2.4	–11.8
Losses on the sale of non-current assets	–0.4	–0.2
Other operating expenses	–3.2	–6.7
Total	**–6.0**	**–18.7**

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 the prior year, other operating expenses largely included a negative effect on profit or loss from cumulative currency translation differences of €6.0 million from the sale of the carbon fiber production site in Evanston (USA) to Mitsubishi Rayon Carbon Fibers & Composites Inc.

In addition, other operating income and other operating expenses included a number of insignificant individual transactions carried out by the 51 (2017: 50) fully consolidated companies.

8. Investments accounted for At-Equity

Result from investments accounted for At-Equity

€m	2018	2017
Share in the net result of the year	16.9	12.9
Thereof joint ventures	*15.9*	*11.3*
Thereof associates	*1.0*	*1.6*
Other adjustments affecting profit or loss	–0.1	–0.1
Thereof joint ventures	*–0.1*	*–0.1*
Increase in value arising from a business combination achieved in stages [1]	-	4.1
Result from investments accounted for At-Equity	**16.8**	**16.9**

[1] Refer to Note 5

€m	Dec. 31, 18	Dec. 31, 17
Interests in joint ventures	42.7	37.0
Interests in associates	9.6	8.1
Carrying amount	**52.3**	**45.1**

Joint Ventures

At the end of the reporting year, SGL Carbon held interests in the joint venture Brembo SGL Carbon Ceramic Brakes S.p.A., Stezzano, Italy (BSCCB). BSCCB develops and produces carbon ceramic brake discs primarily for sport cars and premium class vehicles.

At the end of 2017, SGL Carbon acquired the remaining 50% of the shares in the previous joint venture Benteler SGL GmbH & Co. KG, Paderborn, Germany (see Note 5). Benteler SGL (renamed to SGL Composites after the acquisition) primarily develops and produces fiber-reinforced components for the automotive industry. The following table summarizes the financial performance of BSCCB and in 2017 the aggregated financial performance of BSCCB and Benteler SGL as well as the financial position of BSCCB, as reported in their own financial statements (taking into account IFRS 15 effects). The aggregation in the prior year was performed according to the principles of materiality and clarity. The table also shows the reconciliation of the summarized financial information to the carrying amount of SGL Carbon's share in the BSCCB joint venture. SGL Carbon received a dividend payment from BSCCB in the amount of €11.0 million (2017: €6.0 million).

€m	2018	2017
Ownership interest	**50.0%**	**50.0%**
Income statement		
Sales revenue (100%)	180.1	211.0
Operating profit/loss	43.6	33.2
Net financing result	–0.1	–1.1
Net result for the year (100%)	31.7	22.6
Share of SGL Group in the net result for the year (50%)	15.9	11.3

Balance sheet in €m	Dec. 31, 18	Dec. 31, 17
Non-current assets	49.6	41.2
Current assets	71.3	64.9
Thereof cash and cash equivalents	*12.5*	*31.2*
Non-current liabilities	8.7	6.5
Thereof financial debt	*0.0*	*0.0*
Current liabilities	34.1	33.2
Thereof financial debt	*1.0*	*0.0*
Net assets (100%)	**78.2**	**66.4**
Share of SGL Group in net assets (50%)	39.1	33.2
Goodwill/customer base	3.6	3.8
Carrying amount of material joint ventures	**42.7**	**37.0**

Associates
In addition, SGL Carbon holds shares in a number of associates which, taken individually, are immaterial and which contributed a total of €1.0 million (2017: €1.6 million) to the result from investments accounted for At-Equity.

The fiscal year of all companies corresponds to the calendar year, except for the associate MCC-SGL Precursor Co. Ltd., which has a different fiscal year ending 31 March.

9. Restructuring expenses

€m	2018	2017
Expenses/Income for initiated restructuring measures	–0.9	4.9
Total	**–0.9**	**4.9**

Restructuring expenses include a reversal of restructuring provisions in the amount of €1.5 million (2017: €3.2 million) as well as gains from the disposal of property, plant and equipment in the amount of €6.5 million (2017: €1.7 million), with these items of property, plant and equipment being impaired in prior periods due to restructuring measures. This was offset by the increase in provisions for the retired sites in Griesheim and Italy due to the new cost estimate in a total amount of €7.3 million as well as the recognition of restructuring provisions of €1.6 million for the location in Portugal.

10. Reversal of impairment losses

€m	2018	2017
Reversal of impairment losses of property, plant and equipment	-	3.6
Total	**0.0**	**3.6**

In 2017, land and buildings at the site in Gardena, USA, (Hitco) were no longer classified as held for sale since it was no longer intended to sell them. The land and buildings were recognized at the recoverable amount applicable as of the date when the decision not to sell was made. The recoverable amount was derived from the existing sale agreement which was negotiated within the framework of the original intention to sell this property (equals Level 2 fair value). This resulted in a reversal of impairment losses in the Corporate reporting segment in the amount of €3.6 million.

11. Financial result

€m	2018	2017
Interest in other securities, other interest and similar income	**1.6**	**1.3**
Interest on financial liabilities and other interest expense [1]	–14.1	–29.8
Interest component of additions to provisions for pensions	–5.8	–6.5
Imputed interest convertible bonds [1]	–5.1	–8.5
Imputed interest on finance leases [1]	–2.6	–1.5
Interest expense	**–27.6**	**–46.3**
Interest expense	**–26.0**	**–45.0**
Amortization of refinancing costs [1]	–2.7	–6.3
Foreign currency valuation of intercompany loans	–0.4	0.4
Early prepayment penalty corporate bond	-	–6.1
Other financial income	–0.5	0.2
Other financing result	**–3.6**	**–11.8**
Net financing result	**–29.6**	**–56.8**

[1] Total interest expense from financial instruments	–24.5	–46.1

Interest expenses in particular included the cash interest component (coupon) of the two convertible bonds (2015/2020: interest rate of 3.5%; 2018/2023: interest rate of 3.0%). The non-cash imputed interest on the convertible bonds is established by approximating the below-market coupon with the comparable market interest rate at the time the convertible bonds are issued.

The improvement of the net financing result compared to 2017 is due to the early repayment of the corporate bond in October 2017, which meant that 2017 was negatively affected by the fact that the previously capitalized transaction costs in the amount of €4.2 million were recognized fully in profit or loss, and that the prepayment penalty of €6.1 million had to be paid.

12. Income tax expense

The calculation of deferred taxes for the domestic companies for the years 2018 and 2017 was based on a corporate income tax rate of 15%. In addition, a solidarity surcharge of 5.5% on corporate income tax as well as a trade tax rate of 14% were taken into account; the tax rate calculated for deferred taxes at the domestic companies in both years was 29.8%. The calculation of deferred taxes for the foreign companies was based on country-specific corporate income tax rates.

The breakdown of tax expense from continuing operations is as follows:

€m	2018	2017
Current income taxes		
Germany	–1.2	0.0
Other countries	–3.9	–7.4
Total	**–5.1**	**–7.4**
Deferred taxes		
Germany	3.7	–5.1
Other countries	0.8	6.7
Total	**4.5**	**1.6**
Total sum	**–0.6**	**–5.8**

Actual tax expense includes taxes for prior years from domestic and foreign companies in the amount €0.3 million (2017: €1.9 million). The amount of deferred tax income attributable to the reversal of temporary differences, including valuation allowances, is €4.7 million (2017: €11.6 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	2018	2017
Result from continuing operations before income taxes	**51.3**	**–7.8**
Expected tax expense/income at 29.8%	**–15.3**	**2.3**
Increase/decrease in income tax charge from:		
Income adjustments	–2.9	–5.8
Change in expected tax rate	–2.2	–2.0
Changes in valuation allowances/recognition adjustments	11.0	–0.4
Tax effect on investments accounted for At-Equity	1.7	3.0
Tax free income	4.5	0.9
Tax rate changes	0.1	–0.5
Tax from prior periods	0.6	–2.3
Other	1.9	–1.0
Effective tax expense	**–0.6**	**–5.8**

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 valuation adjustments/recognition adjustments achieved in stages primarily result from the recognition of the business combination of SGL ACF through profit or loss (see Note 5) as well as from unrecognized deferred taxes on tax losses in the reporting year.

During the reporting year, the actual tax expense was reduced by €3.5 million (2017: €2.5 million) million by taking into account previously unrecognized tax losses.

13. Result from discontinued operations

In 2017, earnings generated by PP (former business activities GE and CFL/CE) were reported in the income statement as discontinued operations. The sale of PP was completed at the end of 2017. In the reporting year, tax risks in connection with the former business unit PP in a total amount of €3.6 million as well as expenses from a final settlement in relation to the sale of the business unit Aerostructures (AS) in 2015 in the amount of €4.0 million had a negative effect on the result from discontinued operations.

Result from discontinued operations

€m	2018	2017
Total revenue from discontinued operations	-	365.6
Total expenses from discontinued operations	–9.0	–331.5
Result from operating activities of discontinued operations before income taxes	**–9.0**	**34.1**
Attributable tax expense		–6.3
Result from operating activities of discontinued operations after income taxes	**–9.0**	**27.8**
Result (prior year: impairment losses) from the disposal of assets included in the disposal group at fair value less cost to sell		127.3
Result from discontinued operations [1]	**–9.0**	**155.1**
Earnings per share – discontinued operations basic (in €)	**–0.07**	**1.27**
Earnings per share – discontinued operations diluted (in €)	**–0.07**	**1.25**

[1] Attributable to the shareholders of the parent company

The cash flows from discontinued operations are shown separately in the consolidated cash flow statement.

In the previous year, the disposal of GE led to a negative effect on profit or loss from attributable cumulative currency translation differences of €30.6 million. This effect was overcompensated by the reversal of the impairment loss due to the adjustment to the fair value less costs to sell owing to the better than expected operating development. Overall, the capital gain amounted to €2.7 million.

The sale of the CFL/CE business to Triton in the prior year resulted in a capital gain of €124.6 million after taking into account the negative effect on profit or loss from attributable cumulative currency translation differences amounting to €5.0 million.

14. Earnings per share

Earnings per share are calculated by dividing the net result for the year attributable to the shareholders of SGL Carbon by the average number of outstanding shares during the reporting year. The calculation of diluted earnings per share assumes that outstanding debt securities (convertible bonds) will be converted to shares. No dilutive effect on earnings per share resulted from taking into account the additional shares from the convertible bonds since the profit or loss for the period is adjusted to reflect the interest expense (interest payments and non-cash imputed interest cost) for the convertible bonds and recognized in net financing costs. In the future, these instruments may become fully dilutive.

The table below details the calculation of earnings per share for fiscal years 2018 and 2017:

Reconciliation of basic and diluted earnings per share

€m	Overall potentially dilutive financial instruments 2018	Dilutive financial instruments used for the calculation 2018	Share of net result attributable to the shareholders of the parent company 2018	Share of net result attributable to the shareholders of the parent company 2017
Numerator for basic earnings per share (share of net result attributable to the shareholders of the parent company)	**41.3**	**50.3**	**41.3**	**138.9**
plus: increase of the income by the interest costs of the convertible bonds	9.2	0.0		15.9
Numerator for diluted earnings	**50.5**	**50.3**	**41.3**	**154.8**
Number of shares				
Denominator for basic earnings per share (weighted average number of shares)	**122,270,977**	**122,270,977**	**122,270,977**	**122,270,977**
Potentially dilutive securities (weighted average, in each case)				
Convertible bond 2012/2018		0	0	6,398,858
Convertible bond 2015/2020 (see Note 27)	9,781,400	0	0	9,781,400
Convertible bond 2018/2023 (see Note 28)	12,233,143			
Denominator for potentially diluted earnings per share	**144,285,520**	**122,270,977**	**122,270,977**	**138,451,235**
Thereof to be included for dilution (adjusted weighted average)		**122,270,977**	**122,270,977**	**138,451,235**
Basic earnings per share (€)		0.41	0.34	1.14
Diluted earnings per share (€)		0.41	0.34	1.12

15. Intangible assets

€m	Industrial rights, software and similar rights	Customer relationships	Capitalized development costs	Goodwill	Total
Historical costs					
Balace at Jan. 1, 18	62.2	10.8	18.4	46.7	138.1
Change in the scope of consolidation	0.0	41.8	0.0	19.5	61.3
Foreign currency translation	0.4	0.1	0.0	0.7	1.2
Reclassifications	0.3	0.0	0.0	0.0	0.3
Additions	3.1	0.0	0.0	0.0	3.1
Disposals	–0.1	0.0	0.0	0.0	–0.1
Other	–0.1	0.0	0.0	0.0	–0.1
Balance at Dec 31, 18	**65.8**	**52.7**	**18.4**	**66.9**	**203.8**
Accumulated amortization and depreciation/impairment losses					
Balace at Jan. 1, 18	50.1	2.6	13.3	25.6	91.6
Foreign currency translation	0.3	0.0	0.0	0.0	0.3
Reclassifications	0.0	0.0	0.0	0.0	0.0
Additions	2.1	10.6	1.5	0.0	14.2
Disposals	–0.1	0.0	0.0	0.0	–0.1
Balance at Dec 31, 18	**52.4**	**13.2**	**14.8**	**25.6**	**106.0**
Net carrying amount as of Dec. 31, 18	**13.4**	**39.5**	**3.6**	**41.3**	**97.8**
Historical costs					
Balance at Jan. 1, 17	62.8	2.7	16.4	48.9	130.8
Reclassification from/to the balance sheet item assets held for sale	–2.3	0.0	0.0	0.0	–2.3
Change in the scope of consolidation	2.8	8.1	1.2	0.0	12.1
Foreign currency translation	–1.2	0.0	0.0	–2.2	–3.4
Reclassifications	–0.6	0.0	0.7	0.0	0.1
Additions	1.3	0.0	0.1	0.0	1.4
Disposals	–0.6	0.0	0.0	0.0	–0.6
Balance at Dec. 31, 17	**62.2**	**10.8**	**18.4**	**46.7**	**138.1**
Accumulated amortization and depreciation/impairment losses					
Balance at Jan. 1, 17	52.4	2.4	9.8	25.6	90.2
Reclassification from/to the balance sheet item assets held for sale	–2.3	0.0	1.4	0.0	–0.9
Foreign currency translation	–1.0	0.0	0.0	0.0	–1.0
Reclassifications	–0.6	0.0	0.6	0.0	0.0
Additions	2.2	0.2	1.5	0.0	3.9
Disposals	–0.6	0.0	0.0	0.0	–0.6
Balance at Dec. 31, 17	**50.1**	**2.6**	**13.3**	**25.6**	**91.6**
Net carrying amount as of Dec. 31, 17	**12.1**	**8.2**	**5.1**	**21.1**	**46.5**

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 October 1 of CGUs to which goodwill has been allocated:

€m	Recognized goodwill	Discount rate after tax	Long-term growth rate
Oct. 1, 18			
Graphite Specialties	19.8	7.9%	1.0%
Process Technology	1.9	7.9%	1.0%
Composites DE	19.5	6.9%	1.0%
Oct. 1, 17			
Graphite Specialties	19.5	7.6%	1.0%
Process Technology	1.9	7.6%	1.0%

No requirement to recognize an impairment loss was identified for the three CGUs analyzed in fiscal year 2018, 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 (reporting segment GMS) and Composites DE (reporting segment CFM) have the highest recognized goodwill. While the recoverable amount (value-in-use) of Graphite Specialties 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% point) and a simultaneous reduction of the cash flows in the terminal value by 33% points.

While the recoverable amount (value-in-use) of Composites DE currently exceeds its carrying amount only slightly, this excess would be reduced to zero in case of an increase in the discount rate (plus 0.4% point) and a simultaneous reduction of the cash flows in the terminal value by 6.4% points.

16. Property, plant and equipment

€m	Land, land rights and buildings	Plant and machinery	Office furniture and equipment	Assets under construction	Investment property	Total
Historical costs						
Balace at Jan. 1, 18	423.5	1,022.3	59.5	26.8	19.8	1,551.9
Change in the scope of consolidation	47.2	76.9	1.5	0.6	0.0	126.2
Foreign currency translation	6.2	13.3	0.2	0.4	0.0	20.1
Reclassifications	4.6	15.4	1.1	–21.4	0.0	–0.3
Additions	2.2	18.1	2.5	52.2	0.0	75.0
Disposals	–0.3	–6.2	–1.4	–0.1	0.0	–8.0
Balance at Dec 31, 18	**483.4**	**1,139.8**	**63.4**	**58.5**	**19.8**	**1,764.9**
Accumulated amortization and depreciation/impairment losses						
Balace at Jan. 1, 18	232.6	739.0	49.1	0.0	7.2	1,027.9
Foreign currency translation	1.6	5.9	0.1	0.0	0.0	7.6
Reclassifications	–0.1	0.0	0.0	0.0	0.1	0.0
Additions	12.2	44.7	3.2	0.1	0.6	60.8
Disposals	–0.2	–5.8	–0.9	0.0	0.0	–6.9
Balance at Dec 31, 18	**246.1**	**783.8**	**51.5**	**0.1**	**7.9**	**1,089.4**
Net carrying amount as of Dec. 31, 18	**237.3**	**356.0**	**11.9**	**58.4**	**11.9**	**675.5**
Historical costs						
Balance at Jan. 1, 17	395.3	1,018.0	57.5	43.8	19.8	1,534.4
Reclassification from/to the balance sheet item assets held for sale	15.9	–22.7	–1.3	0.0	0.0	–8.1
Change in the scope of consolidation	15.0	23.6	1.9	0.8	0.0	41.3
Foreign currency translation	–14.4	–35.4	–0.8	–1.0	0.0	–51.6
Reclassifications	3.0	36.8	0.5	–40.4	0.0	–0.1
Additions	9.6	14.4	2.8	24.7	0.0	51.5
Disposals	–0.9	–12.4	–1.1	–1.1	0.0	–15.5
Balance at Dec. 31, 17	**423.5**	**1,022.3**	**59.5**	**26.8**	**19.8**	**1,551.9**
Accumulated amortization and depreciation/impairment losses						
Balance at Jan. 1, 17	232.9	751.1	48.9	1.7	6.8	1,041.4
Reclassification from/to the balance sheet item assets held for sale	–0.6	–12.6	–1.2	0.0	0.0	–14.4
Foreign currency translation	–4.8	–22.0	–0.7	0.0	0.0	–27.5
Reclassifications	0.6	0.0	0.0	–0.6	0.0	0.0
Additions	8.6	34.7	3.0	0.0	0.4	46.7
Reversal of impairment losses	–3.6	0.0	0.0	0.0	0.0	–3.6
Disposals	–0.5	–12.2	–0.9	–1.1	0.0	–14.7
Balance at Dec. 31, 17	**232.6**	**739.0**	**49.1**	**0.0**	**7.2**	**1,027.9**
Net carrying amount as of Dec. 31, 17	**190.9**	**283.3**	**10.4**	**26.8**	**12.6**	**524.0**

In the reporting year, the initial consolidation of SGL ACF led to an increase in property, plant and equipment by €126.2 million (2017: initial consolidation of SGL Composites, increase by €41.3 million). The reversal of impairment loss of €3.6 million reported in the previous year reflects the value adjustment of

HITCO's land and buildings. Please refer to Note 10 for further details.

Investment property

As in the prior years, SGL Carbon has pooled a former business unit's land and buildings held as investment property within a real estate company. The fair values of developed land and the land value of the expected development area totaled €28 million as of December 31, 2018 (December 31, 2017: €20.0 million, determined using an adjusted reference land value) based on an external expert opinion. The reported fair values correspond to Level 3 of the fair value hierarchy of IFRS 13.

Rental income from such land amounted to a total of €1.1 million in fiscal year 2018 (2017: €1.3 million). Expenses amounted to €1.6 million (2017: €0.8 million).

17. Other non-current assets

This item mainly contains financial assets in the form of securities held at foreign subsidiaries to cover pension entitlements.

18. Inventories

€m	Dec. 31, 18	Dec. 31, 17
Raw materials and supplies	99.8	74.4
Work in progress	109.1	108.4
Finished goods and merchandise	101.5	98.6
Total	**310.4**	**281.4**

In fiscal year 2018, cost of sales included a utilization of inventories in the amount of €766.4 million (2017: €627.2 million), which was recognized as an expense. The total carrying amount of inventories measured at net realizable value was €12.8 million as of December 31, 2018 (December 31, 2017: €4.3 million). Write-downs of inventories led to an increase in the overall cost of sales recognized by €2.1 million (2017: €3.2 million). Reversals of write-downs resulting from disposals in the amount of €1.4 million (2017: €4.3 million) reduced the cost of sales. As of December 31, 2018 and December 31, 2017, amounts of €1.4 million and €13.5 million, respectively, of prepayments received less prepayments made were deducted from work in process.

19. Trade receivables and contract assets

€m	Dec. 31, 18	Dec. 31, 17
From customers	130.8	118.7
From investments accounted for At-Equity	5.1	7.7
Trade receivables	**135.9**	**126.4**
Contract assets	80.9	-
Trade receivables and contract asssets	**216.8**	**126.4**

Details on the extent of credit risks included in trade receivables and contract assets are set out in Note 31 in the section “Credit risks.”

20. Other financial assets

€m	Dec. 31, 18	Dec. 31, 17
Purchase price receivables	3.0	62.4
Other financial assets	**3.0**	**62.4**

A purchase price receivable in the amount of €3.0 million is outstanding from the completion of the sale of SGL Kümpers GmbH & Co KG in January 2018; this amount is paid in instalments as contractually agreed until the end of 2019. In the previous year, purchase price receivables in a total amount of €62.4 million were outstanding from the two disposals (GE as well as CFL/CE) which were settled in the first quarter of 2018.

21. Other receivables and other assets

€m	Dec. 31, 18	Dec. 31, 17
Other tax claims	13.2	9.0
Advance payments for leases and insurance insurance premiums	6.3	5.3
Income tax assets	1.4	2.6
Other receivables due from suppliers	1.5	4.5
Receivables due from employees	1.4	1.4
Positive fair values of financial instruments (currency rate derivatives)	0.0	2.8
Other assets	7.6	7.7
Other receivables and other assets	**31.4**	**33.3**

22. Liquidity

Liquidity declined mainly due to the repayment and new borrowings of financial liabilities. The sales proceeds from the successful disposal of the business unit PP were used to redeem the convertible bond with an outstanding volume of €239.2 million in January 2018 upon maturity. As a result of obtaining control of the former joint operation with BMW Group in January 2018 and the full consolidation of SGL ACF (renamed to SGL Composites USA and Germany), financial liabilities to BMW Group increased by €94.3 million to €192.4 million due to consolidation effects. In the current fiscal year 2018, the BMW loans were repaid in an amount of €111.8 million based on the share of SGL Carbon in SGL Composites USA and, as of December 31, 2018, there was only a proportionate financing of SGL Composites USA by BMW Group in an amount of €86.4 million. The new convertible bond issued in September 2018 resulted in higher liquidity (before transaction costs) in the amount of €159.3 million. Accordingly, the Company's liquidity as of the reporting date totals €180.6 million (December 31, 2017: €379.3 million), comprising cash and cash equivalents of €122.5 million (December 31, 2017: €379.3 million) as well as time deposits of €58.1 million (December 31, 2017: €0.0 million).

The breakdown of liquidity as of December 31, 2018 was as follows: 41% in euros (December 31, 2017: 93%), 44% in US dollars (December 31, 2017: 2%), 6% in Chinese renminbi (December 31, 2017: 1%), 5% in Japanese yen (December 31, 2017: 1%), and 4% in other currencies (December 31, 2017: 4%). As in the prior year, there was no significant amount of cash on hand as of the balance sheet date. The increase in liquidity in US dollar is mainly attributable to a time deposit of USD 62 million.

23. Assets held for sale/Liabilities in connection with assets held for sale

SGL Carbon intends to sell the 50.9% interest in the fully consolidated SGL CARBON KARAHM Ltd. The assets and liabilities were assigned to the BU GMS and were classified as assets/liabilities held for sale as of the balance sheet date. In the previous year, this balance sheet item included assets and liabilities of SGL Kümpers GmbH & Co. KG. The sale of the 51% interest in Kümpers was completed mid-January 2018 and, already in 2017, led to a value adjustment of €2.3 million reported in miscellaneous other income.

The carrying amounts of the major classes of assets and liabilities were as follows (after taking into account impairment losses):

€m	Dec. 31, 18	Dec. 31, 17
Other intangible assets and property, plant and equipment	0.2	2.4
Inventories		6.3
Trade receivables and contract assets	0.4	4.9
Other receivables and other assets	0.1	0.6
Liquidity	1.0	3.6
Assets held for sale	**1.7**	**17.9**
Other provisions		1.9
Trade payables	0.1	0.8
Interest-bearing loans and other financial liabilities		6.7
Other liabilities	0.4	1.9
Liabilities in connection with assets held for sale	**0.5**	**11.3**

24. Deferred taxes

As of December 31, 2018, German unrecognized domestic tax loss carryforwards amounted to €471.5 million for corporate tax (December 31, 2017: €463.3 million), €322.4 million for trade tax (December 31, 2017: €324.3 million), and €54.3 million for interest carryforwards (December 31, 2017: €49.7 million). Unrecognized usable foreign tax loss carryforwards also existed primarily in the USA, amounting to USD 511.4 million for federal tax (December 31, 2017: USD 528.4 million), and in the UK, amounting to GBP 86.0 million (December 31, 2017: GBP 37.9 million). Furthermore, as of December 31, 2018, there were unrecognized interest carryforwards and capital losses in the USA totaling USD 69.7 million (December 31, 2017: USD 50.2 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., loss carryforwards that arose until December 31, 2017 will expire from 2022. Losses incurred in tax years ending after December 31, 2017, may be carried forward for an unlimited period.

Above all, the tax group of SGL Carbon SE (mainly SGL Carbon SE and SGL Carbon GmbH) reported a series of losses in recent years. Deferred tax assets are required to be capitalized if there is a history of losses to the extent that there is convincing substantial evidence that sufficient taxable profit will be available. If such substantial evidence exists, deferred tax assets have to be recognized when it is probable (i.e. it is more likely than not) that future sufficient taxable profit will be available in future. Based on the company-specific special situation as regards the restructuring and transformation process initiated in the past years, it was determined that the history of losses is attributable to separately identifiable single causes of loss which will not repeat in the future. In addition, it becomes obvious in retrospect that the assumptions used for corporate and tax planning in relation to cost savings and earnings improvements to be achieved through the restructuring and transformation program have occurred as planned and have led to operating improvements. In the verified tax planning of the tax entity, SGL Carbon expects that this trend will continue. Based on a detailed breakdown of the timing of the utilization of loss carryforwards, taking into account the release of each single temporary difference, a utilization of the loss carryforwards was simulated in the detailed planning period of three years. The detailed analysis resulted in the capitalization of deferred tax assets on loss carryforwards in the amount of €8.5 million at the German tax group and of €16.6 million on a Group-wide basis. The limitation to three years was based on the "3-year cumulative loss test" in accordance with U.S. GAAP and also applies to deductible temporary differences. The applied limitation of the tax planning period led to valuation adjustments totaling €42.3 million in the previous year and to a reversal of €8.6 million, of which €5.6 million was recognized in the income statement and €3.0 million in other comprehensive income.

No deferred tax assets were recognized for the following items as of December 31, 2018 or December 31, 2017 due to uncertainty regarding their usability:

€m	Dec. 31, 18	Dec. 31, 17
From recognition and measurement differences	165.9	258.2
From tax loss carry forwards and tax credits	1,681.6	1,534.1
Total	**1,847.5**	**1,644.3**

Deferred tax assets are offset against deferred tax liabilities when they refer to income taxes imposed by the same taxation authority and when there is a right to set off current tax assets against current tax liabilities. No current and non-current distinction is made in the presentation of deferred taxes in the consolidated balance sheet.

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, 18	Deferred tax liabilities Dec. 31, 18	Deferred tax assets Dec . 31, 18	Deferred tax liabilities Dec. 31, 17
Non-current assets	37.4	69.8	30.5	28.6
Inventories	6.7	2.4	3.8	2.4
Receivables/other assets	3.0	13.2	5.0	2.5
Provisions for pensions and similar employee benefits	82.4	21.1	79.1	18.9
Other provisions	12.6	0.6	9.1	0.3
Liabilities/other liabilities	7.0	2.2	6.7	1.2
From tax loss carry forwards, interest carry forwards and tax credits	309.4	0.0	267.3	0.0
Gross amount	**458.5**	**109.3**	**401.5**	**53.9**
Valuation allowances	–342.0	0.0	–329.0	0.0
Netting	–105.2	–105.2	–51.8	–51.8
Carrying amount	**11.3**	**4.1**	**20.7**	**2.1**

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.

SGL Carbon reports accumulated deferred tax effects of €44.6 million (2017: €41.6 million) on items recognized outside profit or loss, mainly from pension provisions, in equity. The tax effects in the reporting year are presented as footnotes to the statement of comprehensive income by equity category.

In both the reporting year and the prior year, no deferred tax liabilities would result from retained earnings at foreign entities which will not be distributed in the foreseeable future, since the subsidiaries´ potential for distribution has largely been disbursed.

25.Equity

Issued capital

As of December 31, 2018, the issued capital of the parent company SGL Carbon SE amounted to €313,194,183.68 (December 31, 2017: €313,194,183.68) and was divided into 122,341,478 (December 31, 2017: 122,341,478) 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 am Main).

Authorized capital

Pursuant to Section 3 (6) of the Articles of Association, the Board of Management is authorized to increase the share capital, with the approval of the Supervisory Board, by up to a total of €31,319,040.00 by issuing new no-par value bearer shares on one or more occasions (Authorized Capital 2017). Authorized Capital 2017 was created by the Annual General Meeting on May 17, 2017 and is exercisable until May 16, 2022. In principle, the shareholders will be entitled to subscription rights if the Authorized Capital 2017 is utilized. However, pre-emptive rights should be or may be disapplied for fractional amounts, for the benefit of holders of bonds with warrants or conversion rights or obligations issued or to be issued, shares issued in return for contributions in kind to support the acquisition of companies, parts of companies, or investments in companies, and the issuance of shares of up to 10% of the issued share capital, with the approval of the Supervisory Board, in the event of a capital increase against cash contributions.

Conditional capital

The Annual General Meeting has approved conditional capital increases in the past years to service the share-based management incentive plans (see Note 33) as well as to service convertible bonds (see Note 28).

Conditional capital as of December 31, 2018

Articles of association	Date of resolution	€/Number of shares	Capital increase via:	Disapplication of pre-emptive rights/execution of the capital increase
Section 3 (7)	April, 30, 2004	€763,202.56 = 298,126 shares	SAR-Plan[1]2005-2009	Share capital increase will be executed if participants make use of their subscription rights.
Section 3 (9)	May 17. 2017	€ 31,319,040.00 =12,234,000 shares	To be used for the 2018 convertible bond	Share capital increase will be executed if participants make use of their subscription rights.
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 (12)	April 29, 2009	€4,875,517.44 = 1,904,499 shares	SAR-Plan[1]2010-2014	Share capital increase will be executed if participants make use of their subscription rights.
Section 3 (14)	April 30, 2010	€ 20,480,000.00 =8,000,000 shares	Conversion of convertible bond 2012	Convertible bond 2012 no longer outstanding, thus conversion to shares is no longer possible

[1] SAR Plan = Stock Appreciation Rights Plan, see Note 33

There were no changes in the balance of conditional capital compared to December 31, 2017.

Changes in share capital

Number of shares	2018	2017
Balance as of Jan. 1,	122,341,478	122,341,478
Balance as of Dec. 31	**122,341,478**	**122,341,478**

As of December 31, 2018, 70,501 (December 31, 2017: 70,501) treasury shares were held at a carrying amount of €180,482.56 (December 31, 2017: €180,482.56).

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 debt, gearing (net debt/equity), and the equity ratio. Net debt is defined as borrowings at their principal amount less cash, cash equivalents and time deposits. In the medium term, SGL Carbon aims to achieve a gearing of approx. 0.5, an equity ratio of ⩾30% and a leverage ratio (net financial debt to EBITDA before non-recurring items) of ⩽2.5.

In the reporting year, the proceeds from the sale of the business unit PP were used to redeem the convertible bond 2012/2018 in January 2018.

In September, SGL Carbon SE issued a convertible bond in a nominal amount of €159.3 million due in September 2023 (see Note 28).

In the previous year, the proceeds from the sale of the business unit PP were used to redeem the corporate bond in the amount of €250.0 million prior to maturity in 2021.

The key figures developed as follows:

€m	Dec. 31, 18	Dec. 31, 17
Net financial debt [1]	242.2	139.0
Equity attributable to the shareholders of the parent company	531.6	457.0
Gearing	0.46	0.30
Equity ratio	33.5%	29.6%
Gearing	1.90	1.53

[1] Including liquidity of discontinued operations of €1.0 million (prior year: €3.6 million)

SGL Carbon 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. This includes, among other things, the internal financing framework for subsidiaries determined on the basis of their budget requirements and their utilization, monitoring the hedged currency exposure, the change in actual cash flows, the change in the market values of the derivatives portfolio and the maintaining 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 "B3" from Moody's and "B-" from Standard & Poor's.

Change in control agreement

As of December 31, 2018, the Company had issued two convertible bonds maturing in 2020 and 2023, respectively. Each of the convertible bonds entitle the bondholders to repayment of their outstanding notes at the principal amount (plus accumulated interest) 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 can be converted into shares, which can 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 convertible bond 2020, 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. For the purposes of the convertible bond 2023, a change in control exists if one or more individuals acquires control over the Company, with control being direct or indirect ownership of more than 30% of the voting shares. In case of the convertible bond 2023, the improved conversion ratio also applies in case of a public takeover offer when the acceptance rate of the takeover offer at the end of the acceptance period exceeds the control threshold of 30% of the voting shares, any additional minimum acceptance threshold is reached as of this date and no other offer conditions remain outstanding (except for conditions that may also be fulfilled after the end of the acceptance period if legally permitted).

Other

In 2018, SGL Carbon SE, the parent company of SGL Carbon, reported a net loss for the year of €43.5 million in accordance with the German Commercial Code (HGB). Taking into account the loss brought forward in the amount of €887.5 million, the accumulated loss totaled €931.0 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).

26. Provision for pensions and similar employee benefits

The employees of SGL Carbon 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 Carbon 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 SGL Carbon 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 actuarial equivalence principle (Bedarfsdeckungsverfahren). Accordingly, the employer contributions may fluctuate depending on the amount of capital gains of the fund. The contributions made by SGL Carbon to the pension fund (Penka I) in 2018 amounted to 500% (since January 1, 2019: 600%) of the employee contributions. 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). In addition, there is Altersversorgungplus (AV-plus) in Germany. 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. 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. Assets are invested in a European equities fund (30%) and in a European fixed-income fund (70%) via an external investment company to cover the entitlements under AVplus. 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 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 (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. Assets are invested in a European small cap equities fund (7.5%), in a European equities fund (12.5%), in an international equities fund (30%), and in a European fixed-income fund (50%) via an external investment company to cover the entitlements under ZVplus.

USA

The North American subsidiaries have pension plans which are largely covered by pension funds. The effective funding ratio for the U.S. pension plan as of December 31, 2018, amounts to 78.0% (December 31, 2017: 75.4%). 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 Carbon 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 2018, the effective return on plan assets was minus 5.1% (2017: plus 14.0%) in the U.S., which is below the expected interest based on the discount rate of 3.6% as of December 31, 2017.

The investment policy of SGL Carbon 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, 2018, 34.1% of the plan assets in the USA were invested in equities and interests in companies (December 31, 2017: 34.7%), 58.0% in fixed-interest securities (December 31, 2017: 57.3%), 6.7% in hedge funds (December 31, 2017: 6.5%), and 1.2% in bank deposits (December 31, 2017: 1.5%).

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 reporting year, the assumed rates of increase for medical costs (first/last/year) amounted to (7.74%/5.0%/2026) for beneficiaries of less than 65 years of age and (8.46%/5.0%/2026) for beneficiaries of more than 65 years of age. The assumed rates for 2017 were (7.23%/5.0%/2025) and (8.36%/5.0%/2025), 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 €0.1 million (minus €0.1 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 2018.

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	
	2018	2017	2018	2017
Discount rate as of Dec. 31	1.90%	1.70%	4.20%	3.60%
Projected salary increase as of Dec. 31	2.25%	2.25%	3.00%	3.00%
Projected pension increase as of Dec. 31	1.90%	1.50%		
Expected return on plan assets in fiscal year	1.90%	1.70%	4.20%	3.60%
Duration (years)	16.7	17.1	13.8	14.6

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 2018 was as follows:

€m	Germany 2018	USA 2018	Other 2018	Total 2018
Present value of the defined benefit obligation at beginning of year	283.7	101.9	11.6	397.2
Service cost	4.6	2.7	0.2	7.5
Interest cost	4.8	3.6	0.3	8.7
Actuarial gains (–)/losses (+)	6.8	–10.7	–0.4	–4.3
Benefits paid	–9.3	–4.3	–0.8	–14.4
Other changes	0.5	0.2	0.3	1.0
Currency differences		4.8		4.8
Present value of the defined benefit obligation at end of year [1)]	**291.1**	**98.2**	**11.2**	**400.5**
Fair value of plan assets at beginning of year	45.9	60.5	0.8	107.2
Actual return on plan assets	–0.4	–3.1	0.0	–3.5
Employer contributions	3.6	4.8	0.8	9.2
Employee contributions	0.9	0.1	0.0	1.0
Benefits paid	–1.3	–4.4	–0.8	–6.5
Currency differences	0.0	2.9	0.0	2.9
Fair value of plan assets at end of year [2)]	**48.7**	**60.8**	**0.8**	**110.3**
Funded status as of Dec. 31	**242.4**	**37.4**	**10.4**	**290.2**
Amount recognized	**242.4**	**37.4**	**10.4**	**290.2**
Termination benefits		0.7	2.3	3.0
Provisions for pensions and similar employee benefits	**242.4**	**38.1**	**12.7**	**293.2**

1) Of which €6.3 million relate to post-retirement health care benefits
2) This item also includes assets of €4.0 million to cover pension entitlements recognized as other non-current assets

The funded status for 2017 was as follows:

€m	Germany 2017	USA 2017	Other 2017	Total 2017
Present value of the defined benefit obligation at beginning of year	280.9	110.8	11.7	403.4
Reclassification to the balance sheet item liabilities in connection with assets held for sale	−2.1	0.0	0.0	−2.1
Service cost	4.6	2.8	0.2	7.6
Interest cost	5.0	4.0	0.4	9.4
Actuarial gains (−)/losses (+)	2.4	1.2	0.3	3.9
Benefits paid	−8.5	−3.4	−0.8	−12.7
Plan amendments	0.0	0.0	0.0	0.0
Other changes	1.4	0.1	−0.2	1.3
Currency differences	0.0	−13.6	0.0	−13.6
Present value of the defined benefit obligation at end of year[1]	**283.7**	**101.9**	**11.6**	**397.2**
Fair value of plan assets at beginning of year	42.4	58.0	0.0	100.4
Reclassification to the balance sheet item liabilities in connection with assets held for sale	0.0	0.0	0.0	0.0
Actual return on plan assets	0.2	7.7	0.0	7.9
Employer contributions	4.1	5.8	0.8	10.7
Employee contributions	0.9	0.1	0.0	1.0
Benefits paid	−1.7	−3.4	0.0	−5.1
Currency differences	0.0	−7.7	0.0	−7.7
Fair value of plan assets at end of year[2]	**45.9**	**60.5**	**0.8**	**107.2**
Funded status as of Dec. 31	**237.8**	**41.4**	**10.8**	**290.0**
Amount recognized	**237.8**	**41.4**	**10.8**	**290.0**
Termination benefits	0.0	0.7	2.3	3.0
Provisions for pensions and similar employee benefits	**237.8**	**42.1**	**13.1**	**293.0**

[1] Of which €7.6 million relate to post-retirement health care benefits
[2] This item also includes assets of €4.4 million to cover pension entitlements recognized as other non-current assets

The consolidated statement of comprehensive income includes the following amounts:

€m	Germany 2018	USA 2018	Other 2018	Total 2018	Total 2017
Actuarial gains (+)/losses (–) on pensions	–6.8	10.7	0.4	4.3	–5.7
Actual return on plan assets	–0.4	–3.1	0.0	–3.5	9.0
Less expected return on plan assets	0.9	2.1	0.0	3.0	2.8
Currency effects	0.0	0.3	0.0	0.3	0.0
Gains (+)/losses (–) for the reporting year (gross) recognized in equity	**–8.1**	**5.2**	**0.4**	**–2.5**	**0.5**
Tax effect	2.9	0.0	0.0	2.9	0.2
Valuation allowance on deferred taxes from pensions (Note 24)	–0.2	0.0	0.0	–0.2	–39.6
Gains (+)/losses (–) for the reporting year (net) recognized in equity	**–5.4**	**5.2**	**0.4**	**0.2**	**–38.9**

The cumulative net amount of actuarial losses recognized in equity (accumulated profit/loss) was €212.7 million (2017: €212.9 million).

In fiscal year 2018, the following developments influenced the present value of the defined benefit obligation: decrease by €4.2 million resulting from the increase of the discount factor used for pension plans (after taking into account an offsetting effect due to raising the projected pension increase for German plans from 1.5% to 1.9%) (2017: decrease by €3.1 million due to increase of the discount factor), increase by €3.2 million as a result of taking into account new mortality tables in Germany (2017: effect of €1.6 million due to new mortality tables in the USA) as well as a decrease by €1.2 million (2017: €1.7 million) on account of 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 6.9%/plus 8.0% (discount factor) and 4.8%/minus 4.4% (projected pension increase).

Pension provisions with a maturity of less than one year amounted to €13.8 million (December 31, 2017: €13.4 million).

SGL Carbon has pension and healthcare obligations in the amount of €102.9 million (December 31, 2017: €102.3 million) arising from fund-financed pension plans. Pension obligations arising from non-fund-financed pension plans amounted to €297.6 million (December 31, 2017: €294.9 million). The actual return on plan assets in 2018 amounted to a total of minus €3.5 million (2017: €9.4 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, 2018, the asset value included in the pension provisions totaled €29.7 million (December 31, 2017: €29.6 million). The expected return corresponds to the discount rate for the pension obligations. In fiscal year 2018, one-time payments totaling €0.7 million were made to reinsurers (2017: €1.3 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 30.

The breakdown of pension expenses for 2018 and 2017 is as follows:

€m	Germany 2018	USA 2018	Other 2018	Total 2018	Total 2017
Current service costs	4.6	2.7	0.2	7.5	7.6
Service cost	**4.6**	**2.7**	**0.2**	**7.5**	**7.6**
Interest cost	4.8	3.6	0.3	8.7	9.4
Expected return on plan assets	–0.8	–2.1	0.0	–2.9	–2.9
Net interest expense	**4.0**	**1.5**	**0.3**	**5.8**	**6.5**
Pension expenses for defined benefit plans	**8.6**	**4.2**	**0.5**	**13.3**	**14.1**
Pension expenses for defined contribution plans	5.8	1.5	2.1	9.4	6.0
Pension expenses	**14.4**	**5.7**	**2.6**	**22.7**	**20.1**

Contributions to state plans of SGL Carbon amounted to €20.6 million in 2018 (December 31, 2017: €19.0 million). Employer contributions to plan assets and reinsurance policies in 2018 are estimated at €6.2 million (actual amount for 2017: €6.2 million). As of December 31, 2018, the anticipated future pension benefit payments by SGL Carbon to its former employees or their surviving dependents were as follows:

Pension payments to employees

Year	€m
2018	14.5
Payable in 2019	13.8
Payable in 2020	14.4
Payable in 2021	16.0
Payable in 2022	15.4
Payable in 2023	15.9
Due in 2024–2028	88.7

27. Other provisions

€m	Taxes	Personnel expenses	Warranties, price reductions and guarantees	Restructuring	Other	Total
Balace at Jan. 1, 18	8.9	53.0	18.4	29.1	17.0	126.4
Change in the scope of consolidation	0.4	1.3	0.0	0.1	0.4	2.2
Utilizations	−6.2	−36.1	−4.9	−8.1	−8.4	−63.7
Releases	0.0	−1.1	−0.8	−0.4	−0.8	−3.1
Additions	4.0	41.1	2.5	14.3	9.2	71.1
Other changes/exchange differences	0.0	0.4	−6.1	0.0	0.2	−5.5
Balance at Dec 31, 18	**7.1**	**58.6**	**9.1**	**35.0**	**17.6**	**127.4**
thereof with a maturity of up to one year	*5.4*	*50.9*	*6.6*	*11.1*	*17.1*	*91.1*
thereof with a maturity of more than one year	*1.7*	*7.7*	*2.5*	*23.9*	*0.5*	*36.3*

Provisions for personnel expenses mainly comprise provisions for annual bonuses of €30.6 million (December 31, 2017: €27.0 million), provisions for anniversary benefits of €4.5 million (December 31, 2017: €4.4 million), and provisions for outstanding vacation days of €12.6 million (December 31, 2017: €10.0 million).

In addition to warranty provisions, warranties, price reductions and guarantees include provisions for price reduction risks including bonuses, volume discounts, and other reductions in price. The restructuring provisions primarily relate to provisions for clean-up work and dismantling costs.

The item "Other" includes provisions for outstanding invoices in the amount of €6.0 million (December 31, 2017: €5.7 million). In addition, other provisions consist of various individual items of minor value from our 51 (December 31, 2017: 50) fully consolidated companies.

28. Liabilities

€m	Dec. 31, 18	Remaining term to maturity > 1 year	Dec. 31, 17	Remaining term to maturity > 1 year
Interest-bearing loans				
Nominal value of convertible bonds	*326.3*		*406.2*	
Less IFRS equity component	*–20.8*		*–12.0*	
Convertible bonds	305.5	305.5	394.2	155.4
Bank loans, overdrafts and other financial liabilities	97.4	95.2	112.9	108.6
Refinancing costs	–4.2	–4.2	–3.7	–1.9
	398.7	**396.5**	**503.4**	**262.1**
Trade payables	**108.1**	**0.0**	**89.3**	**0.0**
Other financial liabilities				
Derivative financial instruments	0.9	0.0	0.0	0.0
Finance lease liabilities	16.9	15.7	22.4	21.2
Miscellaneous other financial liabilities	68.9	52.2	4.4	0.0
	86.7	**67.9**	**26.8**	**21.2**
Income tax liabilities	1.2	0.0	0.7	0.0
Miscellaneous other liabilities	22.9	0.0	20.4	0.0
Other liabilities	**110.8**	**67.9**	**47.9**	**21.2**
Total	**617.6**	**464.4**	**640.6**	**283.3**

Interest-bearing loans

Convertible bonds
In January 2018, SGL Carbon redeemed the maturing convertible bond with a nominal amount of €240.0 million issued in 2012.

In September 2018, SGL Carbon SE completed the placement of an unsubordinated, unsecured convertible bond (convertible bond 2018/2023). The total nominal amount of the convertible bond due in 2023 is €159.3 million. The convertible bond has a term of five years, its final maturity is September 20, 2023. It will be redeemed at 100% of the nominal amount. The initial conversion price was set at €13.0220, representing a premium of 30% on the reference price of €10.0169. The interest rate was set at 3.00% p. a. and will have to be paid semi-annually on March 20 and September 20, respectively, for the first time on March 20, 2019. The convertible bonds were issued in denominations of €100,000 per bond. Based on the current conversion price, full conversion would result in the issue of 12.2 million shares. The proceeds from the convertible bond placement is used to refinance existing liabilities, to extend the maturity profile, to increase the financial flexibility and for general business purposes. The fair value of the share conversion rights of €13.7 million was recognized in capital reserves at the date the bond was issued and therefore deducted from the bond liability.

In 2015, the Company issued an 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 at 100% of the principal amount and will be redeemed upon maturity also at 100%. The convertible bonds were issued in denominations of €100,000 per bond. The current conversion price amounts to €17.07. 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.

Accordingly, as of December 31, 2018, 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 automatically 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, 18	Original conversion price per share	Change
Convertible Bond 2015/2020	17.07	18.65	–1.58
Convertible bond 2018/2023	13.02	13.02	0.00

Summary of convertible bonds

€m	Volume of issue	Outstanding volume	Carrying amount as of Dec. 31, 18	Market price[1] as of Dec. 31, 18	Coupon % p.a.	Issue price
Convertible bond 2015/2020	167.0	167.0	158.3	165.2	3,500%	100.0%
Convertible bond 2018/2023	159.3	159.3	143.0	140.1	3,000%	100.0%
Total	**326.3**	**326.3**	**301.3**	**305.3**		

[1] 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 2018 was 3.7% p.a. (2017: 3.7% p.a.). Including the non-cash interest cost on the convertible bonds, the weighted average effective interest rate for 2018 was 5.0% p. a. (December 31, 2017: 4.8% p.a.). As of the balance sheet date, bank loans, overdrafts and other financial liabilities amounted to €97.4 million (2017: €112.9 million). Of that amount, €11.0 million (2017: €78.5 million) was subject to fixed interest and €86.4 million (2017: €34.4 million) was subject to variable interest rates. Variable-interest loans are entirely attributable to the former SGL ACF joint venture with BMW. Of the liabilities to banks, a total of €10.5 million was secured by a land charge as of December 31, 2018.

Syndicated credit facility

In addition to the two convertible bonds, SGL Carbon 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 Carbon's core banks and matures at the end of 2019. On February 13, 2019, this credit facility was replaced by a new syndicated credit facility in the amount of €175 million and a term of up to five years. This credit facility is available to various SGL subsidiaries and can be drawn on in euros or in U.S. dollars.

The agreed credit margin varies, in particular depending on the leverage of SGL Carbon during the term to maturity. The terms and conditions of the syndicated credit line include financing provisions.

Trade payables

Trade payables totaled €108.1 million as of December 31, 2018 (December 31, 2017: €89.3 million) and, as in fiscal year 2017, were primarily due to third parties and due for payment within one year. Trade payables include contract liabilities of €3.7 million, referring to prepayments received from customers for the construction of plants for which revenue is recognized over a specific period.

Other liabilities

As of December 31, 2018, other financial liabilities included liabilities from finance leases in the amount of €16.9 million (December 31, 2017: €22.4 million), mainly attributable to an agreement on a heritable building right.

Miscellaneous other financial liabilities of €68.9 million primarily comprise the discounted outstanding purchase price liability for the acquisition of SGL Composites USA of €52.1 million. Moreover, this item includes cash settlement payments in the amount of €10.6 million for the sale of the former AS business and accrued interest in the amount of €2.8 million on outstanding convertible bonds. In the previous year, miscellaneous other financial liabilities included accrued interest of €4.4 million. Miscellaneous other liabilities totaled €22.9 million (December 31, 2017: €20.4 million) as of December 31, 2018 and included liabilities for payroll and church taxes of €7.6 million (December 31, 2017: €7.6 million), social security liabilities of €0.7 million (December 31, 2017: €0.7 million), other tax liabilities of €1.1 million (December 31, 2017: €0.2 million), and deferred income of €8.0 million (December 31, 2017: €6.7 million).

The following table shows all contractually agreed upon payments as of December 31, 2018 for repayments of principal and payment of interest on recognized financial liabilities, including derivative financial instruments

€m	2019	2020	2021	2022	2023	More than five years
Non-derivative financial liabilities						
Convertible bonds	10.7	175.8	4.8	4.8	162.7	
Bank loans, overdrafts and other financial liabilities	4.4	90.9	2.3	2.3	1.8	0.6
Finance lease liabilities	1.2	1.2	1.2	1.1	1.0	43.1
Trade payables	108.1					
Miscellaneous other financial liabilities	16.7	52.2				
Derivative financial liabilities	0.9					
Total	**142.0**	**320.1**	**8.3**	**8.2**	**165.5**	**43.7**

The major change over the disclosures in the previous year is due to the newly issued convertible bond 2018/2023 due in 2023 with a nominal amount of €159.3 million and a coupon rate of 3.0%.

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. SGL Carbon 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.

The following table shows the development of interest-bearing loans.

€m	Balance at Jan. 1, 18	Additions	Repayments	Effect of foreign exchange rate changes	Change in the scope of consolidation	Imputed interest/ amortisation	Balance at Dec 31, 18
Convertible bonds	406.2	159.3	–239.2				326.3
Bank loans, overdrafts and other financial liabilities	112.9		–115.6	5.8	94.3		97.4
Interest-bearing loans (nominal amount)	**519.1**	**159.3**	**–354.8**	**5.8**	**94.3**	**0.0**	**423.7**
Remaining imputed interest for the convertible bonds	–12.0	–13.9				5.1	–20.8
Refinancing costs	–3.7	–3.2				2.7	–4.2
Interest-bearing loans (carrying amount)	**503.4**	**142.2**	**–354.8**	**5.8**	**94.3**	**7.8**	**398.7**

29. Contingent liabilities and other financial obligations

Other financial commitments in connection with purchase orders for approved capital expenditure on property, plant and equipment amounted to €25.3 million as of December 31, 2018 (December 31, 2017: €13.1 million). Some of these capital expenditure projects extend beyond one year. The main investment projects are explained in the Group management report in the section on capital expenditure. Furthermore, there were purchase obligations for services in the amount of €5.0 million as of December 31, 2018 (December 31, 2017: €4.7 million). There were no contingent liabilities relating to investments accounted for At-Equity or other guarantee obligations (December 31, 2017: €0.3 million).

SGL Carbon secures the necessary raw materials and energy for its production by means of procurement agreements with key suppliers. These agreements are normally for one year, include minimum quantities to be purchased by SGL Carbon, 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 and 2016, respectively. These agreements are restricted to share pledge agreements and/ or corporate guarantees for a selected number of companies in the SGL Group. The shares of the following companies serve as collateral: SGL Carbon GmbH, SGL Carbon Beteiligung GmbH, SGL Carbon Technologies GmbH, SGL Carbon LLC, SGL Carbon Holdings BV, SGL Carbon GmbH (Austria), SGL Graphite Solutions Polska sp. z o.o. 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 €44.2 million as of December 31, 2018 (December 31, 2017: €34.7 million). As of December 31, 2018, the future minimum annual lease payments were as follows:

€m	2019	2020	2021	2022	2023	2024 and thereafter	Total
Operating leases	**11.3**	**14.4**	**6.5**	**3.9**	**2.5**	**5.6**	**44.2**
Finance leases	1.2	1.2	1.2	1.1	1.0	43.1	48.8
– discount included	–0.1	–0.1	–0.1	–0.2	–0.2	–31.2	–31.9
= Present value of finance leases	**1.1**	**1.1**	**1.1**	**0.9**	**0.8**	**11.9**	**16.9**

The increase in the amounts to be paid in the fiscal year 2020 results from the exercise of a purchase option in relation to a leased building in the amount of €6.7 million. This was the only material change in comparison to the prior year.

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. Expenses for rental and operating lease agreements totaled €32.6 million in 2018 (2017: €33.6 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 Carbon 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 Carbon. Identifiable risks have been adequately covered by recognizing appropriate provisions.

30.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. As in the previous year, SKion GmbH continues to hold a nominal amount of €25 million of the 2015/2020 convertible bond, with interest amounting to €0.9 million. SKion GmbH holds a nominal amount of €30 million of the convertible bond 2018/2023

In fiscal years 2018 and 2017, SGL Carbon 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 Carbon buys and sells products and services at market conditions. Collateral is reported under other financial obligations (see Note 29). 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 Carbon:

2018

	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	15.2	11.7	0.0	0.0	3.4	0.0	0.0
Associates	0.1	0.4	54.8	1.1	1.7	0.0	12.5
Total	**15.3**	**12.1**	**54.8**	**1.1**	**5.1**	**0.0**	**12.5**

2017

	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	18.0	10.9	1.1	0.0	6.4	0.0	0.0
Associates	0.1	0.4	34.9	0.6	1.3	0.0	2.9
Total	**18.1**	**11.3**	**36.0**	**0.6**	**7.7**	**0.0**	**2.9**

Related persons

Related persons include members of the Board of Management and the Supervisory Board.

For fiscal 2018, the total remuneration (excluding benefit expenses) for the members of SGL Carbon´s Board of Management active in the respective fiscal year based on the principle of allocation (Zuflussbetrachtung) amounted to €2,767 thousand (2017: €3,263 thousand). In addition, pension expenses (service cost) in the amount of €351 thousand in fiscal 2018 (2017: €367 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, 2018 amounted to €3,611 thousand (December 31, 2017: €3,264 thousand).

Remuneration for the members of the Board of Management in fiscal 2018 amounted to a total net expense of €4,481 thousand (2017: €5,152 thousand).

The net amounts outstanding to members of the Board of Management as of December 31, 2018 in the amount of €1,545 thousand (December 31, 2017: €2,494 thousand) consisted of provisions for annual bonuses. A total of 452,101 PSUs (December 31, 2017: 395,107) from the LTI Performance Share Units (PSUs) were granted to active members of the Board of Management as of December 31, 2018. The allotment value at grant date for all outstanding LTI tranches amounted to €3.7 million as of December 31, 2018 (December 31, 2017: €3.7 million). In the 2018 fiscal year, 123,456 new PSUs were granted to the active members of the Board of Management from the LTI tranche 2018–2021.

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 €2,328 thousand (2017: €1.968 thousand). As of December 31, 2018, the pension provisions recognized for former members of the Board of Management (defined benefit obligation, DBO) amounted to €41,826 thousand (December 31, 2017: €30,688 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 €696 thousand (2017: €844 thousand), including attendance fees.

In addition, employee representatives in the Supervisory Board who are employees of SGL Carbon received remuneration within the framework of their employment contracts of €390 thousand (2017: €392 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 2018 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 Carbon.

31. 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 IFRS 9	Carrying amount at Dec. 31, 18	Carrying amount at Dec. 31, 17
Financial assets			
Cash and cash equivalents	1)	122.5	379.3
Time deposits	1)	58.1	0.0
Trade receivables and contract assets	1)	216.8	126.4
Marketable securities and similar investments (31.12: Available-for-sale financial assets)	2)	4.0	4.4
Other financial assets	1)	3.0	62.4
Derivative financial assets			
Derivatives without a hedging relationship [1]	3)	0.0	0.8
Derivatives with a hedging relationship	n.a.	0.0	2.0
Financial liabilities			
Convertible bonds	4)	305.5	394.2
Bank loans, overdrafts and other financial liabilities	4)	97.4	112.9
Refinancing costs	4)	–4.2	–3.7
Finance lease liabilities	n.a.	16.9	22.4
Trade payables	4)	108.1	89.3
Miscellaneous other financial liabilities	4)	68.9	4.4
Derivative financial liabilities			
Derivatives without a hedging relationship [2]	5)	0.2	0.0
Derivatives with a hedging relationship	n.a.	0.7	0.0
Thereof aggregated by measurement category in accordance with IFRS 9 (Dec. 31, 2017: measurement category in accordance with IAS 39)			
1) Financial assets measured at amortized costs (Dec. 31, 2017: IAS 39 measurement category: Loans and receivables)		400.4	568.1
2) Financial assets measured at fair value through profit and loss (Dec. 31, 2017: IAS 39 measurement category: Available-for-sale financial assets)		4.0	4.4
3) Financial assets measured at fair value through profit and loss (Dec. 31, 2017: IAS 39 measurement category: Financial assets held for trading)		0.0	0.8
4) Financial liabilities measured at amortized costs (Dec. 31, 17: IAS 39 measurement category: Financial liabilities measured at amortized cost)		575.7	597.1
5) Financial liabilities measured at fair value through profit and loss (Dec. 31, 2017: IAS 39 measurement category: Financial liabilities held for trading)		0.2	0.0

[1] Thereof €0.0 million (2017: €0.8 million) classified as cash flow hedges prior to the settlement of the hedged item or for hedging of intercompany loans in foreign currency
[2] Thereof €0.2 million (2017: €0.0 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 as well as contract assets, and trade payables have short residual maturities and are approximately equivalent to fair value.

The carrying amounts of these financial assets, less valuation allowances recognized, approximate their fair values due to fact that the residual maturity largely is short-term. In the previous year, other financial assets further included outstanding purchase price receivables from the sale of PP which, due to their short-term maturity, approximated to their market value. SGL Carbon uses the market price in an active market as the fair value of securities and similar cash investments. If no such market price exists, the fair value is determined using observable market data.

Please refer to Note 28 for disclosures on the market value of the convertible bonds as of the balance sheet date.

SGL Carbon 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. Due to the existing framework agreements on derivative transactions with commercial banks, there was the possibility for an economic netting of derivatives. Netting is only conducted in case of the counterparty's insolvency. There was no offsetting in the balance sheet. 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, 2018 and 2017:

				Dec. 31, 18
	Level 1	Level 2	Level 3	Total
Marketable securities and similar investments	4.0			4.0
Derivative financial assets		0.0		0.0
Derivative financial liabilities		0.9		0.9

				Dec. 31, 17
	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets	4.4			4.4
Derivative financial assets		2.8		2.8
Derivative financial liabilities		0.0		0.0

Net gains or losses recognized for financial instruments by measurement category in accordance with IFRS 9 and IAS 39 (prior year) were as follows:

Net gains/losses by measurement category

€m	2018
Financial assets measured at amortized costs	0.9
Other financial assets and financial liabilities measured as fair value through profit and loss	–0.4
Financial assets measured at fair value through profit and loss	–0.9
Financial liabilities measured at amortized cost	–0.5

€m	2017
Loans and receivables	–4.1
Available-for-sale financial assets	0.3
Financial liabilities held for trade	5.1
Financial liabilities measured at amortized cost	0.5

Net gains/losses for the “financial assets measured at amortized cost” measurement category largely include impairments of trade receivables as well as contract assets, 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 at fair value through profit or loss” measurement category primarily includes results from the mark-to-market valuation. Net gains/losses for the “other financial assets and financial liabilities at fair value through profit or loss” measurement category arise from the mark-to-market valuation of derivative 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.

The net result of "financial liabilities measured at amortized cost" includes exchange gains / losses from foreign currency valuation.

Interest income and expense are not included in net gains and losses, as they are already recognized as described in Note 11. For further information on write-downs, please refer to the overview of changes in valuation allowances for doubtful trade receivables and contract assets in Note 31.

Financial instrument risks, financial risk management, and hedging

SGL Carbon 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 Carbon´s solvency as well as its financial flexibility, SGL Carbon 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 Carbon 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).

The convertible bond issued in September 2018 in the amount of €159.3 million provides the Company with liquidity totaling €180.6 million as of year-end 2018. This amount represents a more than sufficient liquidity reserve for the fiscal year 2019. Please refer to Note 28 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 Carbon´s core banks, which have good credit quality.

By defining terms of payment for customers, SGL Carbon 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 Carbon 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 Carbon 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 Carbon 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. In order to determine credit risk, the credit management processes seek to evaluate individual customer risks which are determined by, among other things, taking into account the customer's balance sheet figures, payment experience as well as external credit rating. On the basis this evaluation, counterparty risks are classified into the respective risk classes: low, medium, and high risk.

The default risk for trade receivables as well as contract assets is broken down by risk classes as of December 31, 2018 as follows:

Risk classes	Equivalent to S&P Rating	Carrying amount Dec. 31, 18
Low risk	AAA to AA-	91.3
Middle risk	A+ to BBB-	85.6
High risk	BB+ to C	45.5
Total		**222.4**

The loss allowances for trade receivables and contract assets are determined using a simplified approach (see the following loss allowance matrix) since they do not have any significant financing component. In this context, the customer receivables are classified on the basis of the aforementioned credit risk classes (low, medium, and high risk) and the related past due status. Default is defined by SGL Carbon as a receivable where the contractual cash flows are past due by more than 90 days or where the credit quality of the debtor has deteriorated to an extent that repayment may no longer be expected. The items are derecognized if it can no longer be reasonably expected that any statutory collection measures will be successful. Historical loss rates are complemented with forward-looking estimates (country ratings), if necessary. SGL Carbon assumes for loss allowances for cash and cash equivalents as well as term deposits (liquidity) that credit risk has not increased significantly. Liquidity in a total amount of €180.6 million is invested primarily at banks and financial institutions with a high credit quality (investment grade rating by S&P from AAA to BBB-). The loss allowance for liquidity is calculated based on 12-month expected losses and reflects the short maturities.

The following overview includes information on default risk and the expected credit losses for trade receivables and contract assets for the counterparties as of December 31, 2018:

€m	Gross carrying amount	Gross carrying amount[1]	Loss rate (weighted average)	Impairment losses	Restricted credit rating
Not overdue	189.1	134.8	0.2%	0.4	No
1- 29 days overdue	25.3	13.5	0.8%	0.2	No
30- 60 days overdue	2.5	1.7	4.0%	0.1	Yes
61- 90 days overdue	1.1	0.9	72.7%	0.8	Yes
more than 90 days overdue	4.4	0.3	93.2%	4.1	Yes
Total	**222.4**	**151.2**		**5.6**	

[1] Less receivables covered by credit insurance

The following table shows the extent of the credit risk related to total receivables in the previous year:

€m	Dec. 31, 17
Trade receivables neither impaired nor overdue	**102.7**
Overdue trade receivables not impaired on an individual basis	
less than 30 days	17.3
30 to 60 days	4.4
61 to 90 days	0.9
more than 90 days	1.1
Total	**23.7**
Receivables impaired on an individual basis (gross)	5.4
Less valuation allowances	–5.4
Trade receivables, net	**126.4**

The following table shows the development of loss allowances on trade receivables and contract assets:

€m	2018	2017
Balance at January 1 in accordance with IAS 39	**5.4**	**6.3**
Adjustment on initial application of IFRS 9	1.6	
Balance at January 1 in accordance with IFRS 9	7.0	
Additions	0.7	0.5
Reversals	−0.5	−1.3
Utilizations	−1.6	0.0
Currency translation	0.0	−0.1
Balance at December 31	**5.6**	**5.4**

Reversals recorded in fiscal year 2018 include an amount of €0.1 million for contract assets. A reversal in the amount of €0.2 million for other financial assets, which in the previous year resulted from the purchase price receivable from the sale of the business unit PP, was recognized since the receivable was paid in full in the reporting year.

Market price risks

As an enterprise operating at an international level, SGL Carbon 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 Carbon 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 will change as a result of exchange-rate movements. The risk arises when transactions are denominated in a currency other than the respective Group company´s functional currency. Where SGL Carbon 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). In accordance with the internal hedging policy, SGL Carbon hedges 80% of these net currency positions, as required, within a time horizon of up to a maximum of two years. The most significant currency risks of SGL Carbon from operating transactions result from potential exchange rate changes between the euro and the Japanese yen. In order to hedge operating business, large parts of the corresponding net currency positions are hedged through currency forwards. In 2019, the Company is hedged against a weak Japanese yen at an average rate of EUR/JPY 126.39 and against other currencies as follows: EUR/USD 1.17624 as well as EUR/PLN 4.3259

As a result of the hedges, SGL Carbon was not exposed to any material currency-related cash flow risks in its operating business as of the balance sheet date.

Derivative financial instruments in hedge accounting

SGL Group uses currency forwards to hedge currency risk from future net currency positions. 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 2019 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; the cash flow hedges amount to minus €0.5 million (before taxes) as of December 31, 2018.

The effectiveness of designated hedges is determined prospectively using the critical terms match method in accordance with IFRS 9. In the context of this effectiveness test method for hedging relationships, some important business parameters (also called "critical terms") of the hedged item and the hedging instrument are reviewed to assess if they match each other. Since this matching is given as of the reporting date, an economic hedging relationship between hedged item and hedging transaction exists; therefore, the hedging relationship is deemed effective. Any ineffectiveness may occur due to an unexpected discontinuation of the hedged items, divergence of hedged item and hedging transaction in term of time periods or a default of the counterparty.

The following table shows the nominal amounts, the fair values as of December 31, 2018 as well as the gains/losses from designated currency derivatives in the fiscal year 2018. 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.

	Nominal amounts			Carrying amounts					
€m	Purchase Dec. 31, 18	Sale Dec. 31, 18	Total Dec 31, 18	Total Dec 31, 18	Balance sheet disclosure of hedging instruments	Hedging gains/losses recognized in other comprehensive income 2018	Gains/losses transferred from equity (cash flow hedge) to profit and loss 2018	Hedging costs recognized in other comprehen-sive income	Disclosure of the reclassified amount in profit and loss
Forward contracts	**24.0**	**41.7**	**65.7**	**−0.9**	**Other liabilities**	**−2.6**	**−0.7**		**Sales revenue/ cost of sales**
Thereof:									
USD		8.2	8.2	−0.1					
PLN	24.0		24.0	−0.1					
JPN		33.5	33.5	−0.7					

EUR	Nominal amounts	Fair values
€m	Total Dec. 31, 17	Total Dec. 31, 17
Forward contracts	**80.1**	**2.5**
USD	9.0	0.0
PLN	24.0	0.7
JPN	47.1	1.8

USD	Nominal amounts in US$m	Fair values in €m
	Total Dec. 31, 17	Total Dec. 31, 17
Forward contracts	**18.4**	**0.3**
GBP	15.0	0.2
JPN	3.4	0.1

The fair values shown in the table represent financial assets or liabilities of SGL

Carbon. 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 (2017: not exceed one year).

The following is a reconciliation of the accumulated other comprehensive income from hedging relationships (cash flow hedges):

€m	Cash flow hedge
Balance at January 1, 2018	**2.1**
Changes of the year recognized in equity	−1.9
Reclassifications from equity to profit and loss because the transaction originally hedged occured	−0.7
Balance at December 31, 2018	**−0.5**

In fiscal year 2018, SGL Carbon entered into term deposits in the amount of USD 50 million and USD 62 million to hedge net investments in foreign operations (USA). In the fiscal year 2018, this resulted in hedging gains of €2.9 million recognized in other comprehensive income (currency translation reserve). In fiscal 2018, no gains or losses from the currency translation reserve were reclassified to the income statement.

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 operating activities. Specifically, these include liquidity of €86.9 million (December 31, 2017: €22.0 million), trade receivables of €58.7 million (December 31, 2017: €64.1 million), and trade payables of €48.8 million (December 31, 2017: €42.6 million). As of December 31, 2018, liquidity includes term deposits of USD 62.0 million intended for the payment of the outstanding purchase price in relation to the share in the joint venture SGL ACF (the hypothetical currency risk of this position is minus €4.9 million and included in the figures shown in the tables below). 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. All 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, 2018, and December 31, 2017. The analysis is based on a hypothetical 10% increase in the value of the euro against the other currencies at the balance sheet date.

EUR	Hypothetical exchange rate		Change in fair value/equity		Thereof: change in net profit/loss		Thereof: change in hedging reserve	
€m	Dec. 31, 18	Dec. 31, 17	Dec. 31, 18	Dec. 31, 17	Dec. 31, 18	Dec. 31, 17	Dec. 31, 18	Dec. 31, 17
USD	1.2595	1.3192	−16.2	−9.9	−16.8	−10.5	0.6	0.6
PLN	4.7300	4.5880	−2.3	5.6	−0.3	1.6	−2.0	4.0
GBP	0.9840	0.9760	−2.0	−1.7	−2.0	−1.7	0.0	0.0
JPN	138.4350	1.4851	−0.1	0.9	−2.5	−1.3	2.3	2.2
Other	-	-	1.1	−0.2	1.1	−0.2	0.0	0.0

The approximate effect of a hypothetical 10% devaluation of the euro against other currencies on the equity, profit or loss, or hedging reserve of SGL Carbon 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 variable-interest financing instruments exclusively exists in relation to loans granted by BMW Group to the former joint venture SGL ACF in the amount of €86.4 million. As of the balance sheet date, SGL Carbon had financial liabilities in a principal amount of €423.7 million (December 31, 2017: €519.1 million). Of that amount, liabilities of €86.4 million (December 31, 2017: €34.4 million) had a floating interest rate. The remaining liabilities of €337.3 million (December 31, 2017: €484.7 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 minus €0.9 million (2017: minus €0.3 million).

The variable interest rate liabilities were offset by liquidity (including amounts in the held-for-sale assets) totaling €181.1 million (prior year: €382.9 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 €1.8 million (2017: €3.8 million).

32.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 Carbon – 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

The 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. The CFM reporting segment bundles all of the materials business based on carbon fibers. It covers the entire, integrated value-added chain, from raw materials through carbon fibers to composite materials and the components made from them.

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 central research activities and the central and service functions are included in the reporting segment Corporate.

The following tables provide information on income, profit or loss, and assets and liabilities in the business units of SGL Carbon. External sales revenue was attributable almost exclusively to revenue from deliveries of products. 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. “Corporate” 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 and services between the segments.

Disclosures relating to the segments of SGL Carbon are shown below.

€m	CFM	GMS	Corporate	Consolidation adjustments	SGL Carbon
2018					
External sales revenue	422.5	589.9	35.1	0.0	1,047.5
Intersegment sales revenue	3.8	0.3	29.5	–33.6	0.0
Total sales revenue	**426.3**	**590.2**	**64.6**	**–33.6**	**1,047.5**
Timing of revenue recognition					
Products transferred at point in time	416.8	565.0	35.1	0.0	1,016.9
Products and services transferred over time	5.7	24.9	0.0	0.0	30.6
Total sales revenue	**422.5**	**589.9**	**35.1**	**0.0**	**1,047.5**
Sales revenue by customer industry					
Mobility	246.4	46.4	12.2	0.0	305.0
Energy	8.3	155.6	1.7	0.0	165.6
Industrial Applications	72.9	182.9	21.2	0.0	277.0
Chemicals	0.0	134.3	0.0	0.0	134.3
Digitization	0.0	70.7	0.0	0.0	70.7
Textile Fibers	94.9	0.0	0.0	0.0	94.9
Total sales revenue	**422.5**	**589.9**	**35.1**	**0.0**	**1,047.5**
Operating profit/loss before non-recurring items	20.8	76.0	–32.2	0.0	64.6
Non-recurring items [1]	15.8	0.6	–0.1	0.0	16.3
Operating profit/loss after non-recurring items	36.6	76.6	–32.3	0.0	80.9
Amortization/depreciation on intangible assets and property, plant and equipment	33.4	22.9	6.3	0.0	62.6
Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring items	54.2	98.9	–25.9	0.0	127.2
Capital expenditure [2]	21.5	47.0	9.6	0.0	78.1
Working capital (Dec. 31) [3]	158.5	262.9	–2.3	0.0	419.1
Capital employed (Dec. 31) [4]	650.4	498.2	95.9	0.0	1,244.5
Cash generation [5]	23.4	6.5	–37.5	0.0	–7.6
Employees of investments accounted for At-Equity [6]	479			0.0	479
Total sales revenue of investments accounted for At-Equity [6]	251.6	0.0	0.0	0.0	251.6
Return on capital employed in % (ROCE $_{EBIT}$) [7]	3.2	16.5		0.0	5.4

1) Non-recurring items comprise restructuring expenses in a total amount of minus €0.9 million (Note 9), income from business combination achieved in stages (SGL ACF) of €28.4 million (Note 5) and the carrying forward of the purchase price allocation SGL ACF and Benteler of minus €11.2 million
2) Defined as total of capital expenditure in other intangible assets and property, plant and equipment
3) Defined as sum of inventories and trade receivables and contract asset less trade payables
4) Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital
5) Defined at total of operating loss/profit (EBIT) before non-recurring items plus amortization of intangible assets and depreciation on property, plant and equipment plus change in working capital minus capital expenditure
6) Aggregated, non-consolidated 100% values with third parties
7) EBIT before non-recurring items for the last twelve months to average capital employed

€m	CFM	GMS	Corporate	Consolidation adjustments	SGL Carbon
2017					
External sales revenue	331.9	510.2	18.0		860.1
Intersegment sales revenue	3.6	0.2	27.6	–31.4	0.0
Total sales revenue	**335.5**	**510.4**	**45.6**	**–31.4**	**860.1**
Operating profit/loss before non-recurring items	22.7	47.8	–30.4	0.0	40.1
Non-recurring items [1]	0.4	2.3	6.2	0.0	8.9
Operating profit/loss after non-recurring items	23.1	50.1	–24.2	0.0	49.0
Amortization/depreciation on intangible assets and property, plant and equipment	21.5	23.0	6.1	0.0	50.6
Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring items	44.2	70.8	–24.3	0.0	90.7
Capital expenditure [2]	11.7	29.1	12.1	0.0	52.9
Working capital (Dec. 31) [3]	123.7	199.1	–4.3	0.0	318.5
Capital employed [4]	435.3	401.9	96.9	0.0	934.1
Cash generation [5]	0.7	26.1	–56.7	0.0	–29.9
Employees of investments accounted for At-Equity [6]	428			0.0	428
Total sales revenue of investments accounted for At-Equity [6]	275.6			0.0	275.6
Return on capital employed in % ($ROCE_{EBIT}$) [7]	5.8	12.1			4.6

[1] Non-recurring items comprise restructuring expenses in a total amount of €4.9 million, reversal of impairment losses of €3.6 million. For more information and sundry non-recurring items of €0.4 million. Please refer to Notes 9 and 10
[2] Defined as total of capital expenditure in other intangible assets and property, plant and equipment
[3] Defined as sum of inventories and trade receivables and contract asset less trade payables
[4] Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital
[5] Defined at total of operating loss/profit (EBIT) before non-recurring items plus amortization of intangible assets and depreciation on property, plant and equipment plus change in working capital minus capital expenditure
[6] Aggregated, non-consolidated 100% values with third parties
[7] EBIT before non-recurring items for the last twelve months to average capital employed

The following table shows selected items by geographical region:

€m	Germany	Europe excluding Germany	North America	Asia	Other	SGL Carbon
2018						
Sales revenue (by destination)	358.4	193.4	164.1	291.8	39.8	1,047.5
Sales revenue (by company headquarters)	410.1	320.6	238.2	78.6		1,047.5
Capital expenditure	36.2	20.4	16.2	5.3		78.1
Non-current assets [1]	261.4	200.9	292.1	30.2		784.6

€m	Germany	Europe excluding Germany	North America	Asia	Other	SGL Carbon
2017						
Sales revenue (by destination)	226.2	188.3	153.2	243.3	49.1	860.1
Sales revenue (by company headquarters)	355.4	275.1	178.2	51.4		860.1
Capital expenditure	29.5	10.1	10.6	2.7		52.9
Non-current assets [1]	203.0	192.8	170.3	28.7		594.8

[1] Non-current assets comprise other intangible assets, property, plant and equipment, investments accounted for At-Equity and other non-current assets (excluding financial assets)

33. Management- and employee participation plans

SGL Carbon 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.

Short-Term-Incentive Plan („STI“)

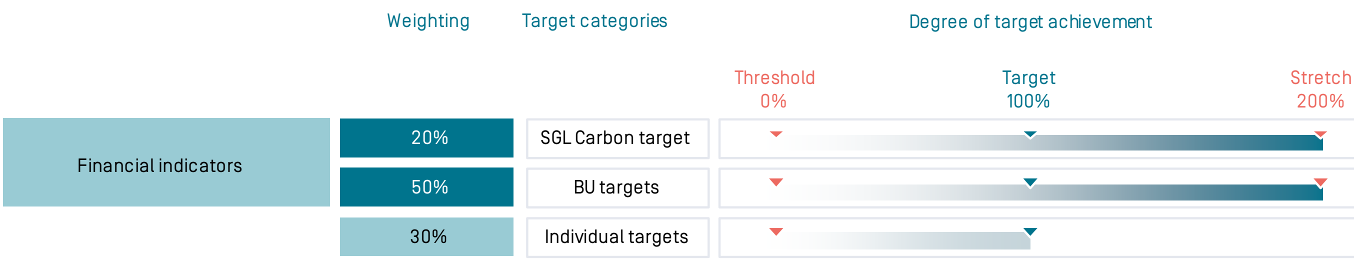
All employees receive an annual bonus regardless of whether they are covered by the collective wage agreement. The amount of the bonus is based on the achievement of short-term corporate and business unit targets as well as individual targets. The reference figure is the amount of the individual fixed remuneration. The 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 Carbon, 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: sales revenue and income before taxes at SGL Carbon level, and sales revenues, operating profit (EBIT), and average committed working capital (DWS-Days Working Capital) for the business unit.

The bonus is paid in the form of shares in March or April of the following year. 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.



For the fiscal year 2019, the STI is amended so that the individual targets relevant for bonuses are no longer taken into account in the STI. This method is to further strengthen collaboration, exchange and common understanding of performance between executives, colleagues and employees.

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 Carbon´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 Carbon or one or more other performance indicators. Furthermore, the long-term remuneration component depends on the share price performance of SGL Carbon SE 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 Carbon SE 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) and to motivate them to ensure SGL Carbon´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 Carbon.

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 existing plan tranches, including the relevant targets, are presented below as of December 31, 2018

Tranche	Allocation value[1]	Price[2]	PSU[3]	Performance	Fair value[4]
	€m	€	Number	0% – 150%	€m
LTI 2015–2018	4.7	13.70	340,328	2	0.0
LTI 2016–2019	4.7	13.38	351,594	82	2.1
LTI 2017–2020	4.7	8.28	569,221	81	3.3
LTI 2018 -2021	4.8	11.34	423,625	86	2.6

[1] PSU-number outstanding as at Dec 31, 18 multiplied with price at grant of each tranche
[2] Fair value at grant date
[3] Outstanding at Dec. 31, 18
[4] PSU-number weighted with the performance and the average share price of 7.17 €, calculated on the basis of the last 20 trading days prior to Dec 31, 18

Target indicators ROCE[1]	Minimum	Target	Maximum
Plan 2015-2018	3.1%	5.6%	7.6%
Plan 2016-2019	1.9%	4.3%	6.3%
Plan 2017-2020	3.7%	6.2%	8.2%
Plan 2018-2021	4.9%	7.4%	9.4%

The provisions for the existing LTI plans of the selected executives as of December 31, 2018 amount to €3.9 million (2017: €2.8 million) and were increased in the fiscal year 2018 by €1.1 million (2017: €2.0 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 may then only be exercised during defined periods (exercise windows). The SARs expire if they are not exercised within this period.

At the end of the reporting year, a total of 1,989,095 SARs may still be exercised.

In 2018, no SARs were exercised from one of the replaced long-term incentive plans. The weighted average term to maturity for the SAR Plan is 3.2 years.

34. Audit fees and services provided by the auditors

The fees for audit services of KPMG AG Wirtschaftsprüfungsgesellschaft mainly referred to the audit of the consolidated financial statements and the annual financial statements of SGL Carbon SE as well as various audits of financial statements and packages of its subsidiaries. Other attestation services refer, among other things, to audits required by law or agreement, such as the EMIR audits pursuant to Section 20 of the German Securities Trading Act (WpHG) as well as the audit of our central ICS pursuant to PS982 and the audit of the separate non-financial statement of the Group. Tax advisory services mainly comprise advice on value added tax related to individual matters.

€m	2018	2017
Audit fees	0.7	0.6
Other assurance services	0.5	0.1
Tax advisory services	0.1	0.0
Total	**1.3**	**0.7**

35. List of shareholdings of SGL Carbon SE pursuant to Section 313 (2) of the German Commercial Code (HGB)

A.	Consolidated Companies		Interest in %	held via
a)	**Germany**			
1	SGL Carbon SE	Wiesbaden		
2	SGL CARBON GmbH [1)]	Meitingen	100	1
3	Dr. Schnabel GmbH [1)]	Limburg	100	2
4	SGL CARBON Beteiligung GmbH [1)]	Wiesbaden	100	1
5	SGL TECHNOLOGIES GmbH [1)]	Meitingen	100	1
6	SGL epo GmbH [1)]	Willich	100	5
7	SGL TECHNOLOGIES Composites Holding GmbH [1)]	Meitingen	100	5
8	SGL Composites Verwaltungs GmbH	Meitingen	100	7
9	SGL TECHNOLOGIES Beteiligung GmbH [1)]	Meitingen	100	5
10	SGL TECHNOLOGIES Zweite Beteiligung GmbH	Meitingen	100	5
11	SGL/A&R Immobiliengesellschaft Lemwerder mbH	Lemwerder	51	5
12	SGL/A&R Services Lemwerder GmbH	Lemwerder	100	11
13	SGL/A&R Real Estate Lemwerder GmbH & Co. KG	Lemwerder	100	12
14	SGL Carbon Asset GmbH [1)]	Meitingen	100	4
15	SGL Composites GmbH & Co. KG	Munich	100	5
16	SGL Composites Deutschland Verwaltungs GmbH	Munich	100	15

[1)] Exemption in accordance with section 264 (3) of the German Commercial Code (HGB)

A.	Consolidated Companies		Interest in %	held via
b)	**Other countries**			
17	SGL GELTER S.A.	Madrid, Spain	64.0	2
18	SGL CARBON S.p.A. in liquidazione (i.L.)	Mailand, Italy	99.8	14
19	SGL Graphite Verdello S.r.l.	Verdello, Italy	100	2
20	SGL CARBON do Brasil Ltda.	Diadema, Brazil	100	2
21	SGL CARBON GMBH	Ried im Innkreis, Austria	100	1
22	SGL Composites GmbH	Ried im Innkreis, Austria	100	7
23	SGL CARBON FIBERS LTD.	Muir of Ord, United Kingdom	100	21
24	SGL Composites S.A.	Lavradio, Portugal	100	21
25	MUNDITEXTIL-COMÉRCIO INTERNACIONAL DE TÊXTEIS, Soc. Unip., LDA[2]	Lavradio, Portugal	100	24
26	SGL BUSINESS SERVICES, UNIPESSOAL, LDA	Lavradio, Portugal	100	2
27	SGL Carbon Holdings B.V.	Rotterdam, Netherlands	100	4
28	SGL GRAPHITE SOLUTIONS POLSKA sp. z o.o.	Nowy Sącz, Poland	100	27
29	SGL CARBON Holding S.A.S.	Paris, France	100	1.4
30	SGL CARBON S.A.S.	Passy (Chedde), France	100	29
31	SGL CARBON Technic S.A.S.	Saint-Martin d'Heres, France	100	29
32	SGL CARBON Ltd.	Alcester, United Kingdom	100	1
33	SGL CARBON LLC	Charlotte, NC, USA	100	4
34	Québec Inc.	Montreal, Québec, Canada	100	33
35	SGL Technologies LLC	Charlotte, NC, USA	100	33
36	Hitco CARBON COMPOSITES Inc.	Gardena, CA, USA	100	35
37	SGL Technic LLC	Valencia, CA, USA	100	33
38	SGL CARBON TECHNIC LLC	Strongsville, OH, USA	100	33

A.	Consolidated Companies		Interest in %	held via
b)	**Other countries**			
39	SGL Composites LLC	Moses Lake, WA, USA	51.0	35
40	SGL LAND HOLDING Inc.	Lachute, Québec, Canada	100	1
41	SGL CARBON INDIA Pvt. Ltd.	Maharashtra, India	100	1
42	SGL CARBON Far East Ltd.	Shanghai, China	100	1
43	SGL CARBON Japan Ltd.	Tokyo, Japan	100	1
44	SGL CARBON Korea Ltd.	Seoul, Korea	100	1
45	SGL CARBON ASIA-PACIFIC SDN BHD	Kuala Lumpur, Malaysia	100	1
46	SGL Quanhai Carbon (Shanxi) Co. Ltd.	Yangquan, China	84.5	4
47	SGL PROCESS TECHNOLOGY PTE. LTD.	Singapore	100	1
48	SGL CARBON KARAHM Ltd.	Sangdaewon-Dong, Korea	50.9	47
49	SGL CARBON Graphite Technic Co. Ltd.	Shanghai, China	100	47
50	Graphite Chemical Engineering Co. Ltd.	Yamanashi, Japan	100	47
51	SGL Graphite Solutions Taiwan Ltd.	Taipei City, Taiwan	100	2

B.	Equity investments over 20%			
a)	**Germany**			
52	SGL Lindner GmbH & Co. KG i.L.[1] [2]	Arnstorf	51.0	4
b)	**Other countries**			
53	Brembo SGL Carbon Ceramic Brakes S.p.A.	Stezzano, Italy	50.0	5
54	MCC-SGL Precursor Co. Ltd.	Tokyo, Japan	33.3	5
55	Fisigen, S.A.	Lissabon, Portugal	49.0	24

[1] No control due to contractual arrangements
[2] Liquidated on January 8, 2019

36. 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 13, 2018 and has been published on the website of SGL Carbon SE.

37. Subsequent events

On February 13, 2019, the credit facility in the amount of €50 million maturing at year-end 2019, which was not utilized as of the balance sheet date, was replaced by a new syndicated credit facility provided by seven banks in a volume of €175 million. The term is four years, subject to a renewal option for one year.

Wiesbaden, March 4, 2019

SGL Carbon SE

The Board of Management of SGL Carbon

Dr. Jürgen Köhler Dr. Michael Majerus

Additional Information

Independent Auditor's Report

To SGL Carbon SE, Wiesbaden

Report on the Audit of the Consolidated Financial Statements and of the Group Management Report

Opinions

We have audited the consolidated financial statements of SGL Carbon SE, Wiesbaden, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018, the consolidated profit or loss statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2018, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of SGL Carbon SE for the financial year from January 1 to December 31, 2018.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Business combination achieved by the acquisition of the 49%-interest in the former joint operation with BMW

With respect to the accounting policies applied, we refer to Note 2 in the notes to the consolidated financial statements. Disclosures regarding the acquired assets and liabilities can be found in the notes to the consolidated financial statements in Note 5.

THE FINANCIAL STATEMENT RISK

With closing date January 11, 2018 SGL has legally and economically finalized the acquisition of the 49% interest in SGL Composites GmbH & Co. KG, Wackersdorf (referred to as "ACF D") from BMW; until then, ACF D has been accounted for as joint operation. At the same time, SGL and the former joint operation partner BMW have contractually agreed on the purchase of the BMW-held 49% interest in SGL Composites, LLC, Moses Lake, USA (referred to as "ACF US"). The purchase of those interests in ACF US will be executed until end of 2020 at a fixed purchase price which has already been agreed. Due to the forward agreement and the set-up of ACF US as extended work bench for ACF D, from January 11, 2018 onwards SGL has the ability to solely direct the relevant activates of both ACF entities and to affect the returns. From an economic point of view, as at January 11, 2018 SGL has obtained power over both, ACF D and ACF US. The transaction is accounted for as business combination in accordance with IFRS 3.

Up to the acquisition date SGL has only recognized assets and liabilities of the ACF entities attributable to SGL, which equaled a pro rata consolidation of 51% of the joint operation. With the acquisition of the remaining 49% interest the ACF entities are being fully consolidated in the consolidated financial statements of SGL from January 11, 2018 onwards. Due to the agreement relating to the purchase of the US shares SGL accounts for the BMW interests by applying the so-called "anticipated acquisition method". This method assumes that the purchase of the ACF US interest has already been executed on January 11, 2018 and only the payment of the purchase price is outstanding. Consequently the interests still held by BMW at the balance sheet date are not presented as non-controlling interests in equity but as financial liability. The purchase price liability in the amount of USD 62.2 million, which has to be paid end of 2020, has been recognized at present value at the acquisition date amounting to USD 58.5 million or EUR 48.6 million.

When a business combination is being achieved in stages the previously held equity interest in the acquiree shall be remeasured at its acquisition-date fair value and the resulting gain or loss shall be recognized in profit or loss. The gain resulting from the ACF business combination achieved in stages is EUR 28.4 million.

SGL has engaged an external consultant as an independent expert for the identification and measurement of the assets and liabilities acquired. When accounting for the business combination, the fair value of the equity interest previously held by SGL and the present value of the purchase price liability for the equity interest in ACF US legally still held by BMW are part of the consideration transferred. After the allocation of the consideration transferred to the identifiable assets and liabilities a goodwill in the amount of EUR 19.5 million remained.

The identification and measurement of the identifiable assets acquired and the liabilities transferred are complex and require the application of management judgement. The most significant assumptions are the budgeted sales and the margin development of the acquired business as well as the costs of capital.

The risk exists for the consolidated financial statements that the identification or valuation of the acquired assets and incurred liabilities are not appropriate. In addition there is the risk that the related disclosures in the notes are incomplete or incorrect. Furthermore, the risk exists that the disposal gain from derecognition of the shares previously held by SGL is incorrect and the application of the anticipated acquisition method not appropriate.

OUR AUDIT APPROACH

With involvement of our valuation specialists we have assessed the adequacy of the significant assumptions as well as the identification and valuation methods. In doing so we have inquired finance and strategy personnel and have analyzed the relevant agreements to gain an understanding of the purchase transaction.

We have reconciled the components of the consideration transferred with the underlying purchase agreement, the proof of payment for the purchase of the ACF D shares, the present value of the purchase price liability for the ACF US shares as well as the fair value for the shares previously held.

We have assessed the competency, abilities and objectivity of the independent expert engaged by SGL. Furthermore we have evaluated the process over identification of the assets acquired and liabilities incurred based on our knowledge about the ACF entities' business model for its compliance with the requirements of IFRS 3. We have assessed whether the valuation methods have been applied in accordance with the valuation principles.

We have discussed the expected revenue and margin development with the persons responsible for the budget. Additionally we have compared the budget with the budget prepared by management and approved by the supervisory board, which has been the basis for the business acquisition, and we have evaluated the consistency of the assumptions with external market expectations. The license rates used for the valuation of intangible assets have been compared with reference values from relevant data bases. We have compared the assumptions and parameter used as basis for the costs of capital, especially the risk-free rate, the market risk premium and the beta factor, with own assumptions and publicly available data.

We have assessed the appropriate accounting for the business combination based on our understanding and evaluation of the economic rationale of the transaction. To evaluate the correctness of the mathematical calculations we have performed recalculations of a sample taken under consideration of a risk-oriented approach. Finally we have assessed whether the disclosures in the notes relating to the acquisition of the ACF entities are complete and appropriate.

OUR OBSERVATIONS

The method applied for identification and valuation of the assets acquired and liabilities incurred is appropriate and in accordance with the applicable accounting and valuation policies. The determination of the consideration transferred and the application of the anticipated acquisition method is adequate and in accordance with the applicable accounting and valuation policies. The disclosures in the notes to the consolidated financial statements are complete and appropriate.

First-time application of IFRS 15

With respect to the accounting and valuation policies applied as well as the assumptions used, we refer to Note 2 and Note 3 in the notes to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK

For the financial year ended December 31, 2018, SGL had to apply IFRS 15 "Revenue from contracts with customers" for the first time and has opted for the retrospective recognition of the cumulative effects of initial application. As a consequence the contracts with customers which had not yet been completed as at January 1, 2018 are recognized as if they had been accounted for under IFRS 15 at the beginning of the contract already. The reported balance sheet items as at December 31, 2017 have been adjusted for the cumulative effects from IFRS 15 as at January 1, 2018.

Due to the first-time application of IFRS 15 at January 1, 2018 inventories have decreased by EUR 29.3 million and contract assets presented within trade receivables have increased by EUR 49.8 million, the at-equity investments have increased by EUR 1.1 million and deferred tax liabilities by EUR 5.4 million. The positive difference from the adjustments resulted in a decrease of retained losses in the amount of EUR 16.2 million.

The determination of the timing for revenue recognition, either at a certain point in time or over the period in time of the production of the products, is subject to judgement and complex. For SGL the identification of contracts with customers, which comprise the sale of customer-specific services and products without an alternative use and from which the company has a legally enforceable right for compensation of already performed services, is especially relevant. This assessment directly affects the determination of the adjustment effects as at January 1, 2018.

Also there are extensive notes disclosure requirements with regards to the first-time adoption of IFRS 15.

Due to the use of different contract terms in the different markets and the discretion in relation to determination and evaluation of the indicators whether it is a customer specific contract without alternative use and the existence of a legally enforceable right for compensation, there is the risk for the consolidated financial statements that the adjustment effects recognized as at January 1, 2018 and the revenue recognized over time for the financial year 2018 are incorrect. Additionally there is the risk that the notes disclosures related to the first-time adoption of IFRS 15 are incomplete.

OUR AUDIT APPROACH

Based on our understanding of the processes we have evaluated the design, implementation and effectiveness of identified internal controls and the methods for the correct determination of customer specific contracts, for which revenue is recognized over time.

Due to the first-time adoption of IFRS 15 we have determined the assessment of the interpretation of the criteria for over-time revenue recognition by the Company’s management to be an audit focus area. In that regard we have analyzed the requirements in the group-wide accounting policies and the results of the implementation project. Based on a sample of contracts, which have been selected considering a risk-oriented approach, we have evaluated the appropriate implementation of the accounting policies.

We have assessed the significant judgement areas, like the existence of the group’s alternative use for an asset as well as the existence of a legally enforceable right for compensation including an adequate margin for services already performed, based on a risk-oriented selection of contracts for their adequacy. Based on the previously obtained insights we have evaluated the appropriate determination of over-time revenues as well as the proper accounting treatment.

Furthermore we have audited whether the disclosure requirements in the notes to the consolidated financial statements as at December 31, 2018 are appropriate and correct.

OUR OBSERVATIONS

The method of SGL to recognize revenues over-time as well as the effects from the first-time adoption of IFRS 15 as at January 1, 2018 is appropriate. The accounting assumptions applied are reasonable. The disclosures in the notes relating to the first-time adoption of IFRS 15 are complete and appropriate.

Recognition and measurement of deferred tax assets

With respect to the accounting and valuation policies applied and the assumptions used, we refer to Notes 2 and 24 in the notes to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK

As of December 31, 2018, SGL recognizes deferred tax assets in the amount of EUR 11.3 million and deferred tax liabilities in the amount of EUR 4.1 million. The excess of deferred tax assets of EUR 16.6 million results primarily from the recognition of tax loss carryforwards. Thereof, the largest amount, EUR 8.5 million, relates to the tax group of SGL Carbon SE.

When recognizing deferred tax assets SGL makes an assessment, to what extent the existing deferred tax assets can be used in the future reporting periods. The usability of those assets is depending on the generation of sufficient taxable income in future periods. If there is reasonable doubt about the future usability of the calculated deferred tax assets, deferred tax assets are not being recognized or already recognized deferred tax assets are being impaired.

The accounting for deferred tax assets is highly dependent on the assessment and the assumptions of management with respect to the operational development of the local entities and the tax planning of the Group and therefore subject to significant uncertainties. In addition, the usability is dependent on the respective environment with regards to income taxes.

The tax group SGL Carbon SE and further Group companies, respectively tax groups, indicate a so-called loss history as a result of tax losses in recent periods. If there is a tax loss history, deferred tax assets are only permitted to be recognized to the extent for which convincing substantial evidence exists that future adequate taxable income will be available for their realization. The existence of a loss history represents a substantial negative indication, which in principle must be offset by several equally-significant or more formidable positive indicators.

According to the assessment of SGL, there is convincing substantial evidence that as of December 31, 2018, the realization of the recognized deferred tax assets from the utilization of loss carryforwards and the reversal of temporary differences is probable.

The risk exists for the consolidated financial statements that the assessment of SGL is not adequate and the recognized deferred tax assets are not recoverable.

OUR AUDIT APPROACH

We have involved our tax specialists for the assessment of the tax positions. Initially, we took a critical look at the temporary differences between the IFRS carrying amounts and those for tax purposes. In addition we have reconciled the tax loss carryforwards with the tax assessments and the tax calculations for the current financial year and assessed off-balance adjustments.

We critically assessed the recoverability of the deferred tax assets on the basis of the forecasts of the future taxable income prepared by the Company as well as the underlying assumptions. In this regard, we especially reconciled the planning of the future taxable income with the budget prepared by management and approved by the supervisory board, and we reviewed it for consistency. The appropriateness of the budget utilized was evaluated based on external market assessments. In addition, we convinced ourselves of the planning quality of the Company by comparing the planning of earlier financial years with subsequent results actually realized and by analyzing variances.

In addition, we investigated and assessed the received evidence to determine whether it is adequately convincing to fulfill the requirements of IAS 12 when a loss history exists. We critically evaluated the assessment of SGL regarding the sustainable improvement in the profit situation of the Group and especially of the tax group of SGL Carbon SE and we had management provide explanations to us. In this connection, we convinced ourselves of the largely completed implementation of the earnings-enhancing measures and analyzed the assumptions for the planned profit improvement, and we assessed the sustainability of the future taxable results. Furthermore, we discussed with management and critically assessed the analysis of the reasons for the existing loss history and appropriateness of the assessment that the reasons for the losses had a one-time character and will not recur.

OUR OBSERVATIONS

Overall, the assumptions underlying the recognition of the deferred tax assets are appropriate.

Other Information

Management is responsible for the other information. The other information comprises the remaining parts of the annual report, with the exception of the audited consolidated financial statements and the group management report and our auditor's report.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, consider whether the other information

– is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or

– otherwise appears to be materially misstated.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e [1] HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group’s ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on May 29, 2018. We were engaged by the Supervisory Board, represented by the Chairwoman of the Supervisory Board and the Chairman of the Audit Committee, on September 12, 2018. We have been the group auditor of SGL Carbon SE since the financial year 2017.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Note to the Supplementary Audit

We issue this independent auditors' report on the consolidated financial statements and the adjusted group management report based on our statutory audit finalized on 4 March 2019 and based on our supplementary audit finalized on 26 March 2019, which refers to the adjustment of the information for the first quarter 2019 in section "General statement on the current financial situation – Assessment of the financial situation by company management" and the adjustment of the outlook for sales revenue from the reporting segment Composites-Fibers & Materials (CFM) in section "Business trends in reporting segments". We refer to the presentation of the adjustments made by management in the adjusted management report, section "General statement on the current financial situation – Assessment of the financial situation by company management" and section "Business trends in reporting segments".

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dirk Janz.

Frankfurt/Main, March 4, 2019 / limited to the adjustment referred to in the note to the supplementary audit: March 26, 2019

KPMG AG

Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Janz	Krauß
Wirtschaftsprüfer	Wirtschaftsprüferin
[German Public Auditor]	[German Public Auditor]

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, March 26, 2019

SGL Carbon SE
The Board of Management of SGL Carbon

Dr. Jürgen Köhler Dr. Michael Majerus

Corporate Bodies

Board of Management

(Status: December 31, 2018)

Dr. Jürgen Köhler

Chairman/Chief Executive Officer of SGL Carbon SE

Responsible for:

Human Resources
Management Development
Compliance
Corporate Development / Strategy
Corporate Communications
Innovation
Environment Protection, Health & Safety Affairs
Business Process Excellence
Global Engineering & Construction

Internal board memberships:
Brembo SGL Carbon Ceramic Brakes S.p. A., Stezzano, Italy [1]

Dr. Michael Majerus

Chief Financial Officer of SGL Carbon SE

Responsible for:

Group Accounting
Group Controlling
Group Treasury
Financial Reporting
Legal
Information Technology
Information Security
Purchasing
Investor Relations
Group Taxes
Risk Management
Internal Audit

Internal board memberships:
SGL CARBON GmbH, Meitingen
SGL CARBON LLC, Charlotte, USA

[1] Shareholder Committee

With memberships outside Germany, the respective country is mentioned.

Supervisory Board

(Status: December 31, 2018)

Susanne Klatten

Chairwoman of the Supervisory Board of SGL Carbon SE
Chairwoman of the Personnel and Nomination Committee

Entrepreneur

External board memberships:
ALTANA AG, Wesel
BMW AG, Munich
UnternehmerTUM GmbH, Munich [1]

Georg Denoke

Deputy Chairman of the Supervisory Board of SGL Carbon SE (since 29.5.2018)
Chairman of the Audit Committee

Managing director and CEO of ATON GmbH, Munich

External board memberships:
EDAG Engineering Group AG, Arbon, Switzerland [3]

Helmut Jodl

Deputy Chairman of the Supervisory Board of SGL Carbon SE
Chairman of the Works Council (full-time)
SGL CARBON GmbH
Chairman of the SE-Works Council

Ana Cristina Ferreira Cruz

Head of Integrated Management System
SGL COMPOSITES, S.A., Lavradio, Portugal

Edwin Eichler

Consultant

External board memberships or similar posts:
Hoberg & Driesch GmbH, Düsseldorf (Advisory board member)
Lürssen GmbH, Bremen (Advisory board member)
Schmolz & Bickenbach AG, Emmenbrücke, Switzerland [3]
SMS Group GmbH, Düsseldorf [1]

Ingeborg Neumann
(since 29.5.2018)

Managing partner of Peppermint Holding GmbH, Berlin

External board memberships or similar posts:
FUCHS PETROLUB SE, Mannheim
BERLINER WASSERBETRIEBE AöR, Berlin
Scienion AG, Dortmund

Markus Stettberger

Chairman of the Works Council (full-time)
SGL CARBON GmbH, Meitingen
Deputy Chairman of the SE-Works Council

Dieter Züllighofen

Chairman of the Works Council (full-time)
SGL CARBON GmbH, Bonn

Dr. Christine Bortenlänger
(until 25.6.2018)

Managing Director Deutsches Aktieninstitut e.V., Frankfurt/Main

External board memberships [4]:
Covestro AG, Leverkusen
Covestro Deutschland AG, Leverkusen
OSRAM GmbH, München
OSRAM Licht AG, München
TÜV Süd Aktiengesellschaft, Munich

Petra Brosowski
(29.5.2018 - 25.6.2018)

Trade union secretary IG Metall Bonn-Rhein-Sieg, Siegburg

External board memberships [4]: none

Arnhild Broszio
(29.5.2018 - 25.6.2018)

Technical employee Quality Management, Chairwoman of the Works Council SGL epo GmbH, Willich

External board memberships [4]: none

Dr. Daniel Camus
(until 25.6.2018)

Former member of the Board of Management (CFO and International Activities) EDF, Electricité de France, Paris, France

External board memberships [4]:
Cameco Corp., Saskatoon, Canada
Contour Global Plc, London, UK (Chairman Personnel Committee)
Valéo SA, Paris, France (Chairman Audit Committee)

Michael Leppek
(until 30.4.2018)

Managing Director (1st authorized Representative), IG Metall Augsburg

External board memberships or similar posts [4]:
AIRBUS Helicopters Deutschland GmbH, Donauwörth
KUKA AG, Augsburg
MAN Diesel & Turbo SE, Augsburg

Dr.-Ing. Hubert Lienhard
(until 30.4.2018)

Deputy Chairman of the Supervisory Board of SGL Carbon SE (until 30.4.2018)
Chief Executive Officer
Voith GmbH & Co. KGaA, Heidenheim

Voith internal board memberships:
Voith Turbo Beteiligungs GmbH, Heidenheim [1]
Voith Hydro Holding GmbH & Co. KG, Heidenheim [2]
Voith Turbo GmbH & Co. KG, Heidenheim [2]

External board memberships [4]:
EnBW AG, Karlsruhe
Heraeus Holding GmbH, Hanau
SMS GmbH & SMS Group GmbH, Düsseldorf

Marcin Rzemiński
(until 30.4.2018)

Quality Management Manager SGL GRAPHITE SOLUTIONS POLSKA Sp. z o.o., Nowy Sącz, Poland

[1] Chairwoman/Chairman of the supervisory board
[2] Chairman of the advisory committee
[3] Chairman of the board of directors
[4] At the time of exercising the mandate for SGL Carbon

With memberships outside Germany, the respective country is mentioned

Glossary

Commercial Glossary

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.

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, 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 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 creditworthiness 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 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

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.

Fine grain graphite
Specialty graphite with a fine grain structure and a grain size of between 1mm and few µm, 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).

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

A AktG
German Stock Corporation Act (Aktiengesetz)

C CFRP
Carbon Fiber Reinforced Plastic

D DAX
German Stock Index (large caps)

E EBIT
Earnings before Interest and Taxes

EBITDA
Earnings before Interest, Taxes, Depreciation and Amortization

EHSA
Environment, Health & Safety Affairs

EPS
Earnings per Share

H HGB
German Commercial Code

I IAS
International Accounting Standards

IASB
International Accounting Standards Board

IFRIC
International Financial Reporting Interpretations Committee

IFRS
International Financial Reporting Standards

IT
Information technology

L LTCI
Long Term Cash Incentive

LTI
Long Term Incentive

M MDAX
MidCap DAX

R REACH
Registration, Evaluation, Authorization and Restriction of Chemicals

ROCE
Return on Capital Employed

S SAR
Stock Appreciation Rights

SDAX
SmallCap DAX

V VorstAG
Act on Appropriateness of Management Board Remuneration

W WpHG
German Securities Trading Act

Financial Calendar

March 27, 2019

- Publication of the 2018 Annual Report
- Year-end press conference, analyst conference, and conference call for analysts and investors

May 7, 2019

- Report on the first quarter 2019
- Conference call for analysts and investors

May 10, 2019

- Annual General Meeting

August 6, 2019

- Report on the first half of 2019
- Conference call for analysts and investors

November 5, 2019

- Report on the first nine months 2019
- 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@sglcarbon.com

www.sglcarbon.com

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Head Office
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Board of Management
Rüdiger Nehmzow

Chairwoman of the Supervisory Board
Michael Dannenmann

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Five-year Financial Summary

€m	Footnote	2018	2017	2016	2015 [1]	2014
Financial performance						
Sales revenue		1,047.5	860.1	769.8	789.5	1,335.6
thereof outside Germany		66%	74%	73%	73%	80%
thereof in Germany		34%	26%	27%	27%	20%
EBITDA before non-recurring items	2)	127.2	90.7	69.9	63.9	84.1
Operating profit/loss (EBIT) before non-recurring items	2)	64.6	40.1	20.7	13.7	2.7
Result from continuing operations before income taxes		51.3	–7.8	–27.2	–45.4	–104.4
Consolidated net result (attributable to the shareholders of the parent company)		41.3	138.9	–111.7	–295.0	–247.0
Return on sales (EBIT-margin)	3)	6.2%	4.7%	2.7%	1.7%	0.2%
Return on capital employed (ROCE $_{EBIT}$)	4)	5.4%	4.6%	2.5%	1.6%	0.2%
Return on capital employed (ROCE $_{EBITDA}$)	5)	10.5%	10.5%	8.4%	7.9%	5.9%
Earnings per share, basic (in €)		0.34	1.14	–1.19	–3.22	–3.26
Net assets						
Equity attributable to the shareholders of the parent company		531.6	457.0	331.8	289.3	567.6
Total assets		1,585.1	1,541.7	1,899.2	1,856.1	2,170.3
Net financial debt		242.2	139.0	449.4	534.2	389.9
Equity ratio	6)	33.5%	29.6%	17.5%	15.6%	26.2%
Gearing	7)	0.46	0.30	1.35	1.85	0.69
Headcount	8)	5,031	4,732	5,384	5,658	6,342
Financial position						
Payments to purchase intangible assets and property, plant and equipment		78.1	52.9	34.6	44.4	132.6
Depreciation/amortization expense		62.6	50.6	49.2	50.2	81.4
Working capital	9)	419.1	318.5	254.2	255.1	462.4
Free cash flow	10)	–58.5	–144.7	–48.1	–99.3	–121.3

[1] Adjusted to reflect PP as discontinued operations
[2] Before non-recurring items of €16.3 million in 2018, €8.9 million in 2017, €3.0 million in 2016, minus €6.8 million in 2015 and minus €51.2 million in 2014
[3] EBIT before non-recurring items to sales revenue
[4] EBIT before non-recurring items to average capital employed
[5] EBITDA before non-recurring items to average capital employed
[6] Equity attributable to the shareholders of the parent company to total assets
[7] Net financial debt to equity attributable to the shareholders of the parent company
[8] As of Dec. 31: till 2016 including discontinued operations, from 2017 including employees with fixed-term contracts
[9] Total of inventories, trade receivables and contract assets less trade payables
[10] 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.sglcarbon.com