



2019

—
Annual Report

Key Figures 2019

| €m | Footnote | 2019 | 2018 | Change |
|--|----------|---------|---------|--------------|
| Financial performance | | | | |
| Sales revenue | | 1,086.7 | 1,047.5 | 3.7% |
| thereof outside Germany | | 69% | 66% | - |
| thereof in Germany | | 31% | 34% | - |
| EBITDA before non-recurring items | 1) | 120.0 | 127.2 | -5.7% |
| Operating profit/loss (EBIT) before non-recurring items | 1) | 48.4 | 64.6 | -25.1% |
| Result from continuing operations before income taxes | | -73.2 | 51.3 | >-100% |
| Consolidated net result (attributable to the shareholders of the parent company) | | -90.0 | 41.3 | >-100% |
| Return on sales (EBIT-margin) | 2) | 4.5% | 6.2% | -1.7%-points |
| Return on capital employed (ROCE _{EBIT}) | 3) | 3.9% | 5.4% | -1.5%-points |
| Return on capital employed (ROCE _{EBITDA}) | 4) | 9.6% | 10.5% | -0.9%-points |
| Earnings per share, basic and diluted (in €) | | -0.74 | 0.34 | >-100% |
| Net assets | | | | |
| Equity attributable to the shareholders of the parent company | | 418.6 | 531.6 | -21.3% |
| Total assets | | 1,504.8 | 1,585.1 | -5.1% |
| Net financial debt | | 288.5 | 242.2 | 19.1% |
| Equity ratio | 5) | 27.8% | 33.5% | -5.7%-points |
| Gearing | 6) | 0.69 | 0.46 | 51.3% |
| Headcount | 7) | 5,127 | 5,031 | 1.9% |
| Financial position | | | | |
| Payments to purchase intangible assets and property, plant and equipment | | 95.1 | 78.1 | 21.8% |
| Depreciation/amortization expense | | 71.6 | 62.6 | 14.4% |
| Working capital | | 406.8 | 419.1 | -2.9% |
| Free cash flow | 8) | -17.3 | -58.5 | 70.4% |

¹⁾ Before non-recurring items of minus €82.7 million in 2019 and €16.3 million in 2018

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)

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Letter from the Board of Management

Dear Shareholders, Employees and Friends of SGL Carbon:

Our two business units experienced widely differing developments over the past fiscal year. While Graphite Materials & Systems (GMS) performed above expectations in terms of sales revenue and earnings and reached record levels, Composites – Fibers & Materials (CFM) declined substantially. Although sales revenue increased slightly, EBIT before non-recurring items dropped significantly compared to last year's level. This decline was primarily caused by the deterioration in the market segments of Textile Fibers, Wind Energy, and Industrial Applications. For consolidated net income, this meant that we remained appreciably below the very good results of the prior year and our original plans. Despite excellent performance in the GMS business unit, this was and is a disappointing course of business overall.

The financial performance in fiscal year 2019 conceals the fact that our strategic orientation is correct. This is evident from our growth and the increasing number of projects in our strategic core markets. We experienced more than proportional growth in our business with specialty graphites, particularly the market segments for Semiconductors and Automotive & Transport. The structural growth drivers in our strategically relevant markets also remain intact with respect to our business in fibers and composite materials. In the Automotive segment, we are seeing an increasing number of projects worldwide, notably driven by electromobility. Following the development of prototypes for a Chinese customer, we obtained orders that included a major order from a North American automotive manufacturer for the development and serial production of battery cases. Driven by the growing global demand for electric vehicles and the associated need for new flexible chassis platforms, our battery cases made of fiber-reinforced composites are a very promising new application within our product portfolio. We also expanded our product portfolio and our global presence in the market segment Aerospace last year. Aerospace is the largest and most profitable market for carbon fiber based composite materials. Against this background, the successful development of our large-tow IM carbon fiber and the joint development agreement concluded at the end of last year with the international Solvay Group are very important strategic steps for rapidly accelerating our growth in the attractive aerospace market. Until now, our access to this market has been restricted by a product portfolio focused on secondary structures. Combining our proficiency in carbon fibers with Solvay's expertise in resin systems and many years of experience in aerospace should enable us and our partner to offer competitive,

advanced carbon fiber composite materials in the future for primary structure parts such as wings, empennage, and fuselage. Intelligent solutions in the field of sustainable energy are another significant driver for our growth. Last year's decision to expand our collaboration with the Hyundai Motor Group is therefore perfectly in line with our strategic orientation. Whether as a drive system in vehicles or as a stationary energy source, fuel cells are one of the most environmentally friendly technologies and offer enormous potential for SGL Carbon. In the medium term, we plan to quintuple sales revenue with our components for fuel cells to approximately €100 million annually.

We have laid a solid foundation for the profitable growth of SGL Carbon. Therefore, we are confident that consolidated revenue can grow on average in the middle to high single digits annually between 2020 and 2024. The market segments Automotive (particularly electromobility) and Aerospace are the drivers for growth in the CFM business unit. In the GMS business unit, we are benefiting from positive market developments in Semiconductors, LEDs, Fuel Cell components, and the Automotive sector. Thanks to our higher capacity utilization throughout the Group and an improved product mix that is oriented toward higher-return applications and solutions, we are expecting above-average improvement in earnings and anticipate that we will reach our Group ROCE target.

Supply chain changes in our lithium-ion battery business in the GMS business unit will continue to be an issue in fiscal year 2020, however, so we expect consolidated revenue to be slightly below the level of 2019, and a consolidated EBIT before non-recurring items of 10 to 15 percent below the level of the prior year. Following approximately €95 million last year, we are limiting capital expenditure in the current year to €70 to €80 million, and thus approximately at the level of amortization and depreciation. This is due firstly to the shift of investments from the capital-intensive business of anode materials for lithium-ion batteries to the less capital-intensive expansion of our activities for fuel cell components. Secondly, given the anticipated decline in consolidated EBIT, we are striving for conservative management of our free cash flow. Thanks to the syndicated loan for €175 million taken out in January 2019 and the refinancing measures undertaken in 2018 and 2019, SGL Carbon's existing financial liabilities are fully financed through 2023.



Our employees have actively driven the transformation of SGL Carbon, even during the difficult situation last year. For this, they deserve our special thanks and respect. We would also like to thank our customers, suppliers, business partners, and shareholders for their loyalty. We will do everything in our power

to regain their confidence in SGL Carbon and to achieve our goals year after year.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Majerus'.

Dr. Michael Majerus
Spokesman of the Board of Management

A handwritten signature in black ink, appearing to read 'Bühler'.

Dr. Stephan Bühler
Management Board Member for Legal and Compliance

Report of the Supervisory Board



Susanne Klatten, Chairwoman of the Supervisory Board

Dear Shareholders,

2019 was a turbulent and disappointing year for us. Significant events included two profit warnings and the surprising resignation of our CEO, Dr. Jürgen Köhler, in August 2019. The search for a suitable successor began immediately with a thorough multi-step selection process, following which we were able to announce the appointment of Dr. Torsten Derr on February 10, 2020. The Supervisory Board is convinced that with his leadership experience in the international arena, his knowledge of technology-based growth markets, and his high level of technological expertise, Dr. Derr will strongly promote a culture of growth and productivity at SGL Carbon.

We were unable to consistently sustain the growth trend begun in 2018 in both business segments during 2019. Nevertheless, the figures for the past fiscal year, particularly in the GMS business unit, as well as the many other projects and signed contracts in both business units, show that the strategy we have followed and our plans for the future are still correct, and that the growth markets addressed by SGL Carbon are intact. For example, the GMS business unit once again generated a record year in 2019. In any case, our clear conclusion is that the Company had a very disappointing year, primarily in terms of the financial result of the CFM business unit. The weak result in CFM and the need for a write-down caused two profit warnings (in August and October); as expected, our share price suffered as a consequence of the write-down the resignation of our CEO.

Despite these setbacks, we are still convinced that the Company serves strategically attractive and strong-growth markets with its existing product portfolio, and is offering innovative and sustainable products. The contracts and forward-looking collaborations entered into by the CFM business unit and in the area of fuel cells toward the end of 2019 support our assessment.

The streamlining of the Supervisory Board, which was already completed in 2017, proved to be a success, and cooperation within the Supervisory Board and the committees is very positive. This was also clearly shown by the efficiency test conducted at the end of 2019, in which the work of the Supervisory Board and its committees was analyzed based upon an extensive anonymous questionnaire, and the results were thoroughly discussed within the Supervisory Board.

Cooperation between the Board of Management and Supervisory Board

In 2019, 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. Following the resignation of Dr. Köhler, Dr. Majerus has been acting as spokesman of our Company's Board of Management since mid-October, and continues to be in close contact with the Supervisory Board and the chairwoman of the Supervisory Board in his new role. Dr. Stephan Bühler was appointed to the Board of Management effective as of October 15. Based upon his many years of work in the Company and his experience, Dr. Bühler is particularly well-suited to direct the Company together with Mr. Majerus until a new CEO takes office.

At five meetings in March, May, July, September, and November and at meetings of the various committees, the Supervisory Board advised the Board of Management and closely monitored the management of the business on a continual basis. An extraordinary meeting was also held in August. The Board of Management kept us informed in a regular, timely, and comprehensive manner, both in writing and orally, concerning 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 the ordinary meetings of the Supervisory Board, the Board of Management held discussions with the shareholder representatives and employee representatives on the Supervi-

sory 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 ordinary meetings of the Supervisory Board were held, the Board of Management provided us with timely and comprehensive information – both orally and through documents – on the agenda items being discussed. Any variances in operating performance from budgets and targets were explained in detail, and the reasons for the variances were discussed at length, together with appropriate measures to be undertaken. The Board of Management also provided regular reports on material transactions, the quarterly figures, and the perception of SGL Carbon in the financial markets.

As chairwoman of the Supervisory Board, I myself maintained a regular and close dialogue with the CEO – and since mid-August with the spokesman, Dr. Michael Majerus – 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 five 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 measures, including those relating to compliance risks.

The strategic positioning and the growth plans for the CFM and GMS business units presented by the Board of Management constituted key issues for deliberation and were the subject of regular, in-depth discussions at all Supervisory Board meetings. Another important issue that we addressed was short and medium-term financial planning.

At the meeting in March 2019, the Supervisory Board discussed the final version of the 2018 annual financial statements and consolidated financial statements with the independent auditors, and approved them and the annual report. The Supervisory Board likewise unanimously approved the reappointment of Dr. Jürgen Köhler for another three years beginning on January 1, 2020. The Supervisory Board also addressed the issu-

ance of a new corporate bond, which was then also successfully placed. In addition, the Supervisory Board discussed the objectives of the Board of Management (both the achievement of the 2018 objectives and the new objectives for 2019), and considered the technical adjustment of the long-term remuneration plans (LTI plans), which became necessary due to the dissolution of the existing joint venture with BMW, Kumpers, and Benteler. The agenda for the 2019 Annual General Meeting was also adopted.

At the Supervisory Board meeting in May, the general business situation was discussed, as was the successful placement of a new corporate bond for €250 million. At this meeting, the Supervisory Board focused very intensively on the situation of the CFM business unit at the Lavradio site in Portugal, and received reports from the Board of Management concerning the staffing and technical measures initiated there.

The meeting in July was held at our Bonn location. The Supervisory Board received detailed reports on the positive trend in fuel cells with the gas diffusion layer developed by SGL. The GMS strategy and the situation at the Portugal plant were also extensively presented and discussed. Not least, the Supervisory Board used this meeting as an opportunity to obtain comprehensive information from Investor Relations concerning the current perception of the SGL Carbon equity story on the capital markets; the Board of Management presented several significant strategic projects.

The extraordinary meeting in August was held due to the resignation of the CEO and the ad hoc notice of August 14. At the same time, the Supervisory Board addressed the variances from plan that were mentioned in the ad hoc notice, and which indicated the probability of a significantly lower net profit for 2019.

At the meeting in September, we focused primarily on the Company's financial position and the risks in the two business units, as well as the planned business performance in the second half of the year and in 2020. In addition, the events leading to the ad hoc notice in August were analyzed and measures for improving operational performance and the planning process were discussed. In doing so, we also decided to commission a review (since completed) of the planning process by an accounting firm in order to identify specific measures for improvement and implement them within the Company to the extent possible. Potential areas of strategic and structural improvement and measures were discussed with the Board of Management, primarily for the CFM locations. Personnel topics, such as the search for a new head of the CFM business unit,

were likewise addressed with the Board of Management. In addition, the declaration of compliance for the reporting year was approved at this meeting and the auditing firm KPMG AG was commissioned to audit SGL Carbon's CSR system.

At the September meeting, we also decided to extend Dr. Majerus' Board member employment contract and Board of Management membership as scheduled by one year until June 30, 2021. The modalities of terminating Dr. Köhler's employment agreement were likewise established and the conclusion of a severance agreement was approved. The chairwoman of the Supervisory Board was also authorized to initiate the search for a successor to Dr. Köhler as CEO.

With the resolution of October 14, the Supervisory Board appointed Dr. Stephan Bühler as an additional member of the Company's Board of Management in order to have another experienced person to support Dr. Majerus in managing the Company and allocating tasks and responsibilities until the arrival of a new CEO. With this step, the Supervisory Board ensured that SGL would have full legal capacity to act.

The November meeting focused on the Company's operational planning and budget for fiscal 2020, as well as an initial exchange of views for medium-term planning. In addition, the Supervisory Board addressed the circumstances that led to the profit warning at the end of October. At this meeting, the Supervisory Board also received a report on the status of individual strategic projects and deliberated extensively on the situation at our plant in Portugal, as well as on new projects in the Automotive and Aerostructures segments and a major project in the area of hydrogen. An updated declaration of compliance was also adopted. At this meeting, the Supervisory Board also dealt with the issue of the remuneration system for the Supervisory Board, and concluded that both the existing system and the amount of the remuneration are reasonable and adequate. The Supervisory Board also addressed the results of the performed efficiency test at the meeting, and came to a very positive overall conclusion regarding organization and cooperation within the Board and its committees.

Activities of the Committees

From the meetings of the three committees, the chairpersons of the committees provided extensive reporting at the Supervisory Board meetings about the work of the committees.

The [Audit Committee](#) held face-to-face meetings in March, September, and November 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 current topics of special interest. All face-to-face meetings were also attended by the independent auditors, which allowed discussion of the Company's audit procedures, key audit issues, and material topics arising from audits of the annual financial statements.

Current business performance and 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 topic at the March meeting was the detailed discussion of the annual financial statements of SGL Carbon SE and the consolidated financial statements for 2018. The Audit Committee also focused on the internal control system, the audits performed by the internal auditors, and the envisaged audit plan, as well as the non-financial Group statement ("CSR Report"). Another significant topic was group financing, particularly the preparations for issuance of the corporate bond in April.

There was a significant focus at the September and December meetings on the analysis and effects of the circumstances leading to the ad hoc notice in August. The planning and forecasting process was examined for possible weaknesses and measures for improvement were addressed. The effects of the earnings variances on the enterprise value of the CFM units was also discussed.

At the March and September meetings, the committee also dealt with potential conflicts of interest among the Supervisory Board members and the major shareholders.

The [Personnel Committee](#) held a total of four ordinary and two extraordinary meetings, at which it focused on overarching personnel issues. The March meeting discussed target attainment by and target setting for members of the Board of Management. The salary system was an agenda item at the July meeting, and there was an initial exchange of views concerning the imminent question of renewing Dr. Majerus' contract. Both of the extraordinary meetings in August dealt primarily with the consequences of Dr. Köhler's resignation and how to proceed in finding a replacement CEO. At the September meeting, following an extensive discussion, the committee decided to propose to the Supervisory Board that it renew Dr. Majerus' contract for one year until June 30, 2021. The decision was also

made to recommend to the full Supervisory Board that a severance contract with Dr. Köhler be concluded as of December 31, 2019. The modalities of this agreement were also extensively discussed at this meeting. At its November meeting, the Personnel Committee addressed in detail the audit and revision of the remuneration system for the Board of Management. The selection process for appointing a new CEO was also extensively discussed.

A meeting of the [Nomination Committee](#) was held in November, and focused on the imminent nomination of shareholder representatives in the context of the Annual General Meeting in April 2020. The terms of the three shareholder representatives (Ms. Susanne Klatten, Mr. Georg Denoke, and Mr. Edwin Eichler) will end with the Annual General Meeting in 2020. All of these individuals have declared their willingness to stand for reelection and are to be proposed to the Annual General Meeting as candidates.

Attendance at the five ordinary and one extraordinary Supervisory Board meetings was 100%. The committees each met with full attendance. During the period under review, there were no reports 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 2019

Both at the Audit Committee meeting and at the Supervisory Board meeting held in March 2020, 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 ending on December 31, 2019, and the management reports of SGL Carbon SE and of the Group had been audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, and had been issued with an unqualified auditors' opinion. The Supervisory Board verified the independence of the auditors as well as the per-

sons acting on behalf of the auditors, and issued the audit engagement letter in accordance with the resolution adopted by the Annual General Meeting on May 10, 2019. We received the audit reports for the consolidated and parent company financial statements in a timely manner. 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 in which the annual financial statements were discussed, reported on their audit, and were available to answer any additional questions and provide further information. No objections were raised either by the Audit Committee or by our own examination. The Supervisory Board approved the financial statements prepared by the Board of Management, and thus adopted the annual financial statements. There was no recommendation by the Board of Management for the appropriation of profits because SGL Carbon SE reported an accumulated loss for 2019.

At its meeting in March 2020, the Supervisory Board also discussed the Report of the Supervisory Board, the Corporate Governance Declaration, the Corporate Governance and Compliance Report, the Remuneration Report, and the disclosures pursuant to Sections 289a and 315a HGB. Please refer to the corresponding disclosures in the annual report (see pages 6-97). The Supervisory Board reviewed these reports and their completeness, and – within the scope of its expertise – the accuracy of their contents.

KPMG issued an unqualified audit opinion with regard to the separate non-financial Group report.

This means that based on the audit activities carried out and the audit evidence obtained, no information was obtained that would lead to the assessment that the separate non-financial Group report was not in compliance in all material respects with Sections 315b and 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 meetings on September 12, 2019 and November 27, 2019, the Supervisory Board discussed the corporate governance principles of SGL Carbon SE. The Supervisory Board also approved the declarations of compliance in these meetings pursuant to Section 161 of the German Stock Corporation Act (AktG). There was a variance in compliance with respect to the composition of the Board of Management in September, which was caused by the resignation of Dr. Köhler. This was remedied in November, however, following the appointment of Dr. Bühler. All declarations of compliance have been made permanently accessible on the Company's website in accordance with the German Corporate Governance Code. The current declaration of compliance is also reproduced in the Corporate Governance Declaration in this annual report on pages 88-97. Further statements concerning our Company's corporate governance can also be found there.

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

There were two changes to the Board of Management of the Company in the reporting period. Until August 31, 2019, and again as of October 15, 2019, the Board of Management consisted of two persons.

There were no changes to the Supervisory Board in the reporting period.

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 2019. We would also like to express our thanks to Dr. Köhler for his efforts as CEO of SGL Carbon, his implementation of the Company's new strategic orientation, and his effective and faithful collaboration with the Supervisory Board.

Wiesbaden, March 9, 2020

The Supervisory Board



Susanne Klatten
Chairwoman of the Supervisory Board

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 anticorruption 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 German Commercial Code (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 35) 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) also for this reporting period 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 limited assurance engagement by KPMG AG Wirtschaftsprüfungsgesellschaft (see information on page 64).

Key issues

Based on this non-financial report, a materiality analysis was performed in 2019, based on the previous analyses in 2016-2018. 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. The key issues ascertained were shown in the following table and 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).

For validation purposes the topics identified in the previous year were once again assessed in 2019 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, which were discussed in a joint workshop together with the responsible project coordinators and process owners in the central departments and in the divisions. Then the total results of the validation were presented to the Board of Management for adoption.

This validation of the material issues did not result in any central adjustments for SGL Carbon's 2019 non-financial Group report. Only the issue of "Human Rights" previously presented under "Anti-corruption" in the "Compliance" segment will be dealt with in a separate paragraph in future.

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 |
|--|---|
| Compliance | <ul style="list-style-type: none"> • Compliance Management • Human rights • Anti-corruption and bribery • Responsibility for the supply chain |
| Products | <ul style="list-style-type: none"> • Product quality • Environmental product impact • Sustainable product innovation |
| Environment, health and safety affairs | <ul style="list-style-type: none"> • Energy consumption and CO₂ emissions • Health and safety at work and health protection • Process safety • Resource management (waste and water) |
| Employee affairs | <ul style="list-style-type: none"> • Diversity and equal opportunities • Employability and development • Attractiveness as an employer |
| Corporate citizenship | <ul style="list-style-type: none"> • <i>Local communities</i> |

The different chapters described 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, in the first instance key risks have been identified for the individual issues (areas) by the responsible departments. These risks were then evaluated together with the Group's risk management while considering the management and control activities, in particular with regard to whether they could be highly likely to have a major negative impact. In summary, no material risks were ascertained which could very probably have a major negative impact on the issues mentioned above.

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.

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 "Corporate Governance and Compliance Report", page 88. 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 "Governance and Compliance Report", page 88).

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 the 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 extent to which targets have been met and the resulting downstream activities as part of an annual review.

Regular risk assessments form part of our effective compliance management system. During the past fiscal year 2019 this led to the compliance risk landscape being extended, with the topic of supply chain compliance being added. The Compliance Committee approved this change. In so doing, we regularly assess 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 we review the suitability of the existing compliance program. This assessment was last performed in 2018.

Compliance topics are regularly documented by the Local Compliance Representative (LCR) and respective representatives of the business units as part of our compliance reporting process. We use semi-annual and annual LCR/business unit questionnaires to confirm that the compliance program is being implemented at our local sites and within the business units. 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.

In view of the constantly further developing underlying statutory conditions, SGL Carbon continuously optimizes its training content and constantly identifies training requirements. In 2019 the previous eLearning program on the Code of Conduct was replaced by a new online training program. This new eLearning program has been updated, in particular to bring it into line with the Code of Conduct updated in 2018. It was rolled out at all of our sites around the world, and is available in German, English, Chinese, French and Polish language. The training program is targeted at the group of all "white collar"¹⁾ employees. During the past fiscal year, 97% of the target group already participated in the training program, i.e. a total of 1,968 employees. New employees in this target group will be included in the eLearning training program on an ongoing basis, based on the SAP quarterly report.

Furthermore, additional face-to-face training sessions on the Code of Conduct were held at select sites and during regional meetings of the business units and corporate functions. A total of 257 employees were trained.

Human rights

We 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. Particular importance is attached to protecting human rights. This is discussed in further detail in the chapter "Employees affairs". This section in the Code of Conduct also refers to the Human Rights Policy already introduced globally in 2018. This policy is available in a total of nine languages and forms part of the recruitment documents for new employees at all of SGL's sites. This is confirmed to Group Compliance by the LCRs

at the sites via the annual LCR report. This report also includes confirmation that our local sites around the world observe and uphold human rights. A risk assessment on human rights was introduced in 2019 to augment this process. In this regard the Group Compliance and Group Human Resources departments jointly developed an internal questionnaire, which is based on external standards. This aims to identify human rights risks, to evaluate these and, if necessary, to put the corresponding risk mitigation measures in place. This risk assessment was performed based on this questionnaire at all SGL sites world-wide during the year under review. The results were evaluated accordingly.

The content of the eLearning program on the Code of Conduct, which is binding for all white-collar employees, was extended to include the topic of anti-discrimination as a key aspect of observing human rights. Management training on site also offers an additional platform for addressing this issue. The first step in 2019 was to introduce the training sessions at the two largest German sites in Meitingen and Bonn, and these are to be rolled out to further sites in 2020. In addition, the topic was integrated into the OMS training sessions. These have already been rolled out at 22 sites.

In order to allow employees and executives to report possible violations of our rules on observing human rights more effectively and in a more direct manner, an in-house reporting channel was introduced in addition to the existing whistleblower system. This is described accordingly in the Human Rights Policy. The reports received are logged and processed and form part of the semi-annual compliance report to the Board of Management.

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 training concept for the anti-corruption topic 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-

¹⁾"white collar" employees: all executives as well as all non-production employees.

level 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 the work flows when dealing with sales agents. The target group for the BPC process currently comprises sales agents and distributors. 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. The nominated business sponsors from the two business units are responsible for starting this process. In 2019 this process was expanded to include additional fields of risks and it was also optimized and automated by implementing a new risk assessment tool. All of the business sponsors received corresponding training.

As part of the regular training plan for 2019 face-to-face anti-corruption training sessions were conducted at selected sites as well as during regional meetings of business units and Corporate Functions. 167 employees were trained at these training sessions. In addition, we also started to introduce anti-corruption training for sales agents. These training sessions are held as both face-to-face or online training sessions.

In addition to the existing face-to-face training sessions, in 2018 SGL Carbon already started to launch an eLearning program on anti-corruption around the world. These eLearning training sessions were implemented at the remaining sites in Wackersdorf, Ried and Ort in 2019. This online training session is currently aimed at all white-collar employees. In addition, the training program is included in the SAP Onboarding Compliance Training Catalog, in order to provide all new employees in this target group with corresponding training.

What is more, 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 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 "Corporate Citizenship", page 26).

Responsibility for the supply chain

As a global company with a highly diversified industrial customer structure, SGL Carbon has a wide variety of business relationships. We expect our business partners to act legally, ethically and sustainably to the same extent as SGL Carbon for the duration of the partnership. In order to guarantee this, we have introduced a Code of Conduct for Suppliers and Sub-contractors (Supplier Code of Conduct). In addition to conduct rules which must be upheld with regard to integrity, combating corruption among suppliers as well as social and environmental standards, it also includes requirements for dealing with so-called conflict materials and a binding acceptance of the UN Global Compact principles.

Global Purchasing is responsible for implementing and applying the Supplier Code of Conduct which was already introduced in 2015 and is anchored in SGL Carbon's general purchasing conditions. As part of the successive roll-out, the Code was issued to the most important and also risk-relevant target groups which had been defined based on their proportion of the annual purchasing volume. 88% of the main existing suppliers have undertaken to comply with our Code. What is more, 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 directly in our supplier risk management. Based on the risk assessment, requirements are derived for any necessary supplier development activities and also any 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 also went through an online sustainability assessment in fiscal year 2019, which is repeated on a regular basis.

SGL Carbon has production sites 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 and customs 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 is regularly brought into line with the latest statutory requirements. With regard to customs, as a rule a license as an Authorized Economic Operator (AEO) is required, in order to be able to use additional authorizations under customs law, specific customs processes or certain simplified processes. During the year under review an additional SGL company was licensed as an Authorized Economic Operator.

Our export control methods are also a key component of the Compliance Risk Assessment (see "Compliance", page 12). 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 delegates 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.

Please refer to the section on Compliance on page 12 for information on SGL Carbon's anticorruption activities and on doing business in line with regulations.

Products

Tailor-made products form the core of the top quality solutions, components and materials which we deliver to our customers and partners. Therefore, we have identified 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 economic 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. Controlling and monitoring product quality is the task of both "Quality Management" in the GMS business unit as well as the "Integrated Management System" in the CFM business unit. The global heads of both areas report directly to the head of their respective business unit. We have established monthly reporting for local site managers and business unit directors based on local and global quality performance indicators.

Since ultimately only the user can assess a product's true benefits, we evaluate the quality of our products based on customer feedback. In this regard the sales organizations in the business units conduct targeted customer satisfaction surveys on a regular basis.

In order to directly obtain an idea of the quality of the products we supply on an ongoing basis, SGL Carbon records customer complaints and the associated costs and evaluates these. In this regard we also launched the customer complaint software already used in the GMS business unit in the CFM business unit in 2019. This IT solution allows us to log, evaluate and work through customer complaints. In addition, the findings from and activities used in processing complaints and the associated customer dialogue are documented. This aims to sustainably rectify defects by implementing suitable activities and prevent them from occurring again in future. Ideally, complaints can be avoided completely.

SGL Carbon has been using the indicator of complaint costs/sales since 2018 to measure product and service quality as well as the associated customer satisfaction. Both of the indicators included therein relate exclusively to external customers.

| KPI „Complaint Costs/Sales“ ¹⁾ | 2019 | 2018 |
|---|-------|--------------|
| GMS | 0.15% | 0.08% |
| CFM | 0.08% | Not recorded |

¹⁾ Sales revenue with third parties

Corresponding assessments are performed throughout the entire production process in order to ensure high product quality

and process deviations can be identified and eliminated at an early stage. High product quality is based on stable production and business processes, robust organization and high-performance systems. In order to constantly improve the quality of our processes and organization, we already started to introduce an Operations Management System (OMS) tailored to SGL Carbon in 2017. Both business units continued to drive the use of the OMS in 2019 as planned. This SGL-specific production system aims to standardize workflows, make systems within the organization uniform and to work out a common understanding at all of our production sites. 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 processes.

After conclusion of the OMS pilot phase in 2018, we are publishing the so-called OMS Maturity Index for the first time in 2019. SGL's sites were subject to a maturity assessment compared to the target of the six OMS elements (Strategic Orientation and Objectives, Organizational Structure, Corporate Culture, Performance Management, Shopfloor Management and Methods and Tools). In order to ensure objectivity and comparability, this evaluation was performed by meticulously trained SGL experts who were not from the specific location being assessed. All of the production sites were evaluated for the first time in 2019 in a project managed by the respective Operations Excellence Managers at the two business units. This evaluation was performed per site on a scale of 0-100, with 100 representing a perfect, theoretical value. Of the 22 sites evaluated in 2018, 21 were able to increase their OMS maturity level. The average OMS maturity assessment weighted against gross value added for all of the sites improved substantially by 17 index points to 45 in 2019. Annual assessments are scheduled from 2020. This allows the progress of the OMS penetration to be ascertained. During the assessments, our experts identify strengths from which other sites can and should learn, and also uncover potential starting points for improvements.

| OMS Maturity Index | 2019 | 2018 |
|--|------|------|
| Number of site assessments performed | 29 | 22 |
| KPI „OMS Maturity Index” ¹⁾ [Index] | 45 | 28 |

¹⁾ 0-100. Weighted average of all sites (weighted against: gross value added)

Almost all of the sites in the SGL Carbon are already integrated in the respective business unit'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), ISO 45001 or 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 product impact

Customers and other stakeholder groups increasingly expect that value chains are geared towards sustainability. It is therefore our aim to know the environmental impact of our products during production and also during their use cycle, and also to constantly identify options to optimize this environmental impact. We believe that this is a key aspect with regard to society's acceptance of our products and manufacturing methods. Reducing environmental product impact can lead to an improved product or a more advantageous solution for our customers, for example if the use of our product at the customer leads to energy being saved.

In many target markets, positive environmental impact when using or consuming our products are an important decision criterion. This includes, for example, 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 CO₂ technologies (for example from increased use for photovoltaic, LED lighting, lightweight construction, or from increasing heat and energy efficiency). In the mobility sector our light composite solutions help to cut energy requirements in the automotive and aerospace industries, and can thus help to reduce CO₂ emissions in general.

As announced last year, in 2019 SGL Carbon started to evaluate its product range in a structured manner with regard to its environmental impact. Our Innovation Team is responsible for these activities. This cross-functional committee consists of the technology managers of both business areas as well as the head of our Central Innovation. It reports to the Board of Management. The Innovation Team has developed a catalogue of evaluation criteria which are used to analyze all of the product groups with regard to the environmental impact of their production and use or consumption at the customer and end user. This evaluation considers in particular the criteria of the resource-saving use of materials, recyclability, CO₂ impact and hazardous materials. In order to ensure consistent comparability, the evaluation criteria are based on the dimensions that we use to evaluate the sustainability of our product innovations.

This is processed in workshop spanning a range of different departments. The results are documented in a uniform manner. The Board of Management has defined objectives regarding the progress made in processing: Through to the end of 2020 at least 60% of the product range [based on external sales revenue with third parties] is to be evaluated with regard to its environmental impact, and at least 95% by the end of 2021. The progress made in these evaluations should be at a comparable extent in both of the business units. 18% of the product range was already assessed in 2019 when the new method was used for the first time [all percentages relate to the percentage of sales with third parties for the products already evaluated compared to SGL Carbon's total external sales revenue with third parties].

KPI „Progress in assessing the environmental impact of products“¹⁾

| | 2019 |
|------------------------|------|
| Assessment outstanding | 82% |
| Assessment completed | 18% |

¹⁾ Percentage of sales revenue based on sales revenue with external customers

Sustainable product innovation

SGL Carbon pursues target-oriented research and development both in its two business units and in Central Innovation. In addition to increasing economic profitability, these activities equally aim to continuously improve the sustainability of our products and processes.

In order to support these activities, in 2018 the Innovation Steering Committee introduced an annual portfolio process. As part of this process all of SGL Carbon's innovation projects are reviewed with regard to their sustainability. The Innovation Steering Committee is responsible for innovation activities at SGL Carbon. It comprises the CEO, the heads of both business units and the head of Central Innovation. This ensures uniform implementation of the portfolio process across business units and Central Innovation.

All innovation projects are evaluated in terms of their environmental compatibility using four criteria which have been recognized as being material for our products and processes. These criteria are: material efficiency in production and the ability to recycle the products, the importance of the external CO₂ impact (energy savings when using our products), the importance of the internal CO₂ impact (energy consumption when producing the products) as well as the use of hazardous substances in the product and the process. The Innovation Team is

responsible for evaluating the projects. This assessment is then presented to the Innovation Steering Committee.

For the overall management of the innovation portfolio, the objectives are, as a rule, to include all of the projects in the systematic evaluation, to improve sustainability for the majority of our product developments, and to ensure that no individual project has a negative impact on sustainability. These targets were fully met in 2019.

76% of the projects assessed contributed to the improvement of sustainability. These were found in both of the business units and also in Central Innovation. In addition, projects for improving sustainability were pursued for all four of the criteria named.

In addition to its own core development topics, SGL Carbon also works as a partner together with public research institutions and other industrial partners in order to improve the sustainability of its products over and above its own value added. A current example of this is the "Algae Fiber Project". This project aims to use the industrial production of algae and their subsequent biochemical processing into raw materials to obtain CO₂ neutral basic chemicals. This allows acrylonitrile, which is the key material used in producing carbon fibers, to be produced in a CO₂ neutral manner in future.

In addition to its own development topics, SGL Carbon supports open exchange to promote innovations, in particular in view of sustainable development. For example, SGL Carbon regularly holds the Innovation Panel, a public event with lectures and discussions on current topics. In 2019, the topics discussed in this panel included the future of energy production or hyper-loops as a future means of transport.

Environment, Health & Safety Affairs

Responsibility for the environment as well as for 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 applies to all of our sites around the world since 2015, SGL undertakes to create safe 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 Sub-contractors 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 EHS organization coordinates all group-wide activities for environmental protection and health and safety at work, sets uniform standards and audits the progress in cooperation with local EHS representatives. As a rule, the sites are audited by Corporate EHS every three years, more frequently after recurring incidents. It reports to SGL Carbon's Board of Management once per quarter, informing it of the current developments.

Energy consumption and CO₂ emissions

The manufacture of carbon fibers and specialty graphite production processes require extremely high temperatures and is energy intensive. The majority of SGL Carbon's energy consumption is due to generating heat and the thermal cleaning of emissions. As a company using a large 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 CO₂. SGL Carbon's CO₂ emissions are primarily scope-1 emissions which are created during combustion processes, and scope-2 emissions which are due to our electricity and steam consumption. In order to ensure profitability and also due to our responsibility towards the environment, we ensure that we constantly improve the energy efficiency of our processes. 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 sites and business units are responsible for concrete implementation of energy reduction activities and projects. For this purpose, sites that make a significant contribution to the total energy consumption at SGL Carbon each have an energy officer, who reports the status to the site managers or Legal Entity manager at least once per year. The EHS Steering Committee is responsible for monitoring and directing energy management at key sites. In this regard, the level of target attainment is reported to the Committee every quarter. The EHS Steering Committee includes the business units' head of operations and is under the leadership of 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 EHS energy management policy and our Code of Conduct. In addition, we offered training activities at the ISO 50001 certified sites and communicated energy management within the Company. We want to ensure that our employees are also aware of our energy reduction activities. They should have the necessary knowledge that will help them contribute to actively reducing energy consumption. Since December 2015 all of SGL Carbon's European production sites have an ISO 50001-certified energy management system. Certification was issued by the management system certification companies, DQS and DEKRA. The non-European sites, Moses Lake, Gardena and Arkadelphia have also been certified to ISO 50001.

The ISO 50001-certified sites evaluate implementation of the elements of the standard, the annual management review and routine internal and external audits. In 2019 a total of 18 internal audits for the energy management system were performed by qualified internal auditors from other SGL sites. External audits are performed at these sites at least once every three years by accredited certification companies.

We commit to reduce our global energy consumption based on adjusted sales revenue by 1% each year and by 10% through 2027 compared to the 2017 consumption. We plan to comply with the expanded ISO 50003 requirements and also the global requirements for energy management. For the worldwide operation with the largest energy consumption Key Data for specific energy usage have been defined and also activities and projects to increase energy efficiency have been determined.

SGL Carbon also works together with external partners as part of its energy management. An example is the energy efficient networks at our sites in Bonn and Meitingen. These are based on an initiative by the federal government, and serve as voluntary, systematic, and target-oriented exchange of experience among companies from one region or industry. At Meitingen in 2017, SGL Carbon helped bring an energy project to life with the local municipality and additional partners. In so doing, we provided 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 was able to avoid emissions in 2019 and reduce their annual energy usage through the use of waste heat.

In 2019 our central Corporate EHS invited all of SGL Carbon's European energy officers to a two-day best practice workshop at the Meitingen site. This promoted the exchange of information and efficiently implement energy-saving projects and activities. It focused on reports about the projects implemented at the sites 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 site can benefit from these and take over additional, efficient activities from other sites.

Furthermore, in 2019 we realized a reduction in CO₂ emissions by purchasing electricity produced by renewable sources at the Wackersdorf, Ort and Ried sites.

| Energy consumption and CO ₂ -emissions ¹⁾ | 2019 | 2018 | Change |
|--|-------|-------|--------|
| Energy consumption | | | |
| in gigawatt hours (GWh) | 1,409 | 1,441 | -2% |
| thereof oil and gas | 488 | 500 | -2% |
| thereof electricity | 628 | 646 | -3% |
| thereof steam | 293 | 296 | -1% |
| Energy consumption in relation to economic output (GWh per €1.0m sales revenue) ²⁾ | 1.37 | 1.41 | -3% |
| CO₂-emissions³⁾ | | | |
| in thousands of tons (kt) | 393 | 406 | -3% |
| thereof direct | 90 | 93 | -3% |
| thereof indirect | 303 | 313 | -3% |
| CO ₂ emission in relation to economic output (kt per €1.0m sales revenue) ²⁾ | 0.38 | 0.40 | -5% |

¹⁾ The data includes all fully consolidated subsidiaries.

²⁾ Adjusted sales revenue (excluding price, currency and other special effects). The adjustment of the previous year's figure results from the use of a rolling base year

³⁾ The calculation of CO₂-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 2019“ of the International Energy Agency (IEA) for indirect emissions (Scope 2)

We were thus able to reduce energy consumption and also CO₂ emissions based on adjusted sales in year 2019.

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 our employees in our Code of Business Conduct and Ethics and our EHS 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 in their work-place, and set up a management system for constant improvement.

The EHS Steering Committee meets four times per year, and is responsible for monitoring and directing the workplace health and safety activities [see "Energy consumption and CO₂ emissions"]. In addition, exchanges take place between our Corporate EHS organization and local EHS managers on important issues in our global EHS network. This aims to ensure that all the statutory regulations are upheld and that corresponding systems are put in place at the respective sites.

Additionally, in 2019 two meetings were held with EU site managers and local safety managers in order to improve the global security culture and prevent reoccurrences of past incidents. In this regard a European information exchange has been created, as part of which information on safety solutions is exchanged.

In order to further improve our employees' safety awareness, a global safety promotion poster was put in place at all of SGL's sites worldwide. These large, highly visible posters provide information on health and safety at work in the local language and also identified safe behavior during everyday work.

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 our production processes. It is the responsibility of the Company's management and each individual employee to ensure safe working conditions. The Corporate EHS organization supports the business units establishing and improving management systems for health and safety in the workplace. The respective business units and site management are responsible for implementing these.

SGL Carbon uses various incentive systems to actively involve its employees in preventing accidents and solicits their ideas for reducing the risk of accidents. An annual Safety Award is issued to sites where there were no safety incidents that result in loss time injuries. Twelve sites were honored with this award in 2019 for 2018. The issue of health and safety at work is promoted by the annual targets at many sites. Since 2018 the Meitingen site runs a campaign once per year to launch the Vision

Zero prevention program. 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 occurs at work, it is recorded in the group-wide Incident Management System. SGL Carbon uses a systematic process to investigate incidents, establish proposals for improvement and in so doing it takes into account solutions that have already been effective in preventing accidents at other SGL sites. Once per month the Corporate EHSA organization issues a safety report with relevant statistics to the Board of Management, managers of the business units and the site managers as well as the EHS managers. This allows SGL to evaluate compliance with the EHSA policy and in the case of negative trends implement counter-measures immediately.

In 2019, at our European sites, we have focused on trips and fall accidents and in cooperation with the safety managers at the sites we have defined local programs to avoid these types of accidents. At sites with a higher frequency of accidents, we put in place individual risk reduction initiatives to prevent accidents already at the start of 2018.

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

The aim is also to improve on the existing safety activities. In 2019 a target Frequency Rate for accidents with lost time injuries was 3.10 accidents per million worked hours. This includes accidents by SGL's employees and external contracted employees¹⁾ with at least one day lost after the day of the accident. This target was not reached with an actual result of 3.29, however the Frequency Rate was lower than in 2018 [3.45 accidents/million worked hours]. The target for Severity Rate was reached with a value of 140 [target: 155] and was also lower than in the previous year [148 days/million worked hours]. Targets of 3.10

¹⁾ Employee are all permanent and temporary SGL employees and external contracted employees under the direct supervision of SGL. Contractors working on an SGL site are responsible for the Safety of their employees and are excluded from calculation of Incident Statistic. The data includes all fully consolidated subsidiaries.

accidents/million worked hours and 150 days/million worked hours have been set for 2020.

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 claims for compensation and restoration of damage. We thus give great importance to pursuing the target of establishing safe production processes and constantly improving our safety culture.

As part of its entrepreneurial due diligence, SGL Carbon has had a global Process Safety 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 CO₂ emissions"]. This is in combination with an incident management system for health and safety at work and process safety [see "Health and safety at work"] in which we precisely classify every accident. This should determine 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 so doing we analyze the extent of hazard potential from crises and calculate their economic consequences such as the costs of remedying environmental damage or preventing lost sales as a result of production downtime. One or several activities to minimize risks are identified for each primary risk, and these are implemented if required.

SGL Carbon performs annual audits in cooperation with the insurance company, which include a safety analysis of processes and equipment. The results are evaluated and documented. If necessary, we put concrete improvement measures in place. A total of twelve sites were audited in 2019. Based on the reports available, 42 improvement activities were implemented. In 2019 a total of five incidents were reported by SGL's global sites, which were caused by fire, explosion, natural disasters, acts of sabotage and / or other business interruptions and which led to

a process interruption of at least one day or damage to property of at least €50 thousand.

Resource management (waste and water)

As part of SGL Carbon's business activities, waste carbon and residual materials are produced. Both carbon as well as the residual materials produced in most of the production processes are highly effectively recycled. SGL's primary use of water is for cooling production equipment.

At all its sites worldwide, SGL Carbon strives to comply with all of the applicable regulatory requirements and to establish 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 generation of waste. Our principle for waste 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 sites. For example, recycled carbon fibers can be used as fleece textiles for automotive production and some feedstock sites in the GMS business unit reuse many of the by-products. 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 EHS 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 Corporate EHS organization collects data from all of the manufacturing sites, which quantifies the use of resources and generation of waste. Water consumption is reported for each water source. Waste data is collected for both hazardous and nonhazardous waste.

In 2019 we reduced our water consumption both in terms of absolute quantity and also in terms of adjusted sales revenue. This is primarily due to a project at our Chedde site, in which the circulation and functioning of water inlet were improved, resulting in approximately 1.4 million cubic meters being saved compared to the average over the past three years. As a result,

it was possible to reduce water consumption by 20% in 2019. These savings are sustainable.

The amount of waste related to adjusted sales was reduced in 2019.

| Ressources ¹⁾ | 2019 | 2018 | Change |
|---|------|------|--------|
| Water requirement | | | |
| Total (millions m ³) | 7.42 | 9.24 | -20% |
| thereof from Company wells | 4.20 | 5.73 | -27% |
| thereof from rivers | 1.80 | 1.85 | -3% |
| thereof from public water supply | 1.42 | 1.66 | -15% |
| Water requirement in relation to economic output (m ³ per €1,000 in sales revenue) ²⁾ | 7.2 | 9.0 | -20% |
| Waste volume | | | |
| in thousands of tons (kt) | 26.3 | 29.7 | -11% |
| thereof hazardous waste | 4.6 | 3.6 | 28% |
| Waste volume in relation to economic output (t per €1.0m sales revenue) ²⁾ | 25.6 | 29.0 | -12% |

¹⁾ The data includes all fully consolidated subsidiaries.

²⁾ Adjusted sales revenue (excluding price, currency and other special effects). The adjustment of the previous year's figure results from the use of a rolling base year.

Employee affairs

SGL Group has a total of 5,127 employees at 31 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 management. 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 (Central Innovation), 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 prepared for the introduction of a comprehensive, cloud-based IT solution for these processes in 2019.

HR reports regularly to the Board of Management. The Head of HR meets personally with the Board of Management on a regular basis. As a result, top management is very aware of HR issues.

SGL Carbon constantly keeps a keen eye on and reduces potential HR risks. This also includes the strategic importance of recruiting resulting from the increasing lack of specialists. This also applies to our staff retention efforts serving to combat high employee fluctuation, and thus also keeping expertise in the Company. The SGL's forward looking competency management also plays a key role. This identifies and promotes the competencies which will be required from senior and middle management in future. In addition, risks can also result from employees' changing requirements and wishes. For Germany, we utilize an external employee consultancy service to record these whereas globally we use our employee survey, performed for the first time in 2018 and expected to be repeated in 2021.

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 meet 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, ensuring 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.

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 2019 the Group employed expatriates in China, Germany and the USA.

| Percentage of women | 2019 | 2018 |
|-----------------------|--------------------|------|
| Total workforce | 17% | 18% |
| thereof Europe | 17% | 18% |
| thereof North America | 20% | 19% |
| thereof Asia | 17% | 18% |
| Senior management | 18% | 19% |
| Middle management | 18% | 17% |
| Talent pool | n.a. ¹⁾ | 29% |

¹⁾ Not specified, as talent management process postponed to 2020

| Age structure | 2019 | 2018 |
|----------------|------|------|
| < 30 years | 19% | 19% |
| 30 to 50 years | 53% | 53% |
| > 50 years | 28% | 28% |

| Internationality | 2019 | 2018 |
|------------------------|-------|-------|
| Total workforce | 5,127 | 5,031 |
| thereof Germany | 2,341 | 2,271 |
| thereof rest of Europe | 1,461 | 1,448 |
| thereof North America | 829 | 824 |
| thereof Asia | 496 | 488 |
| Number of expatriates | 6 | 6 |

Employability and development

In competition for the best talent, top-quality for training and continuing professional development is of key importance. This type of offering not only helps to acquire junior staff and specifically further developing them. It is also the key to retaining experienced employees and to keeping their knowledge in the Company for its long-term success.

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

Vocational training has always played an important role at SGL Carbon. The Company's vocational training offering spans ten technical, commercial and IT professions in Germany as well as five dual study programs. In Meitingen in 2019 two apprentices received an award as being the best in their profession in the region covered by the chamber, in Bonn one apprentice received this award.

SGL Carbon is also involved internationally in training young people. This has been well established for a long time at both of the French sites. There were ten apprentices here in the reporting year. A program started at the Shanxi site in China in 2019 with five apprentices; a program with the same scope is to be added in Shanghai in 2020. The launch of apprenticeship programs is also scheduled for 2020 in Poland and the USA.

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 in the previous year, in 2019 we supported this association in the amount of €10,000 and also in terms of staff - for example, a manager from our central R&D department is a member of its board, and several colleagues provide support during information events - and also by organizational activities (for example as hosts for the annual members' meeting in May 2019).

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 measures, coaching or special tasks with employees.

In addition to local training offerings at individual sites, 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, with 32 participating in 2019.

The activities are supplemented with regular potential analyses. As part of the annual talent management process, which is normally performed every year, 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 paths. As a result of the various organizational

changes in SGL Carbon's top management in 2019, the talent management process was postponed to 2020, with the result that some of the indicators in this regard (see tables "Percentage of women" and "Personnel development and talent management") are not available.

A framework concept for expert careers was developed in previous years, in particular for the target group of experts who do not aim for a traditional management career. In 2019 the concept was implemented in central R&D. It will continue to be rolled out in line with requirements.

| <u>Apprenticeships and dual study programs</u> | <u>2019</u> | <u>2018</u> |
|--|-------------|-------------|
| Total apprentices | 102 | 99 |
| - Site Meitingen | 57% | 60% |
| - Site Bonn | 39% | 34% |
| - Site Limburg | 4% | 5% |
| - Site Willich | 0% | 1% |
| Number of professions for apprentices | 10 | 12 |
| Number of apprentices taken over after training completion | 33 | 25 |
| Number of dual study programs | 5 | 5 |

| <u>Personnel development and talent management</u> | <u>2019</u> | <u>2018</u> |
|---|--------------------|-------------|
| Number of participants in the qualification portfolio "Corporate Training Framework" | 184 | 156 |
| Number of participants in the management development program "Leadership@Work" | 32 | 50 |
| Ghost rate in the talent pool (percentage of talent with no job change for six years) | n.a. ¹⁾ | 6% |
| Talents who left the Company | n.a. ¹⁾ | 7% |

¹⁾ No information available, as the talent management process has been postponed to 2020

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, which makes recruiting employees more difficult. 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 special-

ists 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.

Following communication of the overall results at SGL by the Board of Management to all of the employees, local information on the site-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 started with brainstorming workshops and also included project groups on the individual initiatives through to implementation of the proposed improvements. A total of 205 activities have been defined, and 51% of these had already been fully implemented by the end of the reporting year (35% of the activities were still running, 12% had not yet been started and 2% were obsolete). 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 since 2008. Following the launch of our new corporate brand in 2018, we also fundamentally redesigned our employer brand - closely linked to the new corporate brand with its three SGL values (convince through performance; be open-minded; create momentum). We then implemented the new employer brand during the reporting year in our external and internal communication.

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 career page, at trade 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 48 students from ten different countries, and around 19% of this figure were female. In addition, this department supported 35 bachelor and master's theses as well as dissertations in the reporting year.

As part of our recruiting, in 2019 we continued our contacts with potential applicants in social networks that we started in 2017 (Active Sourcing). During the reporting year this recruiting

channel was used for a total of seven positions, primarily in Europe.

The recruiting process is already mostly standardized in Germany, the USA and China. Our medium-term target is to standardize the process all over the world as far as this is possible and expedient considering the legal and cultural framework conditions in the individual countries. The first step in this direction was taken in 2019 with the launch of the multi-year project to implement a cloud-based IT solution.

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. In this context, in 2018 we assessed and re-adjusted the short-term incentive plans for SGL's management (MG 1-4): we will no longer agree personal bonus-relevant targets from 2019. In addition, from 2019 the same principles apply in the bonus plan "SGL BonusPLUS", which regulates short-term incentives for employees covered by collective agreements and their equivalents in Germany. What is more, during the reporting year we developed uniform global principles for harmonizing short-term bonus systems below the management levels, and these were approved by the Board of Management. We plan to implement these from 2020. The top-level objective pursued by these initiatives to design short-term incentives is 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 72 employees by the end of 2019.

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 offerings decentrally, i.e. at an individual plant level. During the reporting year, in Meitingen several corresponding events and activities regarding sports, fitness, nutrition and medical prevention were held. The latter also included a lung function test, help stopping smoking, flu vaccinations and skin screening. In 2019 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. In Wiesbaden we developed a series of health-related offerings in 2019. These were the results of corresponding local initiatives following the employee survey. They included, for example, fruit being available regularly free of charge in the offices, as well as several fitness courses for the muscular/skeletal system.

| Number of staff | 2019 | 2018 |
|---|-------|-------|
| Number of employees | 5,127 | 5,031 |
| Number of new hires (worldwide) ¹⁾ | 361 | 439 |
| - thereof men | 76% | 77% |
| - thereof women | 24% | 23% |
| Fluctuation rate (worldwide) ²⁾ | 7.3% | 8.5% |
| - Europe | 5.7% | 8.3% |
| - North America | 13.4% | 11.8% |
| - Asia | 8.0% | 4.3% |

¹⁾ Exclusively includes "real" new hires of 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 | 2019 | 2018 |
|--|-------|-------|
| Percentage of part-time employees in Germany ¹⁾ | 4.9% | 4.2% |
| Male part-time employees (Germany) ¹⁾ | 1.6% | 1.3% |
| Female part-time employees (Germany) ¹⁾ | 20.0% | 18.0% |
| Number of employees who used the advice service (EAP) | 2.1% | 2.1% |

¹⁾ Based on a balance sheet date of December 31, 2019, excluding marginal employment employees, students and temporary workers.

Corporate citizenship¹⁾

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 sites, 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 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, among others, 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 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-site. Proper implementation of the policy is reviewed with the help of an annual survey of CSR activities. As part of this, among others, expenses for CSR activities at all of the Company's sites are systematically recorded, reviewed and summarized in an internal report. The Corporate Communications and Marketing department is responsible for performing the survey 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 sites in Europe, North America and in Asia. But what connects the different activities is 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 2019, around €63,000 were donated to various projects. The primary focus at more than 45% was on social activities, followed by education [34%] and sports [13%].

As in previous years, in 2019 SGL Carbon also focused on promoting science. These activities were controlled by the 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 the Cluster Nano Technology from 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 German Materials Society (DGM).

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 kindergarten through to universities. In 2019, 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 by taking over lectures or providing materials, for example the Technical University in Munich and the Technical University in Dresden.

¹⁾ 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.

SGL Carbon in the Capital Markets

SGL Carbon shares were unable to benefit from a favorable stock market development in 2019, closing the year at €4.74

Buoyed by an expansive interest rate policy, German and international stock markets did very well in 2019, despite the global economic downturn caused by the continuing trade dispute between the US and China, and uncertainty regarding a hard Brexit. Following the downward trend seen in 2018, the German DAX hit its annual low of 10,417 points already on January 3, 2019. The ensuing upward trend was helped by an initial rapprochement in the trade dispute between China and the US. As a result, the DAX increased to 12,413 points on May 3, 2019, marking an interim high. Due to the renewal of the trade dispute and uncertainty in the UK, however, the DAX again declined, falling below its benchmark level of 11,500 points by mid-August 2019. In September, the DAX managed to increase once again, however, reaching 13,289 points by November 7, 2019. As a result of the elections in the British House of Commons, and the avoidance of new punitive customs duties in the trade dispute between the US and China, the DAX reached its annual high of 13,407 points on December 16, 2019. On December 30, 2019, the DAX closed at 13,249.91 points, thus increasing by 25.5 % in 2019.

The MDAX mid-cap index increased by 30.5 % during the past year, while the SDAX small-cap index – which included the shares of SGL Carbon ¹⁾ – managed to increase by roughly the same amount, or 30.8 %.

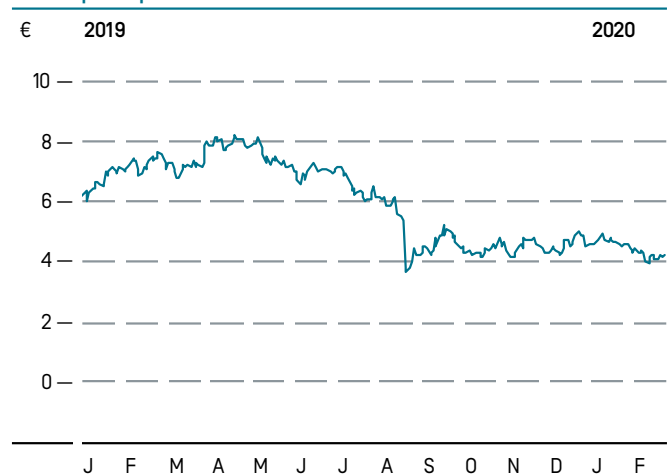
The economic situation and stock market performance in the US was largely determined by developments in its trade dispute with China, and the interest rate policy turnaround of the US Federal Reserve (FED). Following additional customs duties in May and September, a rapprochement was achieved at the end of September. New duties planned for December 15, 2019, were avoided by a partial agreement reached on December 13. The Dow Jones reached its annual low of 22,686 points already on January 3, 2019. It subsequently recorded a sharp increase, with intermittent slumps in May and August, which were triggered by developments in the trade dispute. The FED lowered key rates three times from the end of July to the end of October, to between 1.50 and 1.75 %. On December 27, 2019, the Dow Jones reached its annual high of 28,645 points, which also

marked its all-time high. The index closed the year at 28,538 points, thus recording an increase of 25.2 % in 2019.

| Key figures for SGL Carbon SE shares | 2019 | 2018 |
|--|-------------|-------------|
| Number of shares at year-end | 122,341,478 | 122,341,478 |
| High [€] ¹⁾ | 8.24 | 13.37 |
| Low [€] ¹⁾ | 3.65 | 5.99 |
| Closing price at year-end [€] | 4.74 | 6.10 |
| Market capitalization at year-end (€m) | 579.9 | 745.7 |
| Average daily turnover in Xetra trading (number of shares) | 203,701 | 282,614 |
| Free float at year end [%] | approx. 46 | approx. 46 |
| Dividend per share [€] | - | - |

During 2019, the euro-dollar exchange rate showed its lowest volatility in the last five years. On January 10, 2019, it reached its annual high of 1.1543 US dollars per euro. Its annual low of USD 1.0879 was reached on October 1, 2019. The euro picked up again during the fourth quarter of 2019 due to weak economic data, however, closing the year at USD 1.1213.

Share price performance



¹⁾ On March 4, 2020, STOXX Ltd. as administrator for the DAX indices announced to remove the SGL Carbon shares from the SDAX index effective March 23, 2020

Company and sector-specific factors lead to a decrease in the SGL Carbon share price

During the first four months of 2019, the share price of SGL Carbon moved in tandem with superordinate indices. Our share price reacted positively to the announcement of a framework agreement with Airbus Helicopters at the beginning of January. Our results for fiscal year 2018 and outlook for 2019, which we published on March 27, 2019, were also received positively, leading to a total increase in our share price of about 10%. Reception of our first quarter report issued on May 7, 2019, was slightly negative, while our half year report published on August 6, 2019, led to a slight increase of about 5% in our share price.

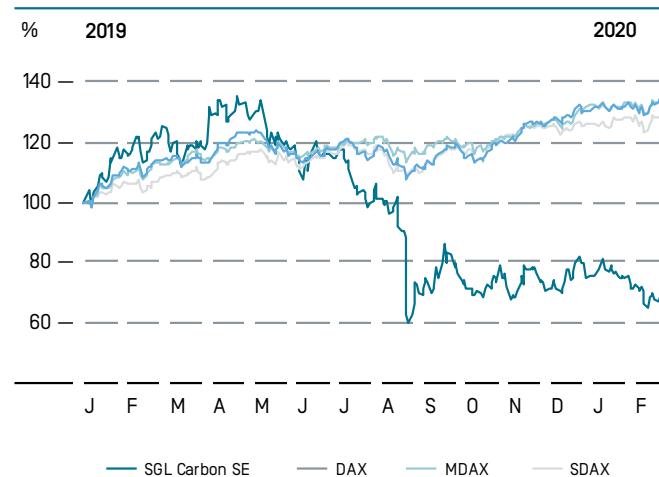
The ad-hoc announcement issued on August 14, 2019, concerning operational problems in our CFM business unit, particularly in the market segments Wind Energy and Industrial Applications, as well as the resignation of our CEO, led to a substantial decrease in our share price of approximately 30%. On October 25, 2019, we were once again forced to revise our forecast downwards due to a further deterioration in the performance of our CFM business unit in the market segments Textile Fibers and Industrial Applications, leading to a 10% decrease in our share price. In contrast, the announcement of our result for the first nine months on November 5, 2019, caused a mildly positive reaction on the capital markets.

The announcement on December 3, 2019, concerning our collaboration with Solvay to develop highly competitive, sophisticated carbon fiber composite materials for primary structures in aviation, as well as the subsequent announcement about a major order to supply components for fuel cells to our customer Hyundai, led to an overall increase in our share price of about 10%.

SGL Carbon shares recorded an annual low of €3.65 on August 16, 2019, while the annual high of €8.24 had already been reached on April 17, 2019. Accordingly, as a result of the factors mentioned above, our share price fell by a good 20% during 2019, closing the year at €4.74. The more than proportional decrease in our share price may also be attributed to the perception of SGL Carbon as an automotive supplier following the disposal of the steel and aluminum activities (former business unit Performance Products) and the complete acquisition of the two former joint ventures with BMW and Benteler. During the past two years, leading automotive suppliers have shown a sharp decrease in their share price comparable with that of SGL

Carbon, after adjustment for special items. In actual fact, however, only about 25% of our consolidated revenue is realized with the automotive industry, and even so, we do not serve the general automotive business. Most demand for our products in the automotive industry is driven by structural issues such as CO₂ reduction, which require solutions for lightweight construction and electric as well as fuel cell cars.

Relative share price performance



The major order for battery cases made from composite materials for a North American automobile manufacturer, which was announced on January 13, 2020 had little impact on SGL Carbon's share price.

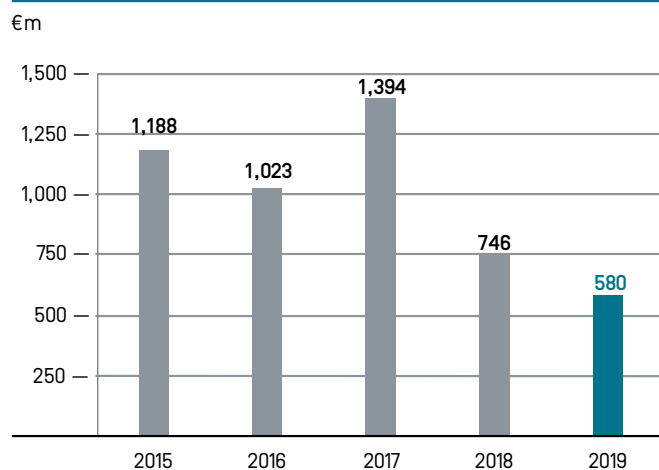
During the first weeks of 2020, SGL Carbon's share price fell by around 10% to €4.22 (as of February 14, 2020), in an overall stable trading environment.

Market capitalization and index ranking reflect decrease in share price

The market capitalization decreased during the course of 2019 in accordance with the negative development in our share price. After reaching €745.7 million in the previous year, market capitalization was down to €579.9 million at the end of the reporting period. As of December 28, 2019, the free float market capitalization of SGL Carbon SE was €258.9 million, which put the company in 168th place in the index rankings as calculated by Deutsche Börse AG, after coming in at 150th place in the previous year. 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 outstanding remained unchanged during the past year, at 122,341,478 shares.

Market capitalization



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:

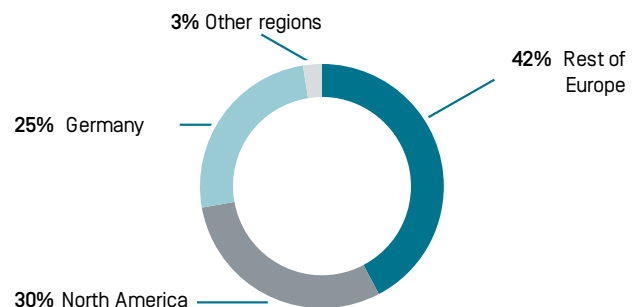
| | | |
|---------------|--------------------------------|--------|
| BMW AG | October 15, 2014 ¹⁾ | 18.44% |
| Volkswagen AG | February 6, 2018 ²⁾ | 7.41% |

¹⁾ Date of 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. On the other hand, this also 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 April 2019, the geographical distribution of institutional investors was as follows: about 25% of our shares are held by investors in Germany, 42% 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 2019, 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.

2019 Annual General Meeting

A total of 65.28% of the voting capital was represented at the Annual General Meeting of SGL Carbon SE on May 10, 2019 at the Kurhaus in Wiesbaden, Germany (2018: 67.52%). This equates to 79,859,272 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 then 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 on our website (www.sglcarbon.com, under “Company/Investor Relations” under the menu item “Annual General Meeting”). SGL Carbon SE’s next Annual General Meeting will be held on April 22, 2020 at the Kurhaus in Wiesbaden.

Intensive communication with the capital markets

As of the middle of February 2020, SGL Carbon shares were covered by a total of 12 German and international analysts (prior year: 11). One analyst issued an add recommendation, three analysts issued a sell, underperform, or underweight recommendation, and seven analysts issued a hold or neutral recommendation (as at mid-February 2020). The analysts’ investment recommendations reflected a broad spectrum of price targets. On February 14, 2020, our shares closed at €4.22; the analysts’ price targets ranged from €3.00 to €4.56.

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 |
| HSBC |
| Kepler Cheuvreux |
| Landesbank Baden-Württemberg |
| Oddo BHF (Bond research) |
| Société Générale |

¹⁾ As of February 14, 2020

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 continued to expand our investor relations activities in 2019, conducting more than 300 individual discussions with analysts and investors in Germany and abroad. Key issues of those discussions were operational problems in our

CFM business unit, particularly as a result of the earnings revisions published in August and October of 2019. New major orders from automotive customers and the development agreement with Solvay were also discussed thoroughly. Another topic of discussion was the good performance and sustainability of our GMS business unit, as well as planned capital expenditures and their financing.

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 11 roadshows in Germany and abroad in 2019. One of the other ways in which we provide capital markets participants with timely and comprehensive information is by holding conference calls during which SGL Carbon’s Board of Management elaborates on 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 there. 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 email distribution list.

Key data for SGL Carbon SE shares

| | |
|---|---|
| Trading venues | Xetra; Berlin, Dusseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart |
| German securities identification number (WKN) | 723 530 |
| International Securities Identification Number (ISIN) | DE 000 723 5301 |
| Stock index | SDAX (until March 20, 2020) |
| Market segment | Prime Standard |
| Reuters symbol: | |
| Xetra | SGCG.DE |
| Frankfurt | SGCG.F |
| Bloomberg symbol: | |
| Xetra | SGL GY |
| Germany | SGL GR |

Debt maturity profile extended

On April 10, 2019, SGL Carbon SE issued a senior secured corporate bond with a nominal value of €250.0 million and a five-and-a-half-year term until September 2024. Proceeds from the placement of the corporate bond were primarily used to re-finance existing liabilities and to extend our debt maturity profile. To that end, our convertible bond with a nominal value of €167 million set to mature in September 2020 was repaid early on July 29, 2019, at its nominal value plus accrued interest.

Overview of SGL Carbon SE bonds

Before it was repaid early on July 29, 2019, the price of our convertible bond 2015/2020 oscillated in a narrow range in the vicinity of its nominal value.

In contrast to our share price, the development of the price of our corporate bond issued at nominal value in April 2019 was only slightly negative, closing the year at 98.2% of its nominal value. In addition, despite the decrease in our share price, the price of our convertible bond 2018/2023 had fallen only slightly by the end of 2019, closing the year at 83%. Like our corporate bond, our convertible bond also benefitted from the low-interest environment.

During the first weeks of 2020, the prices of our corporate bond 2019/2024 and our convertible bond 2018/2023 showed little change compared to the end of 2019.

Corporate bond

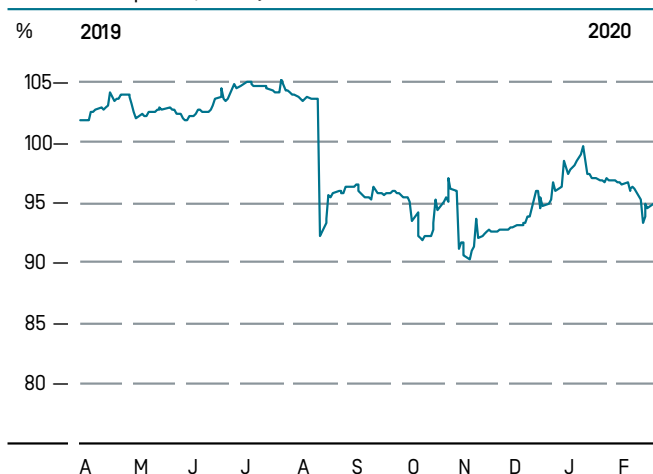
| WKN | ISIN | Coupon | Maturity date |
|--------|--------------|--------|--|
| A1X3PA | XS1945271952 | 4.625% | September 30, 2024 (issued on April 10, 2019) |

Convertible bonds

| WKN | ISIN | Coupon | Maturity date |
|--------|--------------|--------|---|
| A168YY | DE000A168YY5 | 3.5% | September 30, 2020 (repaid early on July 29, 2019) |
| A2G8VX | DE000A2G8VX7 | 3.0% | September 20, 2023 |

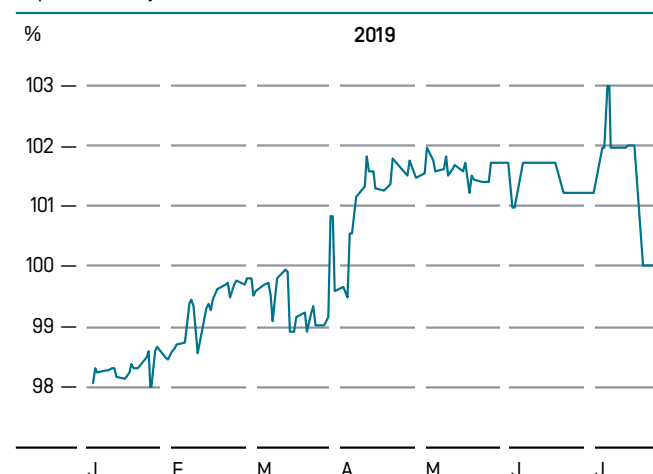
Performance of company bond

(matures September 30, 2024
issued on April 10, 2019)

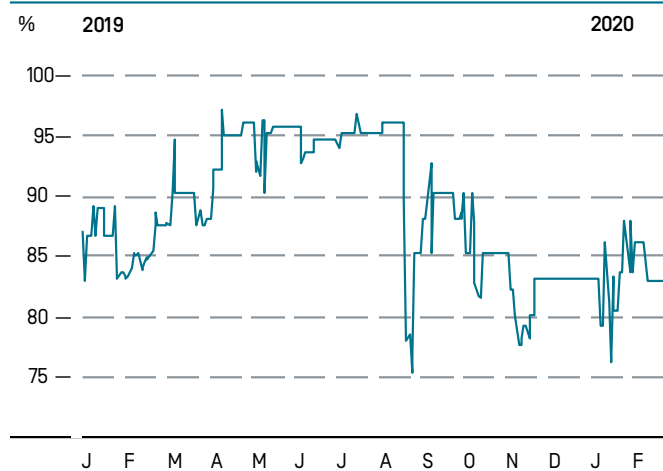


Performance of convertible bond

(matures September 30, 2020
repaid on July 29, 2019)



Performance of convertible bond
[matures September 20, 2023]



**For further information on SGL Carbon,
our shares and bonds**

Please contact our Investor Relations department:

Söhnleinstrasse 8
65201 Wiesbaden/Germany

Phone: + 49 611 6029-103
Fax: + 49 611 6029-101

Email: Investor-Relations@sglcarbon.com

Or visit the Investor Relations section of our website
[www.sglcarbon.com].

We look forward to hearing from you!

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The fiscal year 2019 developed very differently in the two business units. The record result in the graphite specialties business could not fully compensate for the weak development in the market segments Wind Energy, Textile Fibers and Industrial Applications in the carbon fiber business.

While consolidated revenue was up by around 4% to €1,087 million, consolidated EBIT before non-recurring items was down by around 25% to €48 million.

The issue of a new corporate bond and the early redemption of the 2015/2020 convertible bond has significantly improved our maturity profile.

New orders, especially from the automotive industry in both business units, as well as the development cooperation with Solvay in the aerospace sector secure the medium-term growth potential.

With this Group Management Report we provide detailed information on the business development and its underlying conditions in the reporting period and give 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 included in the Prime Standard market segment and are member of the SDAX index of Deutsche Börse (German stock exchange) until March 20, 2020. SGL Carbon comprises SGL Carbon SE, the management holding company, together with its subsidiaries (a detailed overview of shareholdings of SGL Carbon SE can be found in [Note 32](#)).

Business activities and organizational structure

SGL Carbon is a globally active company with a total of 5,127 permanent and temporary employees at the end of 2019. We operated a total of 29 production facilities as of the balance sheet date, of which 16 are located in Europe, eight in North America and five in Asia. We operate two of these production facilities together with our joint venture partner Brembo in the business unit Composites – Fibers & Materials (CFM). With a service network in more than 80 countries, we can accommodate the regional and industry-specific requirements of our customers.

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.

The fiscal year 2019 developed very differently in the two business units. While the business unit Graphite Materials & Systems (GMS) was able to post further organic growth to new record levels both in terms of sales revenue and earnings, the business unit Composites – Fibers & Materials (CFM) suffered from the pronounced weakness in earnings in the market segments Textile Fibers and Industrial Applications, which are strongly driven by the overall economic development. In addition, the market segment Wind Energy was burdened by an unfavorable product mix and the declining German market due to subsidy cuts. In contrast, we were able to make significant progress in our strategic growth market segments Automotive and

Aerospace, up to the point of winning significant new and follow-up orders. This success confirms our strategy to command the entire value chain.

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 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 promising structural growth markets, such as the fuel cell industry, LED and semiconductor industries, as well as multi-industry applications for lightweight construction.

After the acquisition of the joint ventures with BMW and Benteler and the sale of SGL Kämpfers in 2017 and 2018, SGL Carbon now only holds select participating interests in companies together with other shareholders. Some of these companies (e.g., SGL Quanghai Carbon) are fully consolidated and included in the results of their respective segments. In addition, we have a material investment accounted for 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 the 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.

The business models of our business units

Business unit Composites - Fibers & Materials (CFM)

The reporting segment [Composites - Fibers & Materials \(CFM\)](#) 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 low weight and high stiffness. We focus, in particular, on customers from the automotive, aerospace, wind energy and other industries.

We completed our value chain and in particular reinforced our market position in the automotive segment with the acquisition of SGL ACF and the former Benteler SGL. 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 BMW 7-series. The acquisition of the former Benteler SGL has completed the value chain and strengthened our component manufacturing capabilities. Here we primarily develop and produce fiber-reinforced plastic components for the automotive industry with the aim of promoting the use of fiber composite components in the automotive industry.

Our approach of developing tailored solutions based on our integrated value chain offers added value for automotive customers. This is confirmed by 18 new orders since the beginning of 2018. Particularly noteworthy in this context is the major order for composite battery cases announced in January 2020 from a North American automobile manufacturer, which will be supplied from the end of 2020. The battery housing, which usually takes up the most space in the underbody, is an important element of any electric vehicle chassis platform. In addition to the low weight, other very specific requirements apply. Battery cases, for example, must have high rigidity to support the driving dynamics. In addition, the material must protect the underbody from puncture, contribute to optimized thermal management, offer excellent fire protection and meet water and gas

tightness requirements. Composites meet this broad requirement profile much better than any other material.

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 (<http://www.carbonceramic-brakes.com>; Link unaudited).

In order to accelerate our growth in the highly attractive and high-volume aerospace market, we signed a joint development agreement with the international chemical group Solvay in fiscal year 2019. The aim is to offer fiber composites based on large-tow carbon fibers for the aerospace industry for the first time. These materials, which are based on SGL Carbon's Large-Tow-IM (Intermediate Modulus, IM) carbon fibers and Solvay's resin systems for primary structures, enable weight reductions that lead to lower fuel consumption and CO₂ emissions at lower costs and higher production efficiency than with other carbon fibers.

The agreement covers technologies with thermoset and thermoplastic composites. The cooperation is based on SGL Carbon's expertise in the large-scale production of carbon fibers and Solvay's competence as a supplier of advanced materials for the aerospace industry. Together, the two partners intend to press ahead with the development of an advanced material system for aerospace.

Fiber-reinforced composites in aerospace are a market worth billions, which will grow strongly in the coming decade. We expect that SGL Carbon and Solvay together are very well positioned to develop suitable solutions to meet this market's needs.

As industrial applications for composite materials are still in their infancy, we permanently develop processes and methods in our Lightweight and Application 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 so-called polyacrylonitrile [PAN] precursors, can then be further processed to carbon fibers. We will secure the future supply of PAN precursor in our Portuguese facility. By further conversion of 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].

Business unit Graphite Materials & Systems [GMS]

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. Revenues in the business unit GMS are primarily generated with customers in the semiconductor, LED and solar industries as well as the battery and fuel-cell and chemicals industries and also the automotive and transport sector and 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. Gas diffusion layers are an essential component of a fuel cell. 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 products and solutions for the chemical and pharmaceutical industries and the environmental sector, particularly with graphite heat exchangers, distillation devices, pumps and systems.

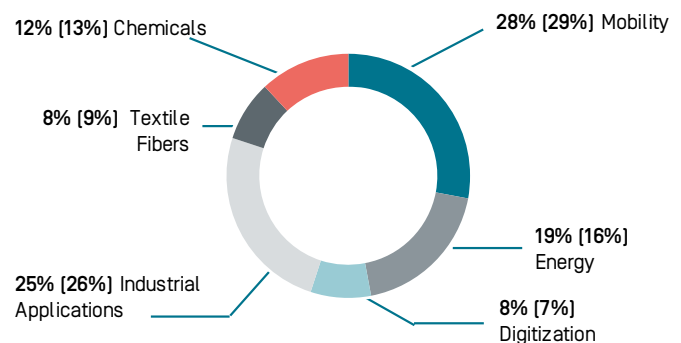
In fiscal year 2019, business with gas diffusion layers for fuel cells was transferred from the central research department Central Innovation to the business unit GMS in order to accelerate commercialization against the background of the major order agreed between SGL Carbon and Hyundai Motor Group, which provides for a multiplication of the current production and delivery volume to support Hyundai's goals in the area of fuel cell propulsion. Furthermore, additional customer relationships are to be developed. In the medium term, we plan to more than quintuple our sales of fuel cell components - to around €100 million annually.

The main 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.

Major sales markets

Sales revenue by market segments 2019 [2018] [Group]



The mobility market segment (automotive & transport, aerospace) continues to be the largest market segment in the Group at 28% of revenues (previous year: 29%), followed by industrial applications at 25% (previous year: 26%). The third largest customer segment is the energy industry (includes, in particular, the sectors batteries & other energy, wind energy and solar) which accounts for an increased share of revenues of 19% (previous year: 16%). The increase is primarily due to the significant rise in the wind energy business in 2019, compared to the previous year which was dominated by the sale of our share in the former joint venture with Kumpers in the same market segment. There was a slight downturn in revenues with the chemicals industry at 12% (previous year: 13%) and textile fibers at 8% (previous year: 9%). As a result of the strong growth, the proportion of sales revenues from digitization (semiconductor and LED industries) increased to 8% compared to 7% in the previous year.

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

Targets and strategies

Financial targets

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

ROCE_{EBIT}¹⁾ min. 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:

| | |
|--|------------------------------------|
| <u>Leverage ratio²⁾</u> | <u>≤ 2.5</u> |
| <u>Equity ratio</u> | <u>≥ 30%</u> |
| <u>Sales growth CAGR³⁾</u> | <u>medium to high single digit</u> |
| <u>Consolidated net result - continuing operations</u> | <u>Positive</u> |
| <u>Free cash flow</u> | <u>Positive</u> |
| <u>Return on sales of the BUs based on EBIT before non-recurring items</u> | <u>≥ 12%</u> |

²⁾ Net financial debt to EBITDA before non-recurring items

³⁾ Based on the period 2020 - 2024

Growth strategy

After a one-off downturn in 2020 we aim for sustainable revenue growth through to 2024

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 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 two business units CFM and GMS operate in markets of varying maturities. Our business unit CFM 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 trendsetting projects during the past

twelve months, development periods mean that these will only be materially impacting sales revenue and earnings over the medium to long-term. The cooperation with the international chemical group Solvay announced in December 2019 will accelerate our growth in the highly attractive and high-volume aerospace market in the medium to long term.

Our business unit GMS 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 revenue growth and profit targets. After a temporary decline in 2020 due to changes in the supply chain for anode material for lithium-ion batteries, GMS will resume its accustomed growth path from 2021. Additional growth drivers are fuel cell components following the recently awarded major order from Hyundai Motor Group.

As a result, we are confident that consolidated sales revenues will be able to grow by a medium to high single digit percentage rate per year between 2020 and 2024, 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 to reach our Group ROCE target.

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 SGL OMS we aim to streamline processes, increase efficiency, and ensure highest product quality. Since the end of 2019 - and thus earlier than planned - all of our local sites are be managed using uniform standards and KPIs.

An additional group-wide program called "Business Process Excellence (BPX)" has been running since 2015. This program aims to 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.

In addition to these group-wide measures, the divisions are also continuously developing projects to improve efficiency, especially in the business unit CFM. These are described as part of the segment reporting.

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 (unaudited).

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 related

target/actual comparisons, as well as gap analyses. Furthermore, steering committees 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 business performance of these activities may 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 energy 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 unit "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 sales revenue with new and improved products over the medium to long term, and to improve our cost situation. The development portfolio comprises both products and technical processes 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 72 employees at the end of 2019 (2018: 89) in the Central Innovation department.

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.

As a result, additional weight savings are possible in vehicles or in aerospace, thus cutting fuel consumption and CO₂ 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, we were able to successfully extend a long-term supply contract with Hyundai, thus securing the expansion of our fuel cell components business for the long term. As a result of the successful commercial development, the business with fuel cell components was transferred from Central Innovation to the business unit GMS during 2019.

In the year under review we continued to strengthen our research and development work in the future growth areas defined in 2015. In the additive manufacturing area (“3D printing”) we continued our projects with development partners and delivered the first components for application. In the future growth area “future composites” we continued our work on the use of carbon fibers in the construction industry and new types of composites in hybrid materials construction. These materials allow us to integrate new functions in components or to significantly simplify production chains, thus cutting costs. In the future growth area future coatings and textiles 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 2019 we continued to further drive the protection of our technology know how 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 48 diploma students, interns and student trainees in 2019 [previous year: 61].

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 Composites United e.V., which was formed in 2019 from a merger between Carbon Composites e.V. (CCeV) and CFK Valley e.V. This association of companies and research institutions spans the entire value chain for high-performance composite materials in Germany, Austria and Switzerland and fosters and maintains other international relationships and alliances with similar organizations, for example in Belgium and South Korea.

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 only grew moderately by 2.9% in 2019. The original IMF forecast in January 2019 was +3.5%. As a result of the intensification of the trade conflict between the USA and China, uncertainty increased in all regions and world trade weakened. In the industrialized nations, production collapsed and investment activity was restrained. According to the IMF, industrialized nations grew by only +1.7%, which is weaker than forecast (+2.0%). In the emerging and developing nations, too, economic growth in 2019 was below expectations (+4.5%) with a plus of 3.7%.

The global economy weakened as a result of escalating trade conflicts

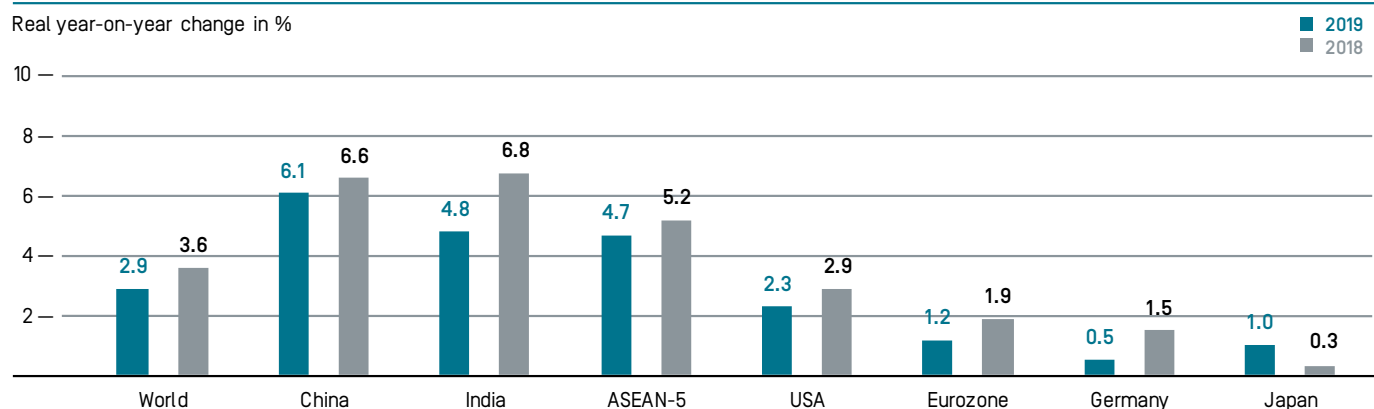
After the strong impulses of the tax reform in the USA in 2019 started to fade, the domestic economy has lost momentum. Exports also came under pressure from trade conflicts and weak world markets. Industrial production has declined and capacity utilization has decreased. The economy was primarily supported by private consumption and higher government

spending. At the end of July, the US Federal Reserve (FED) completed the turnaround on interest rates and lowered key rates three times by the end of October.

In the euro zone, economic expansion continued to flatten out. Although the consumer-related and service sectors as well as the construction industry remained on the upswing, the willingness to invest remained very low due to the lack of international impetus and increased uncertainties. The ECB's monetary policy continued to be expansive and fiscal policy impetus from several governments, as well as high employment, were able to support domestic demand. In 2019, production in the export-oriented industry slumped, especially in Germany.

China's economy suffered from the trade conflict with the USA and weak exports. However, given the already very high level of debt, the new support measures were limited compared with previous packages. Nevertheless, industrial production and investment remained robust. All in all, the pace of economic expansion flattened slightly again. India's economy faltered considerably as a result of massive liquidity problems at the shadow banks that are important for the domestic economy. In Southeast Asia (ASEAN-5), growth flattened out despite high infrastructure investments due to the burdens placed on exports. Russia and Brazil again enjoyed moderate growth in 2019.

Gross domestic product in 2019 [2018] at a glance



Source: IMF, World Economic Outlook (Update) from January 2020

Development of key customer industries

Market segment mobility

Automotive industry 2019 worldwide with slump in sales, however SGL Carbon is in a future-oriented niche with graphite specialties and composites

The technological upheaval in the automotive industry is continuing at full speed. Global economic weakness and trade conflicts also depressed this segment. This put the industry under even greater pressure in 2019 than in the previous year. According to LMC Automotive's industry researchers, global sales slumped 4.4% to 90.3 million light vehicles, with downturns in almost all regions. In particular in China, the largest single market, sales volumes fell significantly [-8.3%]. Demand was also weak in the rest of Asia. Relatively small declines were recorded in the USA [-1.4%]. According to the industry association ACEA, sales in Western Europe actually rose moderately by 0.7% to 14.3 million passenger cars. In order to reduce the emissions of passenger cars and commercial vehicles with combustion engines, weight reduction through lightweight construction plays an important role, also with the help of carbon fibers and composite materials. The development of cars with alternative drive systems was pushed forward across the board. The development of innovative components for these vehicles offers us excellent opportunities. Our activities on the automotive market are well positioned. In 2019 we acquired, for example, orders for battery cases for electric cars and for components for fuel cell cars.

Aerospace: Constantly growing demand for lightweight construction solutions in aerospace

In lightweight aerospace construction carbon fibers and carbon composites (CC) are already well established. As one of our primary customers, the aerospace industry demands more than a third of all CC quantities produced. Commercial aviation is the most important source of inspiration. The models Boeing B787 [Dreamliner] and Airbus A350 XWB are mostly built of CCs. The smaller volume models also use CC in several assemblies. Airbus estimates that global air traffic is growing at a good 4% per year. To this end, airlines are expanding their fleets and modernizing part of their aircrafts. Our current focus in the aerospace CF business is on non-structurally relevant niche applications [components/elements in cabin interiors, 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. Our aerospace business in 2019 was

characterized by new orders and the postponement of invoicing for a project until fiscal year 2020 as well as the newly agreed development alliance with the international chemical group Solvay, which should significantly accelerate our access to the attractive aerospace market.

Market segment energy

Lithium-ion batteries: More moderate growth than in the recent past - China's subsidy cut in mid-2019 put the brakes on e-cars

In 2019, the growth in demand on the two previously dominant end markets (information technology and automotive) for lithium-ion (Li-ion) batteries is likely to be below that of previous years. Due to the high demand for powerful large batteries for electric cars, the automotive industry requires by far the largest volumes of Li-ion batteries. However, according to the InsideEVs industry forum, global sales of electric cars (including hybrids) in 2019 has only increased by 10% to 2.21 million units after a subdued second half of the year. In China, the largest single market, the high government subsidies for the purchase of battery-powered electric cars expired in mid-2019. According to a preliminary estimate by Gartner market researchers, sales of end devices in consumer and business electronics (IT), the second largest Li-ion market, fell by 3.7% in 2019. Sales of high-volume smartphones without major technical innovations in 2019 dropped by 3.2%. In contrast, classic PC sales grew for the first time in years despite bottlenecks for processors [Gartner: +0.6%]. This was driven by the switch to Windows 10 for business PCs. Sales of small portable devices such as Smartwatches increased by 25%. Our business with the Li-ion battery industry is currently still dependent on a few individual customers.

Fuel cells: Attractive technology comes back into focus

Local emission-free mobility is currently dominated by battery-powered electric vehicles (see above). However, in the medium term, regeneratively produced hydrogen and fuel cells will also be of great importance. With the appropriate infrastructure, they enable fast refuelling and attractive ranges. New initiatives by various manufacturers are now driving development forward again. In addition, stationary fuel cells are also important for the energy turnaround. According to the specialists from Global Market Insights, sales on the entire world market for fuel cells likely grew at double-digit rates in 2019, with an average annual growth rate of 12%. Thanks to our high level of expertise in fuel cell components, we have benefited from this as a renowned partner to manufacturers.

Wind industry: Renewed international upswing

Wind energy continues to gain ground worldwide, even though the market environment in many countries is becoming increasingly subsidy-free and the intensity of competition on the manufacturing side has further increased. Low auction prices squeeze their margins. Market concentration thus continued. In spite of this, according to a preliminary estimate of Global Wind Energy Council (GWEC), new turbines with a capacity of 65.4 GW [+27.5%] were installed in 2019. The total capacity of all plants in operation thus grew to around 656 GW worldwide. The sector remained under pressure in the formerly strong wind countries Germany and India. This was more than offset by high growth in the USA and in new wind countries Latin America and South East Asia. In addition to the global expansion of onshore wind energy [2019: +23%], the offshore market is becoming increasingly important [2019: +47%]. The wind turbines designed for this purpose have particularly large rotor blades with very high technical material requirements. This business is still highly specific and dependent on individual projects. Following the temporary weakness resulting from the withdrawal from a joint venture with which we had previously served the wind industry, we sold significantly higher volumes - albeit at lower margins - to the wind energy industry in 2019.

Solar/Polysilicon: New record-breaking PV installations in 2019 - polysilicon producers must further expand capacities

The photovoltaic industry (PV) is by far the most important user of polysilicon, accounting for around 80% of this market. Despite the US trade restrictions against China, the global PV market has returned to a double-digit expansion path, according to industry experts at IHS Markit. Accordingly, a new record volume for new installations of approx. 125 GW was reached in 2019. This was an increase of about 21% and was driven by the extreme growth outside China of 53%. Falling module prices are stimulating demand worldwide. There was also tailwind on the US market, as many projects were implemented at an accelerated pace before tax benefits (30% ITC) were abolished. Structurally, the PV market is supported by the internationally accelerated efforts to transform the energy system. Since upstream polysilicon production is very capital intensive, manufacturers typically invest in large scale plants ahead of time. The GMS business unit serves this cyclical market, which is nevertheless enjoying strong growth in the long run, with a large number of products and solutions.

Market segment digitization

Semiconductors/polysilicon: Significant dent in production in 2019 and restrained capital expenditure; however, SGL Carbon achieves double-digit growth due to high demand for electromobility and 5G mobile technology

The semiconductor industry is the second largest customer group for polysilicon. As a result of the US-China trade conflict, a massive drop in memory prices and flatter growth for key end applications (smartphones, PCs), the market collapsed in 2019. The industry association World Semiconductor Trade Statistics (WSTS) estimates that worldwide sales of semiconductors have shrunk by 12.8%. Market researchers at Gartner put the slump in 2019 at 11.9%. While the markets for optoelectronic components and sensors grew slightly, the most important sub-market by far, integrated circuits, suffered declines in all product segments. Storage facilities were under particularly strong pressure with a drop in sales of more than 30%. According to WSTS and Gartner, their share of the total semiconductor market thus fell from one third to one quarter. According to the SEMI industry association the investment market for production lines and equipment for the semiconductor industry fell in 2019 by 10.5% to almost USD 58 billion, after record-breaking levels in the previous year. With its product range, SGL Carbon serves in particular the double-digit growth wide-bandgap market and was therefore able to significantly expand its business. Wide-bandgap semiconductors are characterized by a high breakdown voltage and a high temperature range. They have low losses and can handle voltages of several kilovolts and highest frequencies. These properties mean that wide-bandgap semiconductors are particularly suitable for applications in electromobility and 5G mobile phone technology.

LED: Uninterrupted dynamic growth on the end market - impetus for example from micro-LEDs

While the turnover of the entire lighting market (private, commercial, industrial, public) is growing steadily worldwide by slightly more than 4% per year, the volume of the LED market is growing by about 16% per year according to previous forecasts (Technavio). The rate of expansion is very high, for example in street lighting (2019: +24.3%). In addition to the boom in lighting, LEDs are also becoming increasingly popular in infrared technology and consumer electronics. The innovative sub-market of micro-LEDs for TV sets alone grew by 19.6% in 2019. The automotive industry is also an important user with increasing use of LEDs in vehicles. According to TrendForce, this sub-market has therefore grown moderately in 2019, contrary to weak overall vehicle production in 2019. The LED industry is benefiting from the increasing variety of applications and is currently investing heavily in establishing capacities for micro

LEDs. We have an excellent position on the LED value chain with our graphite-based susceptors for silicon epitaxy.

Market segment chemicals

Weaker production growth worldwide - environment for investment depressed, focus on modernization

The German chemical industry association VCI (Verband der Chemischen Industrie) estimates that global production in the chemicals and pharmaceuticals sector grew by 3.0% in 2019 (previous year: +3.9%). The weaker global industrial economy, especially in the automotive industry, has dampened growth in this sector. Regionally, the picture in 2019 was very heterogeneous. The largest production growth was recorded in China (+5.5%) and Russia (+6.5%). In the USA, the industry hardly grew at all (+0.5%). Chemical output fell in Japan, South Korea and Brazil. In the EU production recovered, up by an anticipated 3.0% (previous year: +1.8%). However, this was exclusively attributable to pharmaceuticals (+8.0%). Production in the industrial chemicals sector shrank by -1.0% (previous year: -0.6%). Germany's chemical production even slumped by 7.5%, a very significant drop. Both pharmaceutical production [-16.5%] and industrial chemistry [-2.5%] were under pressure, especially in polymers and fine and specialty chemicals. In this environment, the willingness to invest in new equipment or in maintenance and modernization activities was low. This had a corresponding impact on our business performance.

Key events during the fiscal year

Issue of a new corporate bond

In April 2019, SGL Carbon SE placed a €250 million senior secured corporate bond with a term through to September 2024 (the "Corporate Bond") and an interest coupon of 4.625% p.a. The proceeds from the issue together with available cash were used to repay financial liabilities and to settle the transaction costs of the corporate bond.

Repayment of financial liabilities

In July 2019, the 2015/2020 convertible bond was fully prematurely repurchased in July 2019 with the liquid funds from the corporate bond issued in April 2019. The early repayment of the

convertible bond led to a negative effect on earnings in the financial result of € 6.3 million in fiscal 2019.

At the end of June 2019, the BMW Group's previous loans to SGL Composites US amounting to € 87.6 million were repaid completely.

Impairment tests

In August 2019, the reporting segment Composites - Fibers & Materials (CFM) showed significant deviations from our expectations in the market segments Wind Energy, Textile Fibers and Industrial Applications. As a result, we accelerated the preparation of a new five-year plan. This triggered an event-driven impairment test for each of the two cash-generating units (CGU) Carbon Fibers & Composite Materials (CF/CM) and Composites DE (SGL ACF). The impairment test revealed solely for CF/CM a shortfall in the recoverable amount over the carrying amount of the net assets allocated to the CGU. An impairment loss was required in the amount of € 74.7 million on other intangible assets, buildings, technical equipment and machinery as well as other property, plant and equipment. The non-current assets of the former joint ventures with BMW (SGL ACF) and Benteler, acquired in recent years, were not affected by the impairment.

In connection with the impairment test, the related deferred tax assets were also tested for impairment, which resulted in a valuation allowance of € 7.4 million on deferred tax assets in the United Kingdom and in Germany.

For detailed information on the impairment loss, please refer to the notes to the consolidated financial statements.

New IFRS 16 accounting standard

As of January 1, 2019, SGL Carbon adopted the new accounting standards in IFRS 16 (Leases) and changed its accounting policies. In accordance with the transition method we have chosen under IFRS 16, there is no adjustment to prior periods. Consequently, in fiscal 2019, the changes in consolidated net income, assets and liabilities and cash flow year-on-year will be affected by the new accounting policies.

The first-time adoption in accounting policies from IFRS 16 as of January 1, 2019 had the following impact:

- The capitalization of right of use assets increased property, plant and equipment by €36.9 million and current assets by €1.4 million,
- Financial liabilities increased by €38.2 million due to the recognition of leasing liabilities. Of this amount, €28.9 million related to non-current liabilities and €9.3 million to current liabilities,
- Equity increased by €0.1 million.

In fiscal 2019, we recorded amortization on right of use assets in the amount of €8.7 million and imputed interest expenses for lease liabilities in the amount of €1.2 million in our consolidated income statement.

IFRS 16 also affects the structure of SGL Carbon's cash flow statement. While cash flow from operating activities and free cash flow increased, cash flow from financing activities fell by € 8.7 million respectively.

For details and further transition effects in the opening balance sheet, see the notes to the consolidated financial statements.

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.

| | 2019 | 2018 |
|--|----------------|----------------|
| Operating profit/loss (EBIT) | -34.3 | 80.9 |
| Plus / minus: restructuring expenses | -0.7 | 0.9 |
| Plus: Impairment / less: reversal of impairment and PPA-Effects | 83.4 | -17.2 |
| Operating profit/loss (EBIT) before non-recurring items | 48.4 | 64.6 |
| Plus: amortization/depreciation expense on other intangible assets and property, plant and equipment | 71.6 | 62.6 |
| EBITDA before non-recurring items | 120.0 | 127.2 |
| Capital Employed¹⁾ | | |
| Capital employed as of 31.12. of the prior year | 1,244.5 | 896.0 |
| Plus: IFRS adoption | 36.9 | 19.9 |
| Plus: changes in scope of consolidation | 0.0 | 250.5 |
| Adjusted capital employed as of 31.12. of the prior year | 1,281.4 | 1,166.4 |
| Adjusted capital employed as of 31.12. of the financial year | 1,219.8 | 1,244.5 |
| Average capital employed²⁾ | 1,250.6 | 1205.4 |
| ROCE _{EBIT} ³⁾ | 3.9% | 5.4% |
| ROCE _{EBITDA} ⁴⁾ | 9.6% | 10.5% |

¹⁾ 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

²⁾ 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

³⁾ EBIT before non-recurring items to average capital employed

⁴⁾ EBITDA before non-recurring items to average capital employed

What follows is a comparison of the outlook for fiscal 2019, as originally published in the 2018 annual report, with the actual results for the year under review.

| Outlook for 2019 as published in 2018 Annual Report | Actual for fiscal year 2019 | Target met |
|---|---|------------|
| Increase in sales revenue in mid-single-digit percentage range year on year | Increase in sales revenue of 4% to prior year | ✓ |
| EBIT before non-recurring items on prior-year level | EBIT before non-recurring items: €48 million (2018: €65 million) | - |
| ROCE _(EBIT) before non-recurring items on prior year level | ROCE _(EBIT) of continuing operations at 3.9% (2018: 5.4%) | - |
| Consolidated net result to break even | Consolidated net result from continuing operations at minus €90 million (2018: €50 million) | - |
| Increase in net financial debt in mid-double-digit million euro range | Net financial debt at €288.5 million (2018: €242.2 million) | ✓ |
| Capital expenditure of about €100 million | Capital expenditure at €95 million (2018: €78 million) | ✓ |

Sales revenue increases by 4%

Sales revenue from continuing operations increased by 3.7% to €1,086.7 million (2018: €1,047.5 million). Our GMS reporting segment recorded above-average sales revenue growth, while CFM sales revenues only increased slightly.

EBIT and EBITDA before non-recurring items, and ROCE_{EBIT} decrease

EBIT before non-recurring items fell by 25% to €48.4 million in the year under review, down from €64.6 million in the previous year, while EBITDA from continuing operations decreased by 5% to €120.0 million, down from €127.2 million. Both figures fell more noticeably than forecasted at the beginning of the year. This is due to the fact that the good performance seen in our GMS reporting segment was unable to compensate for the weaker performance in our CFM reporting segment. Accordingly, ROCE_{EBIT} from the continuing operations of SGL Carbon fell from 5.4% to 3.9%.

Result from continuing operations falls sharply

Particularly due to the absence of the positive non-recurring items seen in the previous year, resulting from the fair value adjustment of joint operations that were previously proportionally consolidated, and to the impairment loss recorded for CFM during the current fiscal year, the consolidated net result decreased from €41.3 million in the prior-year period to minus €90.0 million in the year under review.

Capital expenditure increases

At €95 million, capital expenditure for intangible assets and property, plant and equipment corresponded to the forecast of about €100 million. Further details can be found in the section on capital expenditure, depreciation and amortization.

Net financial debt increases due to capital expenditure

As anticipated, net financial debt increased by €46.3 million to €288.5 million. The increase was primarily the result of the negative free cash flow from continuing operations of minus €17.3 million stemming from increased capital expenditure, as

well as a €9.4 million settlement with the acquirer of our Aerostructures business as part of discontinued operations, and costs incurred for the issue of our corporate bond.

Financial performance of the Group

Income statement

| €m | 2019 | 2018 | Change |
|---|--------------|--------------|--------------------|
| Sales revenue | 1,086.7 | 1,047.5 | 3.7% |
| Cost of sales | -870.2 | -827.9 | -5.1% |
| Gross profit | 216.5 | 219.6 | -1.4% |
| Selling expenses | -108.6 | -100.2 | -8.4% |
| Research and development costs | -36.8 | -33.0 | -11.5% |
| General and administrative expenses | -43.7 | -54.5 | 19.8% |
| Other operating income/expense | 5.6 | 15.9 | -64.8% |
| Result from investments accounted for At-Equity | 15.4 | 16.8 | -8.3% |
| Operating profit/loss (EBIT) before non-recurring items | 48.4 | 64.6 | -25.1% |
| Restructuring expenses | 0.7 | -0.9 | > 100% |
| Impairment loss / reversal of impairment and PPA-Effects | -83.4 | 17.2 | > - 100% |
| Operating profit/loss (EBIT) | -34.3 | 80.9 | > - 100% |
| Financial result | -38.9 | -29.6 | -31.4% |
| Result from continuing operations before income taxes | -73.2 | 51.3 | > - 100% |
| Income tax expense | -16.2 | -0.6 | > - 100% |
| Non-controlling interests | -0.5 | -0.4 | -25.0% |
| Consolidated net result - continuing operations | -89.9 | 50.3 | > -100% |
| Result from discontinued operations, net of income taxes | -0.1 | -9.0 | 98.9% |
| Consolidated net result (attributable to the shareholders of the parent company) | -90.0 | 41.3 | > - 100% |
| Earnings per share, basic (in €) | -0.74 | 0.34 | > - 100% |
| Earnings per share continuing operations, basic and diluted (in €) | -0.74 | 0.41 | > - 100% |

Sales revenue increases

Sales revenue generated by the continuing operations of SGL Carbon increased slightly by €39.2 million, or 3.7%, year on year. The average exchange rates of the US dollar and Japanese yen increased year on year in 2019, with currency differences positively impacting our sales trend to the tune of €23 million. Adjusted for those positive currency effects, sales revenue rose by 1.6%. This increase in revenue was primarily realized via price increases at individual customers. Increases in production volumes only made a slight contribution to the increase in sales revenue.

Sales revenue by region: Europe remains largest sales market

SGL Carbon's business activities continued to focus on Europe (€530.3 million; share in sales: 49%), in which Germany continued to be the largest individual market, with sales revenue of

Sales revenue by region

| €m | 2019 | Share | 2018 | Share | Change |
|-----------------------------|----------------|---------------|----------------|---------------|---------------|
| Germany | 341.0 | 31.4% | 358.4 | 34.2% | - 4.9% |
| Europe excluding Germany | 189.3 | 17.4% | 193.4 | 18.5% | - 2.1% |
| USA | 158.6 | 14.6% | 156.2 | 14.9% | + 1.5% |
| Asia | 350.5 | 32.2% | 291.8 | 27.8% | + 20.1% |
| Rest of world ¹⁾ | 47.3 | 4.4% | 47.7 | 4.6% | - 0.8% |
| Total | 1,086.7 | 100.0% | 1,047.5 | 100.0% | + 3.7% |

¹⁾ Latin America, Africa, Australia

€341.0 million, equating to a decrease in its share in sales to 31% (2018: 34%). Asia continues to be the Group's second-most important sales region, with the region's share in sales increasing significantly to 32% (2018: 28%). Sales revenue in the USA increased slightly year on year only due to currency translation effects. Its share in sales remained at 15% (2018: 15%), due to the increase in consolidated group revenue.

The restrained sales trend seen in Germany resulted mainly from lower sales revenue with domestic automotive manufacturers. The continued increase in sales revenue from Asia resulted from higher sales revenues from the wind energy sector in our CFM reporting segment.

Gross margin decreases slightly

Cost of sales increased more than proportional to sales revenue. 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. Consequently, the gross margin of sales decreased to 19.9% during the period under review (2018: 21.0%). The improvement to the gross margin in our GMS reporting segment did not offset the decrease in the gross margin in our CFM reporting segment. In absolute terms, however, overall gross profit remained more or less constant at €216.5 million, compared to €219.6 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 only slightly by 0.7% year on year, to €189.1 million (2018: €187.7 million). Consequently, such costs increased considerably less than sales revenue.

The 8.4% increase in selling expenses to €108.6 million (2018: €100.2 million) was particularly due to higher delivery volumes to Asia with higher freight costs.

Research and development expenses amounted to €36.8 million in fiscal year 2019 (2018: €33.0 million). The increase year on year was due to projects for the development of carbon fibers and 3D printing processes. Further details concerning our research and development projects can be found in the chapter of the Management Report titled “Central Innovation – Highlights from our development areas”.

General and administrative expenses decreased noticeably by 19.8% to €43.7 million in fiscal year 2019, down from €54.5 million in the previous year. The decrease was particularly caused by noticeable decreases in expenses for management incentive plans and cost savings.

Other operating income and expenses

Other operating income and expenses that cannot be attributed to functional costs equated to net income of €5.6 million in fiscal year 2019 (2018: net income of €15.9 million). Foreign currency effects resulted in a net expense of €0.4 million in 2019 (2018: net income of €1.7 million). In contrast, net income for the year comprised income from government grants for projects of €3.6 million (2018: €2.9 million), insurance compensations of €1.5 million (2018: €0.5 million), and income from the sale of non-current assets of €0.4 million (2018: €4.1 million).

Income from investments accounted for At-Equity

The income from investments accounted for At-Equity decreased to €15.4 million in fiscal year 2019, down from €16.8 million in 2018, which can be attributed to the performance of Brembo SGL (ceramic brake discs). Following a record result last year, Brembo's income fell by about 14% due to a less favorable product mix and higher R&D expenses.

Non-recurring items

Non-recurring items totaling minus €82.7 million in the year under review primarily comprise impairment loss of €74.7 million in our CFM reporting segment, and additional amortization to capitalized assets and liabilities totaling minus €8.7 million (2018: minus €11.2 million), which were identified as a result of

the purchase price allocations for the SGL Composites entities in the USA, Austria and Germany.

In our Corporate segment, provisions of €0.4 million for restructuring the disused site in Griesheim were reversed (2018: gains of €0.6 million). In the previous year, €0.6 million in restructuring provisions were reversed in our GMS business unit, while €1.4 million in restructuring expenses were incurred in our CFM business unit, particularly in Portugal. All in all, the above changes resulted in net restructuring income of €0.7 million in fiscal year 2019 (2018: net expense of €0.9 million).

Non-recurring items totaling €17.2 million in the prior-year period resulted from adjusting the fair value of our joint operation with the BMW Group, which was previously proportionally consolidated, in the amount of €28.4 million at the time of acquisition, which was then 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.

For further details regarding the above, please refer to [Note 10](#) of the notes to the consolidated financial statements.

Operating profit (EBIT) before non-recurring items at €48 million

EBIT before non-recurring items deteriorated noticeably to €48.4 million in the year under review, down from €64.6 million in the previous year. The corresponding EBIT margin decreased to 4.5% in the reporting year, down from 6.2% in the previous year. Taking into account non-recurring expenses totaling €82.7 million in 2019, and an income of €16.3 million in 2018, resulted in an operating loss of €34.3 million for fiscal year 2019, following operating profit of €80.9 million in the previous year.

Net financing costs impacted by refinancing

| €m | 2019 | 2018 | Change |
|--|--------------|--------------|---------------|
| Interest income | 1.7 | 1.6 | 6.3% |
| Interest expense | -19.1 | -14.1 | -35.5% |
| Imputed interest convertible bonds (non-cash) | -4.7 | -5.1 | 7.8% |
| Imputed interest financing lease (non-cash) | -3.5 | -2.6 | -34.6% |
| Interest expense on pensions | -6.4 | -5.8 | -10.3% |
| Interest expense, net | -32.0 | -26.0 | -23.1% |
| Amortization of refinancing costs (non-cash) | -3.4 | -2.7 | -25.9% |
| Foreign currency valuation of Group loans (non-cash) | 1.6 | -0.4 | > 100% |
| Other financial income/expense | -5.1 | -0.5 | > -100% |
| Other financing result | -6.9 | -3.6 | -91.7% |
| Net financial result | -38.9 | -29.6 | -31.4% |

Issuing our new corporate bond in April 2019 essentially allowed us to largely complete our refinancing measures and considerably improved our debt maturity profile. In addition, the financial liabilities of SGL Composites were repaid to BMW Group on June 30, 2019, and in July, our convertible bond 2015/2020 was repurchased prematurely.

Due to a US dollar term deposit during the first half of 2019, interest income remained fairly constant at €1.7 million in 2019 (2018: €1.6 million), despite continuing low interest rates.

Interest expense in particular comprises the interest from the corporate bond issued in April 2019 with an interest rate of 4.625%, and the cash interest component (coupon) of the convertible bond 2018/2023 with an interest rate of 3.0%. As a result of repaying the financial debts of SGL Composites to BMW Group in June 2019, and repurchasing our convertible bond 2015/2020 (with an interest rate of 3.5%) in July 2019, interest expenses for those instruments are still included in the financing result up to point at which they were each repaid. All in all, due to the newly issued corporate bond, interest expense increased by €5.0 million to €19.1 million year on year (2018: €14.1 million). The average cash interest rate was 3.8% p. a. in 2019 (2018: 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 €3.5 million (2018: €2.6 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 other non-current provisions and liabilities. The increase year on year resulted in particular from the first-time recognition of interest expenses of €1.2 million for leasing liabilities recognized in accordance with IFRS 16. Due to the increase in pension discount rates in December 2018, interest expense on pensions of €6.4 million in fiscal year 2019 was higher than in the previous year (2018: interest expense of €5.8 million). All in all, net interest expense increased by about 23.1% to €32.0 million, compared with the prior-year expense of €26.0 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 €6.9 million in fiscal year 2019 (2018: net expense of €3.6 million). The amortization of accrued refinancing costs resulted in an expense of €3.4 million during the year under review (2018: expense of €2.7 million). The increase was due to the full amortization of accrued costs for the early repayment of our convertible bond 2015/2020. Other financial expense totaled €5.1 million in fiscal year 2019 (2018: expense of €0.5 million). In the current fiscal year, this item primarily consists of an expense of €5.5 million resulting from the early repayment of our corporate bond 2015/2020.

The net financing result thus deteriorated significantly in line with expectations, by 31.4% to a net expense of €38.9 million (2018: net expense of €29.6 million).

Group income tax expense at €16 million

The income tax expense amounted to €16.2 million in the reporting period, up significantly from €0.6 million during the previous year. Tax expenses include value adjustments to deferred tax assets of €9.8 million, in particular in the UK and Germany due to the weaker earnings outlook in our CFM reporting segment, as well as the current tax expenses of €6.4 million at Group companies making positive earnings contributions. In the year under review, cash tax payments amounted to €4.8 million (2018: €3.3 million).

For more information, please refer to [Note 12](#) of the notes to the consolidated financial statements.

Non-controlling interests increase slightly

Non-controlling interests (minority interests) comprise our minority partners' share in the consolidated net result. Within SGL Carbon, minority shareholders in fiscal year 2019 relate in particular to SGL Gelter and SGL A&R Immobiliengesellschaft in Lemwerder. Altogether, minority interests amounted to €0.5 million in fiscal year 2019 (2018: €0.4 million).

Discontinued operations

The result from discontinued operations after income taxes 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 that of Aerostructures in 2015. Discontinued operations had no material effect on our result in fiscal year 2019. The result during the prior-year period was mainly characterized by further additions to tax provisions of €3.6 million carried out in connection with the sale of PP, as well as conclusive settlement expenses of €4.0 million incurred as part of the sale of our AS business.

Consolidated net result burdened by impairment loss

Including non-controlling interests, the consolidated net result for the year attributable to shareholders of the parent company amounted to a net loss of €90.0 million, compared with consolidated net income of €41.3 million in 2018. Based on the average number of shares of 122.3 million, the basic earnings per share amounted to minus €0.74 (2018: basic earnings per share of €0.34). When calculating the diluted earnings per share, the new shares that could potentially be issued from the convertible bond 2018/2023 are only taken into account, if a positive consolidated net income is presented. Consequently, due to the loss situation in fiscal year 2019, no diluted earnings per share is calculated. The diluted earnings per share for the year under review thus also amounts minus €0.74 (2018: diluted earnings per share of €0.34).

Net result of SGL Carbon SE

SGL Carbon SE, the parent company of SGL Carbon Group, reported a net loss for the year of €111.9 million (2018: net loss of €43.5 million), in accordance with the German Commercial Code (HGB). The loss was primarily the result of an impairment of €98.6 million (2018: €29.7 million) to the lower fair value based on a new financial plan of the Austrian holding company that holds the shares of SGL Composites S.A. (formerly: Fisipe) in Portugal, as well as SGL Carbon Fibers Ltd. in Scotland. Income transferred from subsidiaries did not compensate for the impairment. The net loss for the year, together with the accumulated loss of €931.0 million from 2018, resulted in a total accumulated loss of €1,042.9 million in fiscal year 2019.

Financial performance of the reporting segments

Composites - Fibers & Materials: Earnings impacted by cyclical and structural declines

| €m | 2019 | 2018 | Change |
|--|-------|-------|-----------------|
| Sales revenue | 431.6 | 422.5 | 2.2% |
| EBITDA before non-recurring items ¹⁾ | 25.1 | 54.2 | -53.7% |
| Operating profit/loss (EBIT) before non-recurring items ¹⁾ | -8.3 | 20.8 | > - 100% |
| Operating profit/loss (EBIT) | -91.5 | 36.6 | > - 100% |
| Return on sales (EBIT-margin) ²⁾ | -1.9% | 4.9% | - |
| Payments to purchase intangible assets and property, plant and equipment | 27.8 | 21.5 | 29.3% |
| Cash Generation ^{1) 3)} | -1.2 | 23.4 | > - 100% |
| Depreciation/amortization expense | 33.4 | 33.4 | 0.0% |
| Return on capital employed (ROCE EBIT) ^{1) 4)} | -1.3% | 3.2% | -4.5% points |
| Headcount (Year end) | 1,698 | 1,722 | -1.4% |

¹⁾ Non-recurring items include impairment loss as well as effects from purchase price allocation totalling minus €83.4 million in 2019 and €17.2 million in 2018 and restructuring impacts of €0.2 million in 2019 and minus €1.4 million in 2018

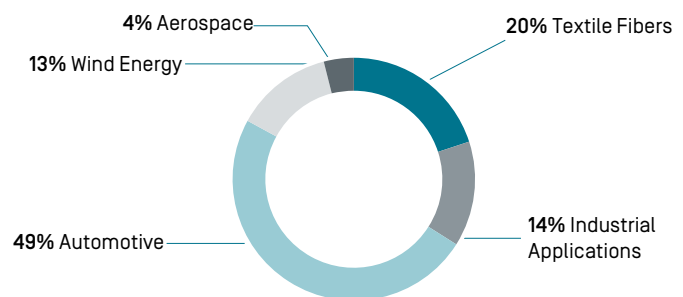
²⁾ EBIT before non-recurring items to sales revenue

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 net working capital)

Sales revenue in our reporting segment CFM increased slightly by about 2% (currency adjusted: unchanged) to €431.6 million (2018: €422.5 million). By far the strongest driver of sales growth was the market segment Wind Energy, which saw its sales multiply. However, the prior year was still impacted by the sale of our share in the former joint venture with Kumpers, with which we had previously served the wind energy segment. Sales in the market segment Aerospace were down on the previous year due to the postponement of a major order invoicing to the following fiscal year. The market segments Industrial Applications and Textile Fibers also showed downturns in sales due to cyclical and structural weaknesses. Sales with the automotive industry also declined slightly for the year as a whole due to significantly lower demand from our customers in the fourth quarter of 2019.

Sales revenue by market segments 2019 (CFM)



Sales of investments accounted for At-Equity are not included in consolidated revenues and mostly relate to our carbon-ceramic brake disks business (Brembo SGL: development and production of ceramic brake disks) which is allocated to the market segment Automotive. Despite the downturn in the automotive industry, the joint venture with Brembo was able to stabilize sales in the year under review on the prior year level. Sales revenue of all companies accounted for at equity increased slightly to €259.4 million (€251.7 million; 100% of the companies' values in each case) due to temporarily higher sales at the precursor joint venture with Mitsubishi Rayon.

Recurring EBIT in the reporting segment CFM fell to minus €8.3 million in the reporting period, down from €20.8 million in the previous year, corresponding to return on sales of minus 1.9% after 4.9% in the prior year. Cumulatively, the main causes for this deterioration were the market segments Textile Fibers and Wind Energy. The market segment Textile Fibers was depressed by expensive raw material inventories during the first half of the year and by adverse cyclical and structural developments during the second half. The market segment Wind Energy was not able to benefit from the significantly higher sales due to the unfavorable product mix. Compared to the previous year, we delivered significantly more unprocessed carbon fibers than processed materials. The automotive market segment also declined due to a temporarily unfavorable product mix. The decline in earnings in the market segment Aerospace is due to the postponement of the invoicing of a major order to fiscal year 2020.

As described in detail in the chapter "Key Events" and in the notes to the financial statements, a non-cash impairment charge of €74.7 million was recorded at CFM in the third quarter of 2019, mainly due to the lower earnings level in 2019 and the

continuing weakness in the market segments Textile Fibers and Industrial Applications.

The impairment exclusively related to the CF/CM cash-generating unit. The assets of the former joint ventures with BMW and Benteler, which were acquired only in recent years, are therefore not affected by the impairment.

Other non-recurring items mainly consist of the additional amortization of minus €8.7 million on the amounts identified and capitalized or recognized as liabilities in the course of the purchase price allocations of the SGL Composites companies. Non-recurring items from the build-up and release of restructuring provisions almost balanced each other out. In the previous year, the transition of the former joint venture 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. In the prior year this resulted to a positive contribution to earnings of €28.4 million. Primarily because of this high positive non-recurring item in the previous year and the impairment loss of €74.7 million in the third quarter of 2019, EBIT after non-recurring items fell from €36.6 million in fiscal year 2018 to minus €91.5 million in the reporting period.

Due to the significant deterioration in the market segments Industrial Applications and Textile Fibers we have decided on a comprehensive package of measures consisting of the following points:

- The development agreement with the Belgian Solvay will accelerate access to the higher-margin aerospace business and significantly expand the addressable market.
- Targeted reduction of around 3% of the headcount in the CFM division, of which around half had been implemented at the reporting date.
- Accelerated conversion of textile fiber production lines into precursor production lines for carbon fiber production
- Improved product mix in the market segments Industrial Applications and Textile Fibers.
- Temporary closure of two acrylic fiber lines.
- Selective price increases especially in the market segments Wind Energy and Industrial Applications.
- Accelerated implementation of operational excellence programs and their transfer to areas outside of production, such as activities to increase revenues and margins in sales and productivity in production.

During the year under review capital expenditures in the CFM business unit increased by slightly more than one quarter to

€27.8 million (2018: €21.5 million). Investments focused on the expansion of the leaf spring and battery case production as well as the conversion of the second acrylic fiber line to precursor.

Graphite Materials & Systems (GMS): Record year thanks to strong growth in semiconductors and automotive

| €m | 2019 | 2018 | Change |
|--|-------|-------|--------------|
| Sales revenue | 622.5 | 589.9 | 5.5% |
| EBITDA before non-recurring items ¹⁾ | 113.6 | 98.9 | 14.9% |
| Operating profit/loss (EBIT) before non-recurring items ¹⁾ | 85.5 | 76.0 | 12.5% |
| Operating profit/loss (EBIT) | 85.6 | 76.6 | 11.7% |
| Return on sales (EBIT-margin) ²⁾ | 13.7% | 12.9% | - |
| Payments to purchase intangible assets and property, plant and equipment | 55.8 | 47.0 | 18.7% |
| Cash Generation ^{1) 3)} | 53.0 | 6.5 | > 100% |
| Depreciation/amortization expense | 28.1 | 22.9 | 22.7% |
| Return on capital employed [ROCE EBIT] ^{1) 4)} | 16.3% | 16.5% | -0.2% points |
| Headcount (Year end) | 3,141 | 3,008 | 4.4% |

¹⁾ Non-recurring items of €0.1 million in 2019 and €0.6 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

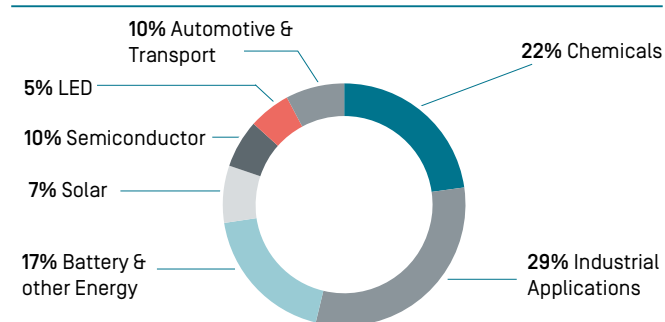
⁴⁾ EBIT before non-recurring items to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for at-Equity and net working capital)

Due to the accelerated commercialization, business with gas diffusion layers for fuel cells was reclassified in the fourth quarter of 2019 from Central Innovation in the reporting segment Corporate to the market segment Battery & other Energy in the GMS reporting segment with retroactive effect from January 1, 2019.

In total, sales revenue in the GMS reporting segment increased in the period under review by almost 6% to a record high of €622.5 million compared to €589.9 million in the previous year (currency adjusted 3%). The market segments developed very differently. While sales to the semiconductor and automotive industries grew at a strong double-digit rate, sales to the chemical industry, industrial applications, the LED industry and the Battery & other Energy segment remained at roughly at the same level as last year. As in previous years, we deliberately kept sales to the solar industry slightly below the prior year's

level in order to primarily serve semiconductor customers, among others.

Sales revenue by market segments 2019 (GMS)



Recurring EBIT improved more than proportionally by 13% to €85.5 million (2018: €76.0 million) and led to a significantly higher EBIT margin of 13.7% (2018: 12.9%). This growth was primarily driven by the strong sales expansion in the market segment Semiconductors. However, the market segment Battery & other Energy, business with the LED industry and industrial applications also contributed to the improved earnings. Despite the strong sales growth, earnings in the market segment Automotive & Transport remained roughly at the prior year level due to high start-up costs in the first half of the year, which - as expected - were significantly reduced in the second half. In contrast, the market segments Chemicals and Solar were slightly below the prior year level.

In fiscal year 2019, there were minor non-recurring items in the GMS reporting segment in the amount of €0.1 million (2018: €0.6 million). EBIT after non-recurring items thus improved to €85.6 million (2018: €76.6 million).

Capital expenditures in the year under review also increased significantly in the business unit GMS by 19% to €55.8 million, compared to €47.0 million in the previous year. The investment activities focused on expanding production capacity for the market segments Semiconductors, Automotive & Transport and LED.

Corporate: Earnings improved compared to previous year

| €m | 2019 | 2018 | Change |
|---|-------|-------|--------|
| Sales revenue | 32.6 | 35.1 | -7.1% |
| EBITDA before non-recurring items ¹⁾ | -18.7 | -25.9 | 27.8% |
| Operating profit/loss (EBIT) before non-recurring items ¹⁾ | -28.8 | -32.2 | 10.6% |
| thereof Central Innovation | -11.4 | -8.0 | -42.5% |
| Operating profit/loss (EBIT) | -28.4 | -32.3 | 12.1% |
| Headcount (Year end) | 288 | 301 | -4.3% |

¹⁾ Non-recurring items of €0.4 million in 2019 and of minus €0.1 million in 2018

As already noted, the business with gas diffusion layers for fuel cells was reclassified in the fourth quarter of 2019 from Central Innovation in the reporting segment Corporate to the market segment Battery & other Energy in the reporting segment GMS with retroactive effect from January 1, 2019 due to the accelerated commercialization.

Sales revenue in the reporting segment Corporate was down slightly to €32.6 million (no currency translation effect, previous year: €35.1 million), which is due to the reclassification detailed above for business with fuel cells.

At minus €28.8 million, recurring EBIT in the reporting segment Corporate improved year on year (2018: minus €32.2 million), although the prior year result included a positive effect of €3.9 million from the sale of a property in Canada. This strong improvement in earnings was primarily due to lower expenses for management incentive plans due to the significant decline in earnings at CFM and thus also in the Group. As expected, expenses for our central research activities were up on the previous year at €11.4 million due to higher expenditure for the development of future businesses such as 3D printing and composite materials for medical technology.

In fiscal year 2019, there were minor non-recurring items in the Corporate reporting segment in the amount of €0.4 million (2018: minus €0.1 million). EBIT after nonrecurring items improved to minus €28.4 million compared to minus €32.3 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 33 as of December 31, 2019, up from 30 at the end of fiscal year 2018. 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 2019, an average of approximately 89% of global supplier payments were handled centrally (2018: 83%). The increase can be attributed to the inclusion in 2019 of SGL Composites in Austria, which was fully taken over in 2018. 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 pay-

ment 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, the core banks. When investing funds, we also take the performance and success of collaboration with business partners in recent years into account.

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 forwards 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 now exclusive use of fixed-interest financing instruments, for which reason no interest rate hedges were entered into in fiscal year 2019. The expected risks from currency fluctuations for fiscal year 2020 are mainly minimized by natural hedge positions, as fewer risks from currency fluctuations are expected than in the past fiscal year. Should additional currency risks arise during the course of fiscal year 2020, they can

be hedged via currency hedging transactions if required. Internal guidelines specify the conditions, responsibilities, and controls required for the use of derivatives. Further details on hedging instruments and the effects of hedging can be found in [Note 28](#) of the notes to the consolidated financial statements.

Debt financing analysis

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 2018/2023 in the amount of €159.3 million [coupon: 3.0%, maturing in 2023] and the corporate bond 2019/2024 in the amount of €250.0 million that was newly issued in 2019 [coupon: 4.625%, maturing in 2024]. The convertible bond in the amount of €167.0 million, which was originally set to mature in September 2020, was fully repaid during the third quarter of 2019. Furthermore, the existing loans from BMW Group in the amount of USD 99.0 million [equivalent to €87.6 million] were repaid in full by SGL Composites US in June 2019. As of the balance sheet date, an unused credit line in the amount of €175.0 million was also available, expiring in January 2023 with the option to extend it for an additional year.

All in all, undrawn credit facilities amounting to €175.0 million (2018: €51.2 million) were available to SGL Carbon at year-end 2019 to cover working capital and capital expenditure. Liquidity totaled €137.1 million as of December 31, 2019 (2018: €181.6 million).

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

SGL Carbon commissions rating agencies Moody's and Standard & Poor's (S&P) to prepare issuer ratings to support both private and institutional investors in evaluating the Group's credit quality. At present, SGL Carbon has ratings of B3 with a negative outlook (Moody's), and B-, also with a negative 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: negative) | November 2019 |
| Standard & Poor's | B- (Outlook: negative) | November 2019 |

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, investing activities, and 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 (2019: €4.0 million; 2018: €58.1 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, the total of which is shown separately.

Free cash flow from continuing operations improved noticeably to minus €17.3 million, compared with minus €58.5 million in the previous year. Together with the free cash flow from discontinued operations in the amount of minus €9.4 million (2018: net cash provided of €58.0 million), the total free cash flow was minus €26.7 million, compared with minus €0.5 million in the previous year. For more details, please see the consolidated cash flow statement in the consolidated financial statements.

Liquidity and capital resources

| €m | 2019 | 2018 | Change |
|--|--------------|---------------|------------------|
| Cash flow from operating activities | | | |
| Result from continuing operations before income taxes | -73.2 | 51.3 | > -100% |
| Non-recurring items | 82.7 | -16.3 | > 100% |
| Depreciation/amortization expense | 71.6 | 62.6 | 14.4% |
| IFRS 15 Earnings effect | 3.2 | -17.6 | > 100% |
| Changes in working capital | 13.8 | -34.1 | > 100% |
| Income taxes paid | -4.8 | -3.3 | -45.5% |
| Interest paid | -17.5 | -17.1 | -2.3% |
| Miscellaneous items | -13.9 | -1.9 | > -100% |
| Cash flow from operating activities - continuing operations | 61.9 | 23.6 | > 100% |
| Cash flow from investing activities | | | |
| Payments to purchase intangible assets and property, plant and equipment | -95.1 | -78.1 | -21.8% |
| Dividend payments and capital repayments from investments accounted for At-Equity | 10.9 | 11.0 | -0.9% |
| Payments for the acquisition / disposal of subsidiaries, net of cash acquired | 3.6 | -19.7 | > 100% |
| Proceeds from the sale of intangible assets and property, plant & equipment | 1.4 | 4.7 | -70.2% |
| Cash flow from investing activities - continuing operations | -79.2 | -82.1 | 3.5% |
| Free Cash flow¹⁾ | -17.3 | -58.5 | 70.4% |
| Changes in time deposits | 54.1 | -58.1 | > 100% |
| Cash flow from financing activities - continuing operations | -17.1 | -200.9 | 91.5% |
| Free cash flow from discontinued operations ²⁾ | -9.4 | 58.0 | > -100% |
| Effect of foreign exchange rate changes and other changes | 0.3 | 0.1 | > 100% |
| Cash and cash equivalents at beginning of year | 122.5 | 382.9 | -68.0% |
| Cash and cash equivalents at end of year - continuing and discontinued operations | 133.1 | 123.5 | 7.8% |
| Time deposits at end of year | 4.0 | 58.1 | -93.1% |
| Total liquidity | 137.1 | 181.6 | -24.5% |
| Net change in total liquidity - continuing and discontinued operations | -44.5 | -201.3 | > 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 operations increases to €62 million

In fiscal 2019, the cash flow from operating activities (continuing operations) improved noticeably to €61.9 million, up from €23.6 million in the prior-year period. The increase was mainly due to the reduction in working capital.

Working capital shown on the balance sheet decreased by 2.9%, or €12.3 million, to €406.8 million as of December 31, 2019 (December 31, 2018: €419.1 million) and was influenced by non-cash effects. These included, in particular, currency effects and the application of IFRS 15 and IFRS 9. Adjusted for these effects, the operational decrease in working capital amounted to €13.8 million (2018: increase of €34.1 million).

At €17.5 million, interest payments only changed insignificantly (2018: €17.1 million). By contrast, tax payments increased by €1.5 million to €4.8 million (2018: €3.3 million). The remaining item mainly reflects bonus payments for the previous year made in March 2019, whereas for fiscal year 2019 there is a lower addition to accrual for bonuses.

Net cash used in continuing investing activities

The 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. At €95.1 million, capital expenditure in fiscal 2019 was significantly above the prior-year level (€78.1 million), as planned. For further details concerning capital expenditure, please refer to the section titled "Capital expenditure, depreciation and amortization". The figures for fiscal year 2019 include cash inflows in connection with investments accounted for At-Equity of €10.9 million from dividends received (2018: €11.0 million).

Payments received from the divestiture of subsidiaries in fiscal 2019 primarily include the last installments totaling €3.0 million from the sale of SGL Kumpers carried out in the previous year. In the previous year, this item included payments of €23.1 million for the acquisition of 49% 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 Kumpers.

Payments received for the disposal of intangible assets and property, plant and equipment in fiscal year 2019 still comprise cash inflows from the sale of property, plant and equipment in particular at the decommissioned site in Frankfurt-Griesheim. Cash inflows in the previous year comprise the payment of €3.9 million received for the sale of a parcel of land in Lachute (Canada).

Despite the significant increase in capital expenditure, the net cash used in investing activities thus decreased slightly by €2.9 million to €79.2 million during the year under review, down from €82.1 million in the previous year.

Capital expenditure, depreciation and amortization ¹⁾

| €m | 2019 | 2018 |
|--|------|------|
| Payments to purchase intangible assets and property, plant and equipment | 95 | 78 |
| Depreciation/amortization expense | 72 | 63 |

¹⁾ Excluding discontinued operations

Capital expenditure for intangible assets and property, plant and equipment was distributed as follows in fiscal year 2019: 29% for CFM (€27.8 million; 2018: €21.5 million), 59% for GMS (€55.8 million; 2018: €47.0 million), and 12% for central projects (€11.5 million; 2018: €9.6 million). The comparative figures for the previous year were: 28% for CFM, 60% for GMS, and 12% for central projects. Payments for significant capital expenditure projects during fiscal year 2019 related to:

- modernization and expansion of production capacities for pressed-to-size (PTS) technology in Bonn in the automotive & transport market segment
- conversion of spinning lines in plants for the manufacture of carbon fiber precursors in Lavidio (Portugal), in the industrial applications market segment
- production capacity expansion for composite leaf springs in Ort (Austria), in the automotive market segment
- capacity expansion for SiC-coated isostatic graphite in Shanghai (China) and St. Marys (USA), in the LED market segment
- increase in production capacities for the manufacture of fuel cell components in Meitingen (Germany), in the market segment Batteries & other Energy
- completion of the 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 €17.1 million, down from net cash used of €200.9 million in 2018. In fiscal year 2019, cash of €167.0 million was used to repay the convertible bond 2015/2020, and €87.6 million was used to fully repay BMW Group for loans to SGL Composites US (formerly: SGL ACF). In addition, cash was provided by issuing the corporate bond 2019/2024 in the amount of €250.0 million, as well as from a bank loan for €7.4 million for the new logistics center in Meitingen (Germany). Total transaction costs of €8.7 million were paid for the issue of the new corporate bond and for the new syndicated credit facility. Cash was also used during the year under review to repay bank debt of €2.2 million (2018: €3.8 million).

Due to the adoption of IFRS 16 as of January 1, 2019, repayment portions of lease payments are shown under cash flow from financing activities starting from fiscal year 2019. As a result of this accounting change, that item comprises a cash outflow of €8.7 million in fiscal year 2019, which was included in the cash flow from operating activities in previous years.

During the previous year, the outflow of liquidity was primarily caused by the repayment of the convertible bond 2012/2018 in January 2018 in the amount of €239.2 million, as well as the repayment of loans provided to SGL Composites US and Germany (formerly: SGL ACF) by BMW Group in the amount of €111.8 million. In contrast, an inflow of liquidity was generated by the convertible bond 2018/2023 issued in September 2018 in the amount of €159.3 million.

Other financing activities primarily comprise dividend payments of €0.3 million to minority shareholders in fully consolidated subsidiaries (2018: €1.0 million).

Free cash flow from discontinued operations

The free cash flow from discontinued operations in fiscal year 2019 only relates to net cash used in investing activities, which still comprises payments received and made in connection with the sale of our former PP and AS businesses. During the year under review, the value primarily comprises the final settlement payment regarding the sale of our Aerostructures busi-

ness to Avcorp. During fiscal year 2019, payments were also received and made for taxes incurred in connection with the sale of our PP business. The cash inflow from investing activities for discontinued operations in fiscal year 2018 particularly consisted of purchase price payments for the disposal of our PP business in the amount of €62.6 million. All in all, the free cash flow from discontinued operations thus decreased to minus €9.4 million, down from €58.0 million in the previous year.

Liquidity amounts to €137 million

Primarily as a result of the negative free cash flow, the transaction costs paid for the corporate bond, and the repayment portion of lease agreements in accordance with IFRS 16, available liquidity decreased to €137.1 million at the end of fiscal year 2019 (2018: €181.6 million). At the end of fiscal year 2019, liquidity included short-term deposits of €4.0 million (2018: €58.1 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 €425.6 million in 2019 (2018: €423.8 million). That amount primarily consists of the corporate bond issued in April 2019 in the amount of €250.0 million, as well as the convertible bond issued in 2018 in a principal amount of €159.3 million. The outstanding amount of the convertible bond is due for repayment in September 2023 unless bondholders exercise their conversion rights before maturity, creating up to 12.2 million new bearer shares.

As of December 31, 2019, trade payables, derivative financial instruments, lease liabilities in accordance with IFRS 16, the purchase price for the acquisition of SGL Composites US and other financial liabilities totaled €216.3 million (2018: €194.8 million). Of that amount, liabilities totaling €34.2 million (2018: €67.9 million) were due after one year. Income tax liabilities and other liabilities amounted to an additional €32.8 million at the end of 2019 (2018: €24.1 million). Further details can be found in [Note 25](#) of the notes to the consolidated financial statements.

As of the reporting date, commitments arising from purchase orders connected with capital expenditure projects totaled €16.2 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, 19 | Dec. 31, 18 |
|--|-------------|-------------|
| Total assets | 1,504.8 | 1,585.1 |
| Equity attributable to the shareholders of the parent company | 418.6 | 531.6 |
| Equity ratio | 27.8% | 33.5% |
| Working capital ¹⁾ | 406.8 | 419.1 |
| Capital employed ²⁾ | 1,219.8 | 1,244.5 |
| Return of capital employed (ROCE _{EBIT}) ³⁾ | 3.9% | 5.4% |
| Net financial debt | 288.5 | 242.2 |
| Gearing ⁴⁾ | 0.69 | 0.46 |

¹⁾ Total of inventories, trade receivables and contract assets, less trade payables

²⁾ 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

⁴⁾ Net financial debt to equity attributable to the shareholders of the parent company

Changes to individual balance sheet items, total assets, working capital, shareholders' equity, the equity ratio, and net financial debt are explained in the following two 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 – deteriorated noticeably to 3.9% in the year under review (2018: 5.4%), due to the decrease in EBIT. The equity ratio – the ratio of equity attributable to the shareholders of the parent company to total assets – deteriorated to 27.8% (2018: 33.5%), primarily due to the impairment loss in CFM and the reduction in pension interest rates.

Balance sheet structure

| €m | Dec. 31, 19 | Dec. 31, 18 | Change |
|---|----------------|----------------|--------------|
| ASSETS | | | |
| Non-current assets | 820.9 | 841.2 | -2.4% |
| Current assets | 683.9 | 742.2 | -7.9% |
| Assets held for sale | 0.0 | 1.7 | -100.0% |
| Total assets | 1,504.8 | 1,585.1 | -5.1% |
| EQUITY AND LIABILITIES | | | |
| Equity attributable to the shareholders of the parent company | 418.6 | 531.6 | -21.3% |
| Non-controlling interests | 10.3 | 10.7 | -3.7% |
| Non-current liabilities | 796.0 | 798.0 | -0.3% |
| Current liabilities | 279.9 | 244.3 | 14.6% |
| Liabilities in connection with assets held for sale | 0.0 | 0.5 | -100.0% |
| Total equity and liabilities | 1,504.8 | 1,585.1 | -5.1% |

Assets

Non-current assets decreased by a total of €20.3 million to €820.9 million in the reporting year (2018: €841.2 million). Significant changes resulted from the impairment loss of €74.7 million in CFM, which was offset by an increase of €31.2 million resulting from lease agreements capitalized for the first time in accordance with IFRS 16.

As a result of the impairment loss, other intangible assets decreased by €3.1 million, and property, plant and equipment decreased by €71.6 million. Currency translation increased non-current assets by €6.8 million, particularly due to the appreciation of the US dollar (2018: increase of €11.5 million). At €95.1 million, the level of capital expenditure in fiscal year 2019 was higher than the level of depreciation and amortization on non-current assets, which totaled €82.4 million including amortizations of purchase price allocations, resulting in an increase in non-current assets of €12.7 million (2018: increase of €3.1 million). The carrying amount of investments accounted for At-Equity increased by €4.4 million due to the positive pro-rata earnings of associated companies, which were not entirely paid out via dividend payments (2018: increase of €7.2 million).

Current assets decreased by €58.3 million to €683.9 million (2018: €742.2 million). Adjusted for currency effects, current assets decreased by €64.5 million. Cash funds used to cover negative free cash flow decreased in particular, by €43.5 million. In addition, trade receivables and contract assets decreased by €7.7 million, or 3.6%, due to billing reasons. Adjusted for currency effects, the decrease amounted to

€14.3 million. Inventories could also be reduced year-on-year after adjustment for currency effects, by 1.3%, or €4.2 million, due to the decreased inventory of finished products.

Assets held for sale decreased from €1.7 million in the previous year, to zero as of the end of 2019. At the end of 2018, this balance sheet item still comprised the assets held for sale pertaining to a company in Korea, which was sold during the first quarter of 2019.

As of December 31, 2019, total assets decreased by €80.3 million, or 5.1%, to €1,504.8 million (2018: €1,585.1 million). The decrease in total assets as of December 31, 2019, was partly due to the impairment loss of €74.7 million recognized during the third quarter of 2019, as well as the €43.5 million decrease in cash and cash equivalents. By contrast, the first-time recognition of lease agreements in accordance with IFRS 16 led to an increase in total assets of €38.3 million, while currency effects, particularly those resulting from the appreciation of the US dollar, increased total assets by €13.6 million (2018: increase of €17.7 million).

Equity and liabilities

Shareholders' equity decreased by €113.0 million to €418.6 million as of December 31, 2019 (2018: €531.6 million). The decrease mainly related to the consolidated net loss of €90.0 million. Additional factors that decreased equity were the adjustments made to the parameters for calculating the provision for pensions in Germany and the USA, which decreased equity by €27.2 million after tax effects (2018: increase of €0.2 million). In contrast, currency gains of €8.7 million, particularly due to the appreciation of the US dollar, also increased equity (2018: gains of €6.5 million). In addition, changes in cash flow hedges of €0.4 million directly increased equity (2018: decrease of €2.0 million).

Overall, the above factors reduced the equity ratio (excluding non-controlling interests) to 27.8% at the end of the year under review (2018: 33.5%).

| | Equity attributable to the shareholders of the parent company | Non-controlling interests | Total equity |
|---|---|---------------------------|---------------|
| December 31, 2018 | 531.6 | 10.7 | 542.3 |
| Transition impact from IFRS 16 | 0.1 | 0.0 | 0.1 |
| January 1, 2019 | 531.7 | 10.7 | 542.4 |
| Dividends | 0.0 | -0.3 | -0.3 |
| Equity component of the convertible bonds | -5.0 | 0.0 | -5.0 |
| Net result for the year | -90.0 | 0.5 | -89.5 |
| Other comprehensive income | -18.1 | -0.1 | -18.2 |
| Comprehensive income | -108.1 | 0.4 | -107.7 |
| Other changes in equity | 0.0 | -0.5 | -0.5 |
| December 31, 2019 | 418.6 | 10.3 | 428.9 |

Non-current liabilities decreased slightly by €2.0 million to €796.0 million (2018: €798.0 million). The decrease in non-current liabilities is primarily due to the early repayment of the convertible bond in the amount €167.0 million, which was originally due in 2020, the €87.6 million repayment of loans by SGL Composites US (formerly: SGL ACF) to BMW Group, and the reclassification of the purchase price liability for SGL Composites US of €54.2 million due to the BMW Group at the end of 2020 to current liabilities. In contrast, non-current liabilities increased as a result of the newly issued corporate bond in the amount of €250.0 million (maturing in 2024), the lease liabilities of €19.1 million recognized for the first time in accordance with IFRS 16, and the €25.5 million increase in provisions for pensions.

The pension provisions included under non-current liabilities increased to €318.7 million as of December 31, 2019, up from €293.2 million at the end of 2018. Increases of €40.4 million and €14.3 million were primarily the result of adjusting discount rates for pension provisions in Germany (by minus 0.8 percentage points to 1.1%) and the USA (by minus 1.0 percentage points to 3.2%), respectively, to reflect the lower anticipated long-term interest rate climate. On the other hand, the decrease in the rate for pension payments from 1.9% to 1.5% in Germany had an opposite effect, decreasing pension provisions by €16.1 million.

Current liabilities increased by €35.6 million to €279.9 million at the end of fiscal year 2019 (2018: €244.3 million), primarily due to the reclassification of the purchase price liability of

€54.2 million for SGL Composites US (formerly: SGL ACF) from non-current to current liabilities. Furthermore, other current liabilities increased due to the first-time recognition of current lease liabilities of €13.5 million in accordance with IFRS 16. In contrast, current provisions decreased by €24.0 million, in particular due to the decrease in accruals to the provisions for employee bonuses. Other financial liabilities also decreased by €10.6 million, as a result of the payment made as part of the settlement with the acquirer of our Aerostructures business.

Trade payables included under current liabilities increased slightly by €0.6 million to €108.7 million year on year (2018: €108.1 million). Adjusting for currency effects of €0.9 million results in an operational decrease in trade payables of €4.7 million.

Net financial debt

| €m | Dec. 31, 19 | Dec. 31, 18 | Change |
|--|--------------|--------------|---------------|
| Carrying amount of current and non-current financial liabilities | 407.6 | 398.8 | 2.2% |
| Remaining imputed interest for the convertible bonds | 10.7 | 20.8 | -48.6% |
| Accrued refinancing cost | 7.3 | 4.2 | 73.8% |
| Total financial debt (nominal amount) | 425.6 | 423.8 | 0.4% |
| Liquidity - continuing operations | 137.1 | 180.6 | -24.1% |
| Liquidity - Assets held for sale | 0.0 | 1.0 | -100.0% |
| Total liquidity - continuing and discontinued operations | 137.1 | 181.6 | -24.5% |
| Net financial debt - continuing and discontinued operations | 288.5 | 242.2 | 19.1% |

Total financial debt of €425.6 million recorded at the end of 2019 are made up as follows:

- Corporate bond 2019/2024 of €250.0 million
- Convertible bond 2018/2023 of €159.3 million
- Liabilities to banks of €16.3 million

In order to reconcile the total financial debt mentioned above with the balance sheet carrying amount of €407.6 million, the net remaining imputed interest component of minus €10.7 million for the outstanding convertible bond and total refinancing costs of €7.3 million must be taken into account. Financial liabilities are divided according to their remaining terms and correspondingly shown in the consolidated balance sheet under "interest-bearing loans" and "current portion of interest-bearing loans".

Liquidity comprises "cash and cash equivalents" and "time deposits" (with a residual term of less than 12 months). Liquidity decreased to €137.1 million as of December 31, 2019 (2018: €181.6 million), primarily due to the negative free cash flow. The balance of liquidity and total financial debt resulted in net financial debt of €288.5 million for SGL Carbon at the end of 2019 (2018: €242.2 million), which, as planned, was €46.3 million higher than the figure as of December 31, 2018.

Assets not recognized and off-balance sheet financial instruments

Various assets of SGL Carbon are not included in the balance sheet. Due to accounting changes resulting from IFRS 16, material leased or rented assets are shown in the balance sheet as from fiscal year 2019. Since the application of IFRS 16, off-balance sheet financed assets consist of leases for IT equipment, vehicles and other property, plant and equipment that have a low value or are only used for a short period of time.

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

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 €314.7 million as of December 31, 2019, compared with minus €290.2 million as of December 31, 2018. As of December 31, 2019, the Group's pension obligations totaled €444.4 million, compared with €400.5 million at the end of 2018. The change was

primarily due to adjustments to pension interest rates in Germany and the USA, and with an offsetting effect from the decrease in the rate for pension payments. The actuarial losses from defined benefit pension plans recognized in equity (under retained earnings) increased by €27.2 million after taxes. The status of the plan assets designated to fund the pension obligations rose noticeably to €129.7 million as of December 31, 2019, up from €110.3 million at the end of the previous year, due to increased market values.

Further information on the effects in the balance sheet and the income statement, as well as on pensions and similar obligations, can be found in [Note 23](#) of the notes to the consolidated financial statements.

General statement on the current financial situation

Business overview

2019 was an eventful year for us. Following the unexpected resignation of Dr. Jürgen Köhler, Dr. Stephan Bühler was appointed as a member of the Board of Management with responsibility for Legal and Compliance with effect from October 15, 2019. Dr. Michael Majerus was appointed Spokesman of the Board of Management. The reporting segments showed a mixed picture. The fiscal year was characterized by further growth in graphite specialties and by cyclical and structural declines in the carbon fiber segment.

GMS recorded another record year, especially due to the significant growth in the market segments Semiconductor and Automotive. Capital expenditure have been made over the last three years in modernizing and expanding production capacities at the Bonn site. With completion at the end of 2019, production capacities on the high-growth market for our automotive components have now more than doubled to meet the increased demand from the automotive industry. Moreover, we have established and expanded our business with fuel cell components in the energy segment, so that we now have another promising growth pillar.

In contrast, the CFM did not achieve its targets for 2019. However, the positive long-term outlook remains unchanged. CFM was able to acquire key new projects and customers in the au-

tomotive sector. This includes a large order from a North American car manufacturer for high-volume serial production of carbon and glass fiber-based composite top and bottom layers for battery cases. The serial production of the components will start end of 2020. Furthermore, as a result of the partnership with Solvay we now have excellent opportunities to accelerate our growth in the aerospace business.

We have only partially achieved our financial targets for the 2019 fiscal year. We successfully placed a new corporate bond on the market and the maturity structure of our financial liabilities improved. Consolidated EBIT and EBITDA in 2019 were below our expectations and significantly below the previous year's levels, although we achieved a further significantly improved earnings contribution in the GMS business unit. Earnings in the CFM business unit were significantly lower than in the previous year. Overall, consolidated EBIT before non-recurring items fell by 25% and we had to record an impairment loss of €74.7 million on non-current assets, with the result that we now report a consolidated net loss following a net profit in the previous year. Although capital expenditure were increased in 2019, free cash flow from continuing operations improved significantly to minus € 17.3 million.

New order development

Order entry showed a mixed picture in both business units at the end of 2019. All in all, the value of the order backlog for the SGL Carbon Group at the end of 2019 was lower than in the prior year.

Order backlog in the reporting segment CFM showed slightly positive growth. This is valid in particular for the market segments Automotive, Aerospace and Wind Energy. However, these orders often have long lead times and will only lead to higher sales revenues in the subsequent years (in particular for Automotive and Aerospace).

In the GMS business unit the positive growth recorded in the previous year also continued in the first half of 2019. This growth was primarily driven by the market segments LED, Semiconductor and Automotive & Transport. GMS was also able to record growth in the Chemical and Industrial Applications segments. In the course of 2019, a slowdown in the global economy led to lower order entries, especially in our market segments Industrial Applications, Semiconductors and Chemicals.

Assessment of the financial situation by company management

SGL Carbon began fiscal year 2020 according to our expectations. As planned, sales invoiced in the first few weeks of 2020 were slightly lower than the prior-year level. The extent and duration of the possible effects of the coronavirus (COVID-19) on the business activities of SGL Carbon are currently not yet assessable.

As explained above, as part of the measures to improve earnings in the reporting segment Composites - Fibers & Materials (CFM) in the market segment Textile Fibers we temporarily shut down two lines and converted one line into precursor for carbon fiber production. Given this background, we expect lower sales revenues and a nearly constant earnings situation in the first quarter of 2020 compared to the same quarter of the previous year.

In the reporting segment Graphite Materials & Systems (GMS) we are expecting sales revenues to be lower in the first quarter of 2020 than in the same period of the previous year. The main reasons for this are the declining order situation in general, as described above, and lower demand for our anode material in particular due to changes in the supply chain in our Lithium-ion battery business.

For the first quarter of 2020, EBIT in the GMS business unit will be significantly below the level in the same period of the previous year. This is due to a lower capacity utilization and also to a positive effect from IFRS15 in the comparable prior-year period.

Based on the developments in the reporting segments described above, we also expect Group sales revenue and EBIT in the first quarter to be significantly below the strong prior-year quarter.

In fiscal year 2020 we are expecting purchase price allocation effects to continue and we are not expecting any material negative impact on earnings from other non-recurring items.

After about €95 million in the previous year, we are limiting capital expenditure in 2020 to €70-80 million and thus approximately at the same level as amortization and depreciation.

We have further improved our maturity profile thanks to the new corporate bond and the early repayment of the convertible

bond and the ACF loans. This will not lead to higher interest expenses in the coming quarters. The absence of the one-off charge from the repayment of the convertible bond will lead to an improvement in the other financing result in the further course of the 2020 fiscal year and thus to a slightly improved financial result.

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
- Research and development activities
- Production, and especially accident frequency rate

Our employee trend is presented under [Note 6](#) of the notes to the consolidated financial statements. Following the increase in fiscal year 2019, the number of employees will decrease slightly in both reporting segments in the next financial 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 separate non-financial Group report in this annual report (see page 11).

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. Further information and details can be found in the annual report in the section separate non-financial Group report.

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 11, 2020 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. However, unmanageable or unreasonably high risks are not taken if avoidable. The principles of this policy are set out in the SGL Group policies 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 SGL Group's risk policy. This is achieved through the early identification, analysis and assessment of risks and the immediate introduction and tracking of response measures. 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 for our Company. Furthermore, the management of non-financial risks is integrated into our RMS.

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. The risk reporting 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.

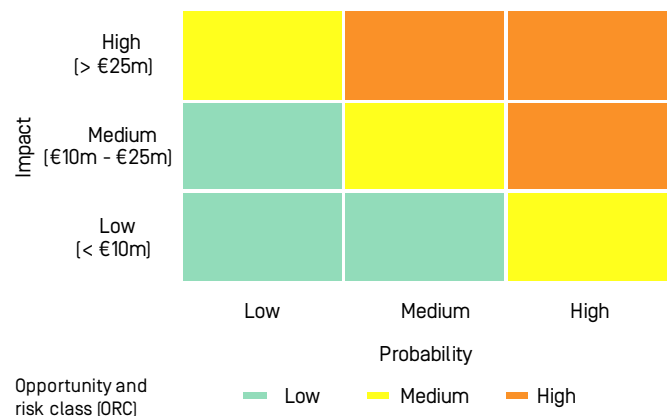
Opportunity and risk officers are positioned in all areas of the Company and throughout SGL's entire organizational structure – there where the risks arise and where they are managed. This includes plants, segment and sales organizations, and corporate functions.

Der 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 our business activities (which also comprises the protection of assets, including the prevention and detection of damages to assets), and the proper application and reliability of both internal and external accounting. 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 315 business processes worldwide are covered by around 825 controls. Other controls are performed automatically or with IT support. 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 standard IDW PS 982 and its effectiveness certified. Suggestions to further enhance the effectiveness of the ICS were collected and implemented in fiscal year 2018. On this basis, the effectiveness of SGL Carbon's group-wide ICS according to IDW PS 982 could be confirmed in fiscal year 2019. SGL Carbon 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 automated 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 framework conditions
- Financial opportunities and risks
- Legal risks and compliance 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 business unit Composites – Fibers & Materials [CFM] aims to grow in the aerospace, automotive, and industrial applications industries. We see opportunities, especially in those areas where customers need a combination of lightweight materials and high strength. The future holds considerable growth opportunities in the medium term in the aerospace industry as a result of the need to reduce weight and the significant cost savings from the use of industrial carbon fibers, such as in materials and components for 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. We intend to counteract this

risk by cooperating with established aerospace industry suppliers, such as the chemicals company Solvay. Furthermore, we expect significant project-based growth in the medium term in the market segment Automotive for components such as leaf springs and battery cases made of composite materials. If these projects experience delays or are not implemented as expected, it can have an impact on our economic development. We also expect a significant increase in volume in the market segment Industrial Applications, where we are focusing on profitable product groups. However, there is also the risk that the expectations based on our planning assumptions may not be realized.

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 Graphite Materials & Systems [GMS] business unit, we are striving for further significant growth, particularly in the market segments LED, Semiconductors, Battery & other Energy and Chemicals. This gives rise to risks depending on the actual volume growth compared with planning. If our target markets do not grow sustainably as expected, especially in the LED and semiconductor industries, we may not fully achieve our growth targets in the medium term, which could have a negative impact on the future results of operations, financial position and net assets.

Opportunities and risks from price and volume development [ORC: medium]

In the GMS business unit, order volumes and prices have increased significantly in recent years. In 2020, prices are now expected to remain broadly constant for most segments. If the price level should weaken in the medium term, we see risks particularly in the market segments Solar, Semiconductor, Industrial Applications and Battery & other Energy. While we are secured in the Battery & other Energy segment by long-term contracts for our fuel cell components, the battery business harbors greater uncertainties. Opportunities and risks for our business exist, depending on developments in the battery supply chain in particular.

Risks in the CFM business unit may arise from lower growth as a result of delays in the expected rise in volume and price com-

pared with planning and further capacity expansion by competitors. Here in particular, the margin development in the acrylic fiber business and fierce competitive pressure in the wind energy sector must be monitored carefully on a continuous basis. In the medium term, however, we see increasing opportunities for price increases due to the low price level of carbon fibers combined with good capacity utilization.

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 future results of operations, financial position and net assets. The global economy should stabilize in 2020, but a noticeable recovery is not expected, especially as the high risks and uncertainties remain.

Due to the increasing global spread of the corona virus (COVID-19) there is currently a high degree of uncertainty for the development of the global economy. Should this result in a sustained economic slowdown, this could also have a negative impact on our business activities. In addition, Europe continues to face major political challenges and risks, such as the consequences of an unregulated Brexit, which remains a possibility. Furthermore, an escalation in the trade dispute with the USA still cannot be ruled out. In the USA, forecasters expect the economy to slow in 2020 because the tax reform stimulus is no longer a factor this year. China's economic expansion rate is expected to level off slightly.

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. An end to the transition phase on December 31, 2020 without an agreement on future trade relations could have a negative impact on our supply chain. That is why we are continuously monitoring and assessing the developments in a steering committee led by the Board of Management and initiating the measures necessary to mitigate our risk exposure.

In addition, a renewed 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 the CFM and GMS business units do not perform as foreseen in the growth initiatives, there remains a medium-term risk related to an impairment loss on the reported carrying amounts. A medium-term improvement in the business trend in the CFM business unit 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 future net assets, financial position and results of operations. In particular, the developments of plan assets and of the discount 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, and other factors 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: medium]

As of December 31, 2019, we had liquidity of €137 million. In addition, an unused syndicated credit line in the amount of €175 million was also at our disposal. This credit line has been in place since January 15, 2019 and replaces the syndicated credit line in the amount of €50 million. The term of the new credit line is four years, subject to a renewal option for one year. No significant due dates for financial liabilities will arise through mid-2023. The final purchase price payment for the shares in the former SGL ACF in the amount of USD 62 million will be made in cash at the end of 2020. If risks deviating from planning materialize, further measures to safeguard liquidity would be taken such as an extension of the factoring program.

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.

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 harbors 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. Conversely, our suppliers also hedge receivables from SGL Carbon through trade credit insurance. Should trade credit insurers change their credit rating with regard to SGL Carbon, this could have a negative impact on our purchasing conditions.

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. We seek to leverage our broad global footprint to reduce the potential impact of exchange rate fluctuations on our 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 as long as the risks do not exceed certain materiality thresholds. 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 recognized taxes depend on the performance in the individual companies. If individual companies significantly improve earnings, there is potential in the medium term to capitalize deferred taxes.

Risks from compliance and other non-financial areas [ORC: medium]

The risks from compliance and other non-financial areas were classified into the risk classes high, medium and low as part of a structured process and based on their significance for the results of operations, financial position and net assets. The classifications were then discussed and substantiated by those responsible during a group-wide SGL Carbon workshop. The key

non-financial issues include the areas “Compliance”, “Products”, “Environment, health and safety affairs” and “Employee affairs”. Detailed information regarding these issues can be found in the separate group non-financial statement, starting on page 11.

In addition, risk mitigation measures such as the existing organizational structure, processes and controls as well as valid guidelines were evaluated for these issues.

The “Compliance” area covers the subjects of compliance management, respect for human rights, anti-corruption and bribery as well as responsibility in the supply chain. Our compliance management system aims to reduce the risk of legal violations. The SGL Carbon compliance program comprises our Code of Business Conduct and Ethics, whistleblower policy, global antitrust compliance policy, gifts and entertainment policy, business partner compliance program, human rights policy, and code for subcontractors and suppliers. Since SGL Carbon is an international company with production sites in numerous countries and supplies products to customers all over the world, the compliance risk of export control contained in the issue of responsibility in the supply chain is of significant importance to us. A violation of export control regulations could have a significant impact on our business. Therefore, we continuously expand our system through training and control mechanisms.

The area “Environment, health and safety affairs”, which includes energy and CO₂ emissions, occupational health and safety, resource management and process safety, is coordinated by our central corporate EHS organization. As part of our process reliability analysis, we assess the costs of rectifying environmental damage or lost sales as a result of production downtime. Risks may arise here in particular from increasing legal requirements.

The area “Products” includes three subjects: product quality, the environmental impact of products and sustainable product innovation. The topic “Employee concerns” covers the subjects of diversity and equal opportunities, employability and development, and attractiveness as an employer. Here, too, more detailed explanations can be found in the separate group non-financial statement.

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.

SGL Carbon also plans to have individual parts of the company certified in accordance with the automotive safety standard TI-SAX in 2020.

Great attention is being given to continuously increase the safety awareness of all employees who handle sensitive information on a daily basis. To achieve this, we use regular global information security campaigns on topics such as data classification, authorized access to company IT and protection against e-mail and telephone 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 continuously adapted 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 claims may differ from our estimates and have a considerable negative impact on our future 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 negative impacts on earnings for already disposed business.

Risks from environmental protection laws and regulations [ORC: Low]

Extensive studies are sometimes necessary for substances or products affected by the re-registration, assessment and licensing requirements prescribed by the EU legislation on chemicals (REACH). Continued developments in legislation as well as the effects of cost intensive testing and registration procedures at European production facilities cannot currently be completely quantified. 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. The current draft legislation under debate by the European Commission (EU Green Deal) and by the Germany's federal government (Climate Pact) could force SGL Carbon to make enormous investments.

Opportunities and risks from operating activities

Opportunities and risks in production [ORC: medium]

In order to achieve our growth targets and to seize further growth opportunities in the medium term, we invest in new assets and technologies. Risks such as delays in ramping up new systems or in customer qualification could lead to a delay in realizing sales revenue.

In the CFM business unit, a major project in Lavradio (Portugal) is the expansion of production of our own precursor, the raw material for carbon fiber. If the targeted ramp-up curve is not fully realized, this may have a negative impact on the expected improvement in earnings.

In addition, GMS classifies the production ramp-up curve for the medium-term growth projects planned in the market segments LED and Battery & other Energy as subject to risk.

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.

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

Opportunities and risks in the raw material and energy markets [ORC: medium]

We employ structured procurement concepts as well as medium- and long-term framework agreements to balance out volatility in energy markets and price fluctuations in our principal raw materials. We develop appropriate strategic concepts with our main suppliers based on business relationships built up over many years. In the GMS business unit in particular, there is a risk that materials or preliminary work no longer can be purchased from existing suppliers and that new suppliers have to be qualified. Furthermore, the planned raw material price reductions have yet been fixed by contracts only partially. In addition, the market segment Textile Fibers in the CFM business unit is characterized by high fluctuations of the raw material acrylonitrile. This gives rise to opportunities and risks, which we aim to reduce by maintaining safety stocks. However, 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, especially considering the demographic development in many countries where we do business, continues to increase. 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 and job platforms designed for specific target groups. The loss of important knowledge and expertise as well as insufficient attractiveness as an employer could have a negative impact on the future 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. 3D printing with carbon materials is an example of one such field.

Opportunities arise from the active participation in corporate networks. Examples of such networks, through which we discover trends and customer interests early, include Composites United (a 2019 merger of Carbon Composites e. V. and CFK Valley e. V.) 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 successively invest in new assets and technologies based on the actual market development. This comes with opportunities and risks, which arise from implementing and ramping up our investment and technology projects. In addition, there are particular opportunities and risks in price and volume trends to both sales and procurement. A deteriorating business situation could have negative effects on liquidity. Furthermore, a change to our business assessment could have a further impact on the value of our assets. Tax risks could affect our financial figures, especially in the medium term. We actively manage measures to secure liquidity.

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

For 2020, the International Monetary Fund (IMF) expects global economic growth to continue to accelerate, albeit less robustly than previously forecast. Although a relaxed monetary policy and expansive fiscal policy are continuing to support economic development in many countries, there is not yet enough demand-driven momentum to speak of a real turnaround and acceleration in growth. A marked increase in industrial production and investment confidence is not expected, especially while a high degree of uncertainty and risk still exist.

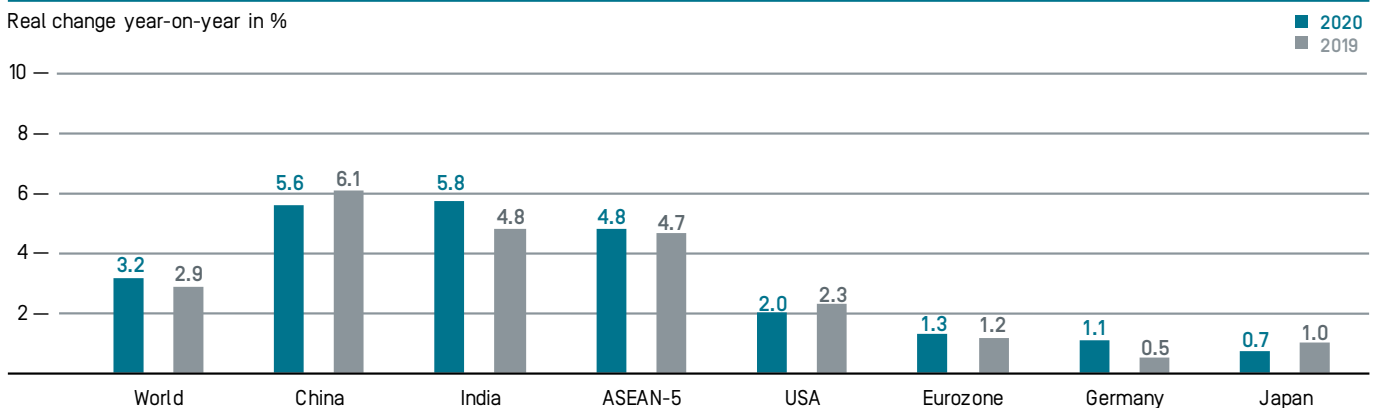
Although a further escalation of the US trade war with China has yet to materialize, a sustained reversal of already existing trade restrictions is currently difficult to predict. In addition, the possibility of the USA provoking a trade war with Europe cannot be

ruled out either. Other risks continue to be the as yet unresolved consequences of Brexit and, above all, the recent significant global increase in sovereign and corporate debt. The recent coronavirus outbreak in China is from today's perspective a sustained disruptive factor also on a global level. As a result, the global economy remains particularly susceptible to disruption in 2020.

The IMF revised its forecast downward in January and February (due to Corona). For 2020, it now anticipates global growth of only 3.2%, as opposed to the 3.4% expected previously. According to IMF's January forecast, industrialized countries will only grow by 1.6%, and emerging and developing countries only by 4.4% (excluding the impacts from the coronavirus).

Gross domestic product 2020 [2019] at a glance

Real change year-on-year in %



Source: IMF, World Economic Outlook (update), January and February 2020.

World economy stabilizing in 2020, but still weak and fraught with risk

The US economy stands to markedly lose momentum, since the strong impetus initially generated by the tax reform is now missing for a full 12 months. In addition, exports and corporate investment were also declining at the end of 2019/beginning of 2020. However, an expansive monetary policy and robust job market are stimulating consumer demand. The IMF expects growth of 2.0% in the USA.

In the Eurozone, private and state consumption continue to be important economic pillars in 2020. The construction sector should remain extremely buoyant, and the slight upturn in

global trade should provide relief to export-oriented industries. Interest rates remain low and fiscal policy is also predominantly expansive. According to the IMF, the Eurozone will grow by 1.3% in 2020.

The German economy remains divided, since according to the Kiel Institute for the World Economy, the industry downturn has yet to be overcome, thus delaying a cyclical recovery. On the other hand, construction and private consumption are continuing to stimulate robust domestic demand. Consequently, the German economy should grow very moderately in 2020, by only 1.1%, according to the IMF.

China's economic expansion rate is expected to flatten off to 5.6%, according to the IMF. Alongside targeted structural changes and increased domestic demand, as well as increased focus on services and high tech, the trade conflict and restrained demand from other countries are slowing down exports. The full impact of the recent coronavirus outbreak cannot yet be estimated, and high levels of debt are also limiting the scope to provide a further boost to lending. For the ASEAN-5 countries and India, the IMF expects growth to pick up slightly, while Brazil and Russia should also continue to recover moderately in 2020.

Industry trends

Market segment Digitization

Semiconductors/polysilicon: market recovering in 2020, with attractive medium-term projections providing impetus for investment

The semiconductor industry processes about 20% of the polysilicon produced around the world. Progressive digitization, with its enormous need for increasingly more powerful systems, is driving structural semiconductor market growth. As a result of increasing data networking in trade and industry (Internet of Things), as well as in automotive construction (assistance systems, autonomous driving), the already high demand will only continue to accelerate in the future. Consequently, despite substantial market saturation in consumer electronics, the semiconductor industry remains on an attractive growth course. For 2020, there are indications that the market will recover. World Semiconductor Trade Statistics (WSTS) expects sales in the semiconductor market to grow by 5.9%, based on growth in all regions and product areas, including storage (which is set to grow by 4.1%). At the same time, the most robust growth is expected for optoelectronic components, which should increase by 12.5% in 2020. Sales of sensors and integrated circuits should also increase markedly, by a good 5%. The industry association SEMI anticipates an increase in investments in manufacturing facilities and equipment of 5.5% in the semiconductor industry, to about USD 61 billion in 2020. Record levels are expected for the semiconductor market in 2021. With our graphite products in the market segment Semiconductors, we are particularly suited to supply the fast-growing wide-bandgap market, and thus also to capture an above-average share in such market growth.

LED: Sustained high growth due to increasing variety of applications

Owing to their high energy efficiency, LEDs have great advantages in the lighting industry from an environmental point of view, as well as in terms of ongoing energy costs. In addition, LED manufacturing costs have decreased significantly, which is stimulating demand at the expense of other lighting sources. The megatrends of urbanization and digitization are providing further impetus, with double-digit growth in demand expected for LEDs. So far, experts at Technavio have expected global LED sales to increase 16% per year during the years 2018 to 2022. In the outdoor and street lighting segment, sales are expected to increase by 14% annually from 2019 to 2024, according to Research & Markets. The automotive industry also makes significant use of LEDs, with more and more vehicles being equipped with LEDs and sensors. Although the automotive industry is currently in upheaval, global sales of LEDs to the automotive segment are increasing by 7% annually during the years 2018 to 2023, according to TrendForce. The development of autonomous driving should also push demand for LEDs in the automotive industry even further over the long term. The still-young micro-LED sector (TV/display lighting) is also showing very dynamic growth at the moment. During the years 2019 to 2023, the market volume for micro-LEDs should increase five-fold. The overall high structural growth of the LED market requires manufacturers to make significant, time-adapted investments to their production capacities. Our GMS business in the market segment LED should benefit from this strong market growth.

Market segment Mobility

Automotive industry: carbon fibers could capture more market share in vehicle construction independent of drive technology

2020 is beginning to look like another difficult year for the automotive industry. Moody's expects light vehicle sales to decrease by 0.9% to 90.2 million vehicles. The German Automotive Industry Association (VDA) expects sales in the more narrowly defined global passenger car market to shrink by more than 1% to 78.9 million units (with decreases of 3% in the US, 2% in China and Europe, and 4% in Germany). In addition, the technological shift is continuing to put pressure on manufacturers. E-cars will significantly increase in importance among new car registrations in the future. With our battery cases made from composites, we offer a highly attractive solution for that market in particular for better performance and protection of the battery. According to the analysts at Research and Markets, the market for carbon fibers (CF) in automotive construction will likely grow by just under 11% per year up to the year 2024. Our business particularly benefits from growth in electric mobility, as there

is special demand for intelligent solutions for lightweight construction and more efficient battery performance in that area. This particularly benefits the market segment Automotive at CFM and Battery & other Energy at GMS.

Aerospace: Despite carbon fiber growth potential, adverse impact from underused capacities

Airbus estimates that the global fleet of commercial aircrafts will more than double to 47,680 aircrafts by the year 2038. Growth will be realized both through new construction (fleet expansion, replacements) and maintenance to the existing fleet. Over their long useful lives, aircrafts must above all be retrofitted to include the latest technological advances, which benefits our business with aerospace lightweight construction for secondary structures and components for cabin interiors and braking systems. The overall market for carbon fibers in aircraft construction will grow by 4.2% annually during the years 2020 to 2025, according to Lucintel, with slightly higher growth of 4.7% per year (during the years 2018 to 2023) for composites used in aircraft cabin interiors. Thanks to our development agreement with the Belgian company Solvay, there is significant long-term growth potential for carbon fibers used in structural components in civil aviation, which should drive strong growth for the market segment Aerospace in CFM.

Market segment Energy

Fuel cells: attractive technological breakthrough

Alongside battery-powered electric vehicles, fuel cells will likely play a particularly important role in the future drive mix for automobiles. Extensive development initiatives have already been started in Asia and Europe. The specialists at Global Market Insights anticipate that more than 1.2 million fuel cell vehicles (FCVs) will already be sold worldwide by the year 2023. Furthermore, global sales in the overall fuel cell market (including stationary equipment) will double to over USD 7 billion between the years 2018 and 2025. Owing to the high level of expertise we have gained in the manufacture of fuel cell components over many years, we are well positioned in this market thanks to the gas diffusion layers produced in the market segment Battery & other Energy in the reporting segment GMS.

Lithium-ion batteries: Growth drivers are e-mobility, and increasingly also stationary energy storage systems

Global sales of lithium-ion (Li-ion) batteries are growing dynamically. Market researchers predict growth of between 11% and 16% annually by 2024/2025. E-mobility is expanding drastically as part of the transformation of the transportation in-

dustry. By 2030, sales of electric vehicles (EVs), including hybrids, could reach almost 27 million EVs (2019: just under 2.2 million EVs). Sales of electric two-wheeled vehicles (including bicycles and e-scooters) are also growing simultaneously, by 6.4% per year. Sales of Li-ion batteries for automobiles will even grow by 17.1% annually up to 2030. Additional market volume is also being created by the development and expansion of electricity generation from renewable sources in the stationary energy storage system sector, which also requires Li-ion batteries. According to market experts, that segment will grow by more than 25% annually up to the year 2030 (Global Market Insights). With regard to technological developments, it can be assumed that anode materials based on synthetic graphite will remain the dominant material over the medium term. Following a temporary downturn (see 2020 outlook for GMS), we expect to continue to participate in market growth over the medium term by continuing to develop our product range in the market segment Battery & other Energy.

Wind industry: Strong market growth – demand for carbon fibers increasing with size of rotor blades

The wind industry is showing very dynamic growth around the world. In established markets, in addition to new installations on land, an increasing number of old installations that have already reached their technological and economic life expectancies are being replaced by newer, more efficient installations (a process known as "repowering"). Wind energy has now also become established in Latin America, Southeast Asia, and the Middle East. In addition to the previously dominant onshore segment (wind parks located on land), substantial investment is now being made worldwide in offshore projects at sea. According to the Global Wind Energy Council (GWEC) forecast, a total additional 330 GW will come on the market between 2019 and 2023, meaning that the global installed capacity will increase to more than 900 GW. That equates to installed capacity growth of 4% annually. Modern onshore and offshore installations also have increasingly larger rotor diameters. As carbon fibers are increasingly being used for such rotor blades, our carbon fiber shipments are increasing dramatically. Consequently, the long-term outlook for our business with carbon fibers in the market segment Wind Energy in CFM is positive.

Solar / polysilicon: Photovoltaic (PV) boom continues – high investment required in upstream polysilicon production

As part of the intensified global efforts to combat climate change, solar energy is a technically established, efficient key technology for sustainable energy production, which is becoming increasingly more competitive compared to other sources of energy. That is one of the major drivers of demand for solar

energy over the medium term, irrespective of the subsidy policies of individual countries. For 2020, the industry experts at IHS Markit expect new PV installations to grow by 14% to 142 GW worldwide. Market volumes have already increased seven-fold within the past decade. For the current decade, dynamic growth is expected to continue, as entirely new PV markets open up in Southeast Asia, Latin America and the Middle East. The photovoltaic segment processes about 80% of the globally manufactured primary product polysilicon, and is thus the main driver for this industry. According to previous forecasts, polysilicon production will increase by an average of 13% annually between the years 2018 and 2024. In the market segment Solar in GMS, we only participate in such market growth selectively and opportunistically with our graphite products for the production of polysilicon, silicon crystals and wafers, preferring to focus on the semiconductor and LED market segments, which are more attractive for us.

Market segment Chemicals

Chemical industry remains restrained in 2020 – with greater focus likely on maintenance than on new investments

For 2020, the German Chemical Industry Association (VCI) anticipates global chemical and pharmaceutical production to once again grow only modestly, by 3.0%. China remains the major growth engine (+4.5%), although the expansion rate is flattening off there. Minimal growth is expected for India (+2.5%), Russia (+2.5%), South Korea (+2.0%), and the USA (+1.5%). In addition, the chemicals industry in the EU is only expected to stagnate, as slight declines with economically sensitive product groups will be compensated by modest increases in production volumes in consumer and fine/special chemicals. Including pharmaceuticals, the EU chemicals industry should grow by 1.5%, according to the VCI. For Germany, weak growth of 0.5% is expected (excluding pharmaceuticals: a decline of 0.5%). Our business in the market segment Chemicals should develop in line with the expectations for the EU chemicals industry in 2020.

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. We are not yet able to estimate the potential impact from the coronavirus (COVID-19) on the business development of SGL Carbon in terms of magnitude and duration. 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 some of our business in the reporting segment GMS, and particularly for CFM, performance will also depend on our customers' large 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. Unlike in previous years, at the time this management report was prepared we did not have any material net currency positions. Distortions in the prices of essential raw materials can also influence our earnings forecast. Further details 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 2020:

Group financial targets

| €m | Actuals 2019 | Outlook 2020 ¹⁾ |
|--|--------------|--|
| Sales revenue | 1,086.7 | Slight decline |
| EBIT before non-recurring items ²⁾ | 48.4 | 10-15% decline |
| Return on capital employed (ROCE _{EBIT}) | 3.9% | Slight decline |
| Consolidated net result - continuing operations | -89.9 | Substantial improvement to negative low double digit |

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

²⁾ Before non-recurring items

Group performance

Fiscal year 2020 will be characterized by the anticipated muted overall economic development and continuing geopolitical tensions. We expect a temporary dent in the growth path in our Li-ion battery business due to changes in the supply chain, which will resume over the medium term as a result of product

developments and new customers and the strong growth anticipated in our fuel cell components business. Nevertheless, we confirm the initial guidance from October 2019 for the current fiscal year. Accordingly, we continue to expect a slight decline in our consolidated sales revenue, as well as a consolidated recurring EBIT 10% to 15% below the 2019 level. It should also be taken into account that the previous year benefitted from lower expenses for management incentive plans, due to the downward trend seen in the business unit CFM and thus the Group as a whole.

Following a consolidated net loss of approximately €87 million in fiscal year 2019 – which can primarily be attributed to impairment in CFM and to deferred tax assets – the consolidated net result should improve significantly in 2020 to a low negative double-digit range.

Business trends in reporting segments

| | KPI | Actuals 2019 | Outlook 2020 ¹ |
|-----------|--------------------|-----------------|---|
| CFM | Sales revenue | 431.6 | Approx. stable on prior year level |
| | EBIT ²⁾ | -8.3 | Turnaround and slightly positive EBIT |
| GMS | Sales revenue | 622.5 | Slight high single digit percentage decline |
| | EBIT ²⁾ | 85.5 | Decline of approx. 20% |
| Corporate | EBIT ²⁾ | -28.8 | Substantial decline |

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

²⁾ Before non-recurring items

Sales development in the reporting segment Composites – Fibers & Materials (CFM) will be impacted by the earnings improvement measures in the market segment Textile Fibers, where we anticipate a sales decline of approximately 25%, as we are converting one line to precursor for carbon fiber production and have temporarily idled two lines to save costs. In contrast, sales revenue in the Aerospace segment should increase noticeably, also due to the postponement of the invoicing of an order from 2019 to 2020. Following the solid growth seen in the previous fiscal year, sales revenue from the wind industry should continue to increase, both in terms of prices and volumes. Industrial applications should also show growth. We expect sales revenue from the automotive industry approximately on the level of the prior year, as newly acquired projects will only have a gradual impact on sales revenues. All in all, we

thus expect sales revenue in the reporting segment CFM to remain approximately on the prior year level. Due in particular to the implemented earnings improvement measures in the past year [see CFM segment report for more details], but also based on selective price increases, a turnaround to a slightly positive recurring EBIT is expected for CFM.

The reporting segment Graphite Materials & Systems (GMS) achieved record sales and EBIT figures in fiscal year 2019. From our current perspective, however, that excellent development will not continue in 2020, as changes in the supply chain of our Li-ion battery business are causing a temporary decrease in the market segment Battery & other Energy. That decrease will only be of a short-term nature, however, as very robust growth in our business with fuel cell components, which are still only of limited importance today, will help the segment to grow once again. Furthermore, we are continuing to develop our anode material technology in order to attract new customers and open up new markets. Primarily against this framework, we anticipate a slight high single digit percentage decline in sales revenue in the reporting segment GMS. Adjusting for the development in Battery & other Energy, however, sales revenue for GMS should remain approximately on the level of the previous year despite the overall subdued global economic outlook. The expected decline in sales revenue in the market segment Industrial Applications is expected to be mostly compensated by the ongoing growth in semiconductors. We anticipate a similar development in earnings in the business unit GMS. Only due to the development in the market segment Battery & other Energy as described above, we anticipate a substantial decrease of approximately 20% in recurring EBIT. Adjusted for that development, however, recurring EBIT would improve. All in all, GMS should reach a recurring EBIT margin of well above 10%, once again underscoring that its business model is stable even in a weakening global economic environment.

The expected substantial deterioration in recurring EBIT in the reporting segment Corporate can mainly be attributed to the prior year benefiting from lower expenses for management incentive plans.

Capital expenditure approximately on level of depreciation and amortization

Following capital expenditures of approximately €95 million in the previous year, we are limiting capital expenditure to between €70 and €80 million, and thus approximately on the level of depreciation and amortization, in the current year. The rea-

son for that decision is in part the postponement of investments in our capital-intensive anode materials business for Li-ion batteries, in favor of growing the business with fuel cells, which has a much lower capital intensity. In addition, we intend to conservatively manage our free cash flow in light of the anticipated decrease in consolidated EBIT. In the business unit GMS, capital expenditures will be focused on the market segment Battery & other Energy s (fuel cell components), as well as on Semiconductors and LED. Capital expenditures in the reporting segment CFM will focus in part on the market segment Automotive (in particular to fulfill new orders for battery cases and leaf springs). In addition, we are continuing to invest into converting existing textile acrylic fiber into PAN precursor lines in order to supply our carbon fiber production.

Expected financial position

The Group's financing requirements are determined by the strategic business plans of the operating business units, which are reviewed annually based on the new projections. Solid balance sheet ratios, our available financing framework, and our operating cash flow all provide sufficient means to cover our anticipated liquidity requirements for 2020.

The mid-double-digit million euro increase in net financial debt at the end of 2020 compared to year-end 2019 can largely be attributed to the payment of the purchase price for SGL Composites US (the carbon fiber plant of our former joint venture with BMW in Moses Lake, Washington, US), in the amount of USD 62 million.

Dividend performance

Due to the accumulated losses in the parent company SGL Carbon SE in fiscal year 2019, 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 expenditures 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 2019

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 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 the sustained effectiveness of remuneration systems

In the past, the Annual General Meeting of SGL Carbon SE approved this remuneration system by a majority of 99.64% of votes cast.

The Articles of Incorporation of SGL Carbon provide that the Board of Management shall generally have two members. Following the resignation of Dr. Köhler on August 31, 2019, Dr. Bühler temporarily moved to the Board of Management of SGL Carbon SE on October 15, 2019. He has responsibility for Legal and Compliance on a temporary basis until a new CEO will take office. After completing his work on the Board of Management, Dr. Bühler will resume his previous role as General Counsel and Chief Compliance Officer of SGL Carbon on the basis of his previous employment agreement. Dr. Michael Majerus directs the Company as the Spokesman of the Board of Management.

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 amounts, one at the end of each month. The fringe benefits primarily consist of the use of a company car, including a shared chauffeur. D&O insurance with a deductible as specified by the German Stock Corporation Act (AktG) and the German Corporate Governance Code (DCGK) is also included.

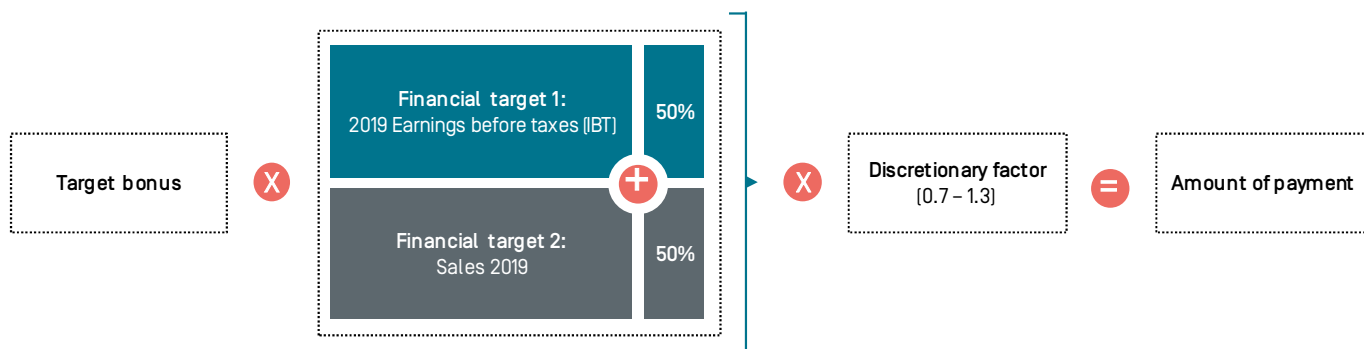
The performance-related components consist of a one-year remuneration (SGL Carbon Bonus Plan) and a multi-year variable remuneration component (SGL Carbon Long Term Incentive Plan, LTI).

SGL Carbon Bonus Plan

The one-year 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 (€400,000 p.a. for Dr. Majerus, €350,000 for Dr. Bühler, and €450,000 for Dr. Köhler). The amount paid out depends upon the achievement of financial and individual performance targets within the fiscal year.

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

To determine the one-year 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 based upon factors including the individual level of achievement for the various personal targets set at the start of the year for each Board member.

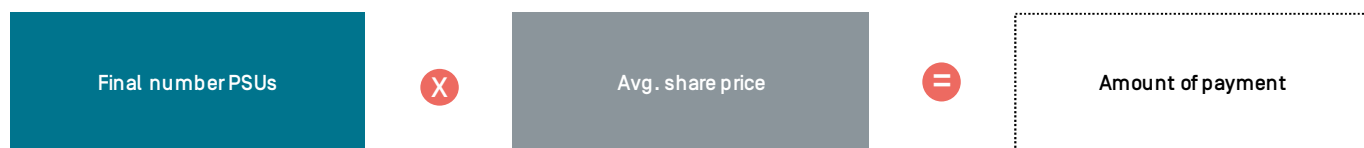
The payout is capped at 200% of the target bonus.

SGL Carbon Long-Term Incentive Plan

Members of the Board of Management are entitled to multi-year variable remuneration in the form of a Long-Term Incentive (LTI) plan. The purpose of the LTI is to reward the recipient for the Company's sustained long-term development. This is reflected by the multi-year Return on Capital Employed - ROCE_{EBIT} trend (performance target) and the share price. One tranche from the plan is granted each year. The Supervisory Board sets the target ROCE_{EBIT}, including the relevant minimum and maximum thresholds, for a period of up to four years.

An allocation amount in euros is established for each Board member (€700,000 p.a. for Dr. Majerus, €545,000 for Dr. Bühler, and €700,000 for Dr. Köhler). Based upon these amounts, a preliminary number of virtual shares (performance share units, or PSUs) is calculated each year. The number of preliminary PSUs is calculated at the start of the relevant performance period by dividing the allocation amounts by the average share price before the start of the performance period.

After a period of either three or four years, the degree of ROCE target attainment is determined. A payout is made only if the minimum ROCE target is reached. The final number of PSUs is limited and can be between 0% and 150% of the preliminary number of PSUs. The potential payout amount is calculated from the final number of PSUs multiplied by the average share price 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.



Shareholding requirements

Members of the Board of Management are generally 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 is based to his fixed annual salary. For the other members of the Board of Management, the number of shares to be held is based on 85% of their fixed annual salaries. The number of shares is calculated on the basis of an

average share price at the beginning of the term of office. 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. Shareholding requirements do not apply for Dr. Bühler due to his temporary appointment to the Board of Management.

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

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 remuneration components. The cap for the maximum remuneration is €3,100,000 each for Dr. Majerus and Dr. Bühler, and was €3,600,000 for Dr. Köhler.

Benefits after leaving the Board

If a member's appointment to the Board of Management is terminated prematurely – either by mutual consent, revocation, resignation, or termination as a result of procedures under corporate law in accordance with the Transformation Act (UmwG) – the Board member receives a maximum compensation of two years' annual 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 used 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 Board service agreement. There is no commitment to pay benefits if a Board member's appointment to the Board is terminated prematurely due to a change of control.

As a rule, Board members are subject to a one-year ban on competition after their contracts end. As compensation for this, the Company pays the members of the Board of Management a non-competition bonus equal to 50% of their annual remuneration for the duration of the non-competition clause. The amount of the annual remuneration to be used 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 Board service agreement. Any other income received by the Board member is offset against the non-competition bonus.

Dr. Köhler resigned from his position as CEO effective as of August 31, 2019. A mutually consensual termination of the employment as of December 31, 2019 (termination date) was agreed upon, and his remuneration was continued until this date. No other compensation was granted. Thus, within the context of the four-month release from duties until the termination date, a total of €508,062 was granted as a settlement, of which a portion was already paid out in fiscal year 2019. Only the variable remuneration components (STI and LTI grant) that were granted for the outstanding tranches pro rata up to the termination date will be paid out on the future due dates. The necessary pension provisions for benefits after the termination of the employment relationship were already fully allocated for Dr. Köhler as of December 31, 2019. The pro rata retirement service costs following his resignation are €86,848.

Given his temporary appointment as member of the board of management and subsequent resumption of his prior role as General Counsel and Chief Compliance Officer, no settlement or compensation payment for early termination is owed to Dr. Bühler.

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 this fiscal year include:

- all benefits granted, 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, broken down by the respective reference years;
- expenses for retirement benefits.

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

Total remuneration for the Board of Management in 2019 [benefits granted]

Total remuneration for the members of the Board of Management (based on benefits granted) was €3,025,506 [2018: €4,481,835] for fiscal year 2019. Of this total remuneration, €1,032,736 was allotted to fixed remuneration [2018: €1,150,000], €32,338 to non-cash compensation [2018: €36,502], €318,0891 to one-year variable remuneration [2018: €1,544,875], €1,283,170 to multi-year variable remuneration [2018: €1,400,000], and €359,173 to retirement benefits [2018: €350,458]. As of the date that these financial statements were prepared, the Supervisory Board had not yet finally decided on

the annual performance-related amounts to be paid out for 2019. The annual performance-related amounts are presented based upon the preliminary figures and an assumption 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.

The LTI tranches granted in fiscal year 2019 were based on a four-year performance period for the Board members. The following remuneration was extended to the active members of the Board of Management in the 2019 reporting year (individualized presentation):

| Benefits granted (€) | Spokesman of the Board of Management | | Dr. Michael Majerus | | Dr. Stefan Bühler Legal and Compliance (since October 15, 2019)) | | |
|--|--------------------------------------|------------------|---------------------|------------------|--|----------------|------------------|
| | 2018 | 2019 | Min. | Max. | 2019 | Min. | Max. |
| Fixed remuneration | 500,000 | 500,000 | 500,000 | 500,000 | 99,402 | 99,402 | 99,402 |
| Fringe benefits | 17,707 | 17,792 | 17,792 | 17,792 | 2,016 | 2,016 | 2,016 |
| Total | 517,707 | 517,792 | 517,792 | 517,792 | 101,418 | 101,418 | 101,418 |
| One-year variable remuneration ¹⁾ | 727,000 | 177,588 | 0 | 800,000 | 36,908 | 0 | 73,816 |
| Multi-year variable remuneration ²⁾ | 700,000 | 700,000 | 0 | 1,400,000 | 116,504 | 0 | 233,008 |
| LTI 2019-2022 | - | 700,000 | 0 | 1,400,000 | 116,504 | 0 | 233,008 |
| LTI 2018-2021 | 700,000 | - | - | - | - | - | - |
| Total | 1,944,707 | 1,395,380 | 517,792 | 2,717,792 | 254,830 | 101,418 | 408,242 |
| Retirement benefits | 144,777 | 155,549 | 155,549 | 155,549 | 29,928 | 29,928 | 29,928 |
| Total remuneration (German Corporate Governance Code) ³⁾ | 2,089,484 | 1,550,929 | 673,341 | 3,100,000 | 284,758 | 131,346 | 3,100,000 |

| Benefits granted (€) | Chief Executive Officer (till August 31, 2019) | | Dr. Jürgen Köhler | |
|--|---|------------------|-------------------|------------------|
| | 2018 | 2019 | Min. | Max. |
| Fixed remuneration | 650,000 | 433,333 | 433,333 | 650,000 |
| Fringe benefits | 18,795 | 12,530 | 12,530 | 12,530 |
| Total | 668,795 | 445,863 | 445,863 | 662,530 |
| One-year variable remuneration ¹⁾ | 817,875 | 103,593 | 0 | 900,000 |
| Multi-year variable remuneration ²⁾ | 700,000 | 466,667 | 0 | 1,400,000 |
| LTI 2019-2022 | - | 466,667 | 0 | 1,400,000 |
| LTI 2018-2021 | 700,000 | - | - | - |
| Total | 2,186,670 | 1,016,123 | 445,863 | 2,962,530 |
| Retirement benefits | 205,681 | 173,696 | 173,696 | 173,696 |
| Total remuneration (German Corporate Governance Code) ³⁾ | 2,392,351 | 1,189,819 | 619,559 | 3,600,000 |

¹⁾ The payout amount for the one-year variable compensation in the 2019 financial year will only be determined at the Supervisory Board meeting on March 10, 2020. The figure for the one-year variable compensation for 2019 represents the estimated payments in the following financial year and are based on a discretionary performance factor of 0.9 for Dr. Majerus; of 1.0 for Dr. Bühler and of 0.7 for Dr. Köhler

²⁾ The figures for the multi-year remuneration for fiscal years 2019 and 2018 correspond to the grant values of 100% at the beginning of the respective financial year

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 2019 (amounts received)

The payments made to the Board of Management in fiscal year 2019 totaled €3,057,848 (2018: €3,116,960). Of this total remuneration, €1,032,736 was allotted to fixed remuneration (2018: €1,150,000), €32,338 to non-cash compensation (2018:

€36,502), €1,544,875 to one-year variable remuneration (2018: €1,580,000), €88,727 to multi-year variable remuneration (2018: €0), and €359,173 to retirement benefits (2018: €350,458).

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 benefits.

| Cash method (€) | Dr. Michael Majerus Spokesman of the Board of Management | | Dr. Stefan Bühler Legal and Compliance (since October 15, 2019) | Dr. Jürgen Köhler Chief Executive Officer (till August 31, 2019) | |
|--|---|------------------|---|---|------------------|
| | 2019 | 2018 | 2019 | 2019 | 2018 |
| Fixed remuneration | 500,000 | 500,000 | 99,402 | 433,333 | 650,000 |
| Fringe benefits | 17,792 | 17,707 | 2,016 | 12,530 | 18,795 |
| Total | 517,792 | 517,707 | 101,418 | 445,863 | 668,795 |
| One-year variable remuneration ¹⁾ | 727,000 | 725,000 | 0 | 817,875 | 855,000 |
| Multi-year variable remuneration | 5,690 | 0 | 0 | 83,037 | 0 |
| Total | 1,250,482 | 1,242,707 | 101,418 | 1,346,775 | 1,523,795 |
| Retirement benefits | 155,549 | 144,777 | 29,928 | 173,696 | 205,681 |
| Total remuneration | 1,406,031 | 1,387,484 | 131,346 | 1,520,471 | 1,729,476 |

¹⁾ The amount paid 2019 represents the amount paid in March 2019 for financial year 2018. The amount paid 2018 represents the amount paid in March 2018 for fiscal year 2017

Additional disclosures on share-based payment instruments in fiscal year 2019

The following table shows the status of the SAR plans being phased out, which were replaced by the LTI:

| SAR | Balance at Dec. 31, 2018 | | Forfeited 2019 | Balance at Dec. 31, 2019 | |
|------------|--------------------------|---------------------|----------------|--------------------------|---------------------|
| | Number | Weighted base price | | Number | Weighted base price |
| Dr. Köhler | 46,000 | 30.77 | 0 | 46,000 | 30.77 |
| Dr. Bühler | 15,000 | 27.84 | 0 | 15,000 | 27.84 |

The SARs existing as of December 31, 2019 were not exercisable.

The following performance share units (PSUs) were granted based upon the LTI in recent years. Based on the results posted by SGL Carbon and the ROCE performance, it is expected that

the targets relating to the LTI plans granted in 2016 to 2019 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 2019:

| LTI | Tranche | Allocation value € | Price € ¹⁾ | No. of PSUs | Performance 0% - 150% ²⁾ | Fair value € ³⁾ |
|--------------|---------------|--------------------|-----------------------|----------------|--|----------------------------|
| Dr. Majerus | LTI 2016-2019 | 545,000 | 12.26 | 48,905 | 65.4% | 147,811 |
| | LTI 2017-2020 | 545,000 | 8.49 | 64,194 | 25.2% | 74,737 |
| | LTI 2018-2021 | 700,000 | 11.34 | 61,728 | 0.0% | 0 |
| | LTI 2019-2022 | 700,000 | 7.17 | 97,629 | 0.0% | 0 |
| Dr. Bühler | LTI 2019-2022 | 116,504 | 4.62 | 25,217 | 100% | 116,504 |
| Dr. Köhler | LTI 2016-2019 | 525,000 | 12.26 | 47,111 | 65.4% | 142,388 |
| | LTI 2017-2020 | 700,000 | 8.49 | 82,450 | 25.2% | 95,992 |
| | LTI 2018-2021 | 700,000 | 11.34 | 61,728 | 0.0% | 0 |
| | LTI 2019-2022 | 700,000 | 7.17 | 97,629 | 0.0% | 0 |
| Total | | 5,231,504 | | 586,592 | 21.3% | 577,432 |

¹⁾ Fair value on grant date before dilution

²⁾ Estimated attainment

³⁾ PSU- Number weighted with the performance and an average share price of €4.62 of the last 20 days in 2019

Remuneration in accordance with DRS 17

The total remuneration paid to Dr. Michael Majerus in fiscal year 2019 within the meaning of DRS 17 amounted to €1,395,380 [2018: €1,944,707] and consisted of the non-performance related component in the amount of €517,792 [2018: €517,707], the one-year variable component in the amount of €177,588 [2018: €727,000], and the multi-year variable component granted for 2019 in the amount of €700,000 [2018: €700,000]. The total remuneration paid to Dr. Stephan Bühler in fiscal year 2019 within the meaning of DRS 17 amounted to €254,830 [2018: €0] and consisted of the non-performance related component in the amount of €101,418 [2018: €0], the one-year variable component in the amount of €36,908 [2018: €0], and the multi-year variable component awarded for 2019 in the amount of €116,540 [2018: €0]. The total remuneration paid to Dr. Jürgen Köhler in fiscal year 2019 within the meaning of DRS 17 amounted to €1,016,123 [2018: €2,186,670] and consisted of the non-performance related component in the amount of €445,863 [2018: €668,795], the one-year variable component in the amount of €103,593 [2018: €817,875], and the multi-year variable component awarded for 2019 in the amount of €466,667 [2018: €700,000].

The total remuneration accruing to Dr. Michael Majerus for fiscal year 2019 amounted to €998,740 [2018: €1,395,174] and consisted of the non-performance related component in the amount of €517,792 [2018: €517,707], the one-year variable component in the amount of €177,588 [2018: €727,000], and the multi-year variable component of €147,811 [2018: €5,690], as well as retirement benefits of €155,549 [2018: €144,777]. The total remuneration accruing to Dr. Stephan Bühler for fiscal year 2019 amounted to €168,254 [2018: €0] and consisted of the

non-performance related component in the amount of €101,418 [2018: €0], the one-year variable component in the amount of €36,908 [2018: €0], and the multi-year variable component of €0 [2018: €0], as well as retirement benefits of €29,928 [2018: €0].

The total remuneration accruing to Dr. Jürgen Köhler for fiscal year 2019 amounted to €865,540 [2018: €1,775,383] and consisted of the non-performance related component in the amount of €445,863 [2018: €668,795], the one-year variable component in the amount of €103,593 [2018: €817,875], and the multi-year variable component of €142,388 [2018: €83,032], as well as retirement benefits of €173,696 [2018: €205,681].

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. Extra interest generated due to the investments in the benefits account having earned interest at a higher rate than the applicable statutory guaranteed interest rate for the life insurance sector is credited to the benefits account (surplus) when benefits start being paid out. In the event of invalidity or death prior

to the benefits falling due based upon age, the benefits account is credited with contributions up to the age of 60, with the replenishment being limited to a maximum of ten contribution payments. The payout is made as a one-time payment or, upon request, in ten annual installments. The new pension system took effect for Dr. Majerus for the first time as of July 2014.

Dr. Bühler remains in the defined contribution plan (ZVplus) for the senior management level. The present values of the defined benefit obligations for each of the two active Board members (shown in the table below) are secured by a reinsurance policy in the amount of €630,692 for Dr. Majerus and by plan assets in the amount of €420,787 for Dr. Bühler.

| Active members of the Board of Management as of Dec. 31, 2019 € thousand | Present value of defined benefit obligation | | Service costs | |
|---|---|------------|---------------|------------|
| | 2019 | 2018 | 2019 | 2018 |
| Dr. Majerus | 790 | 649 | 143 | 145 |
| Dr. Bühler ¹⁾ | 421 | - | 29 | - |
| Total | 1,211 | 649 | 172 | 145 |

¹⁾ The defined benefit obligation of Dr. Bühler includes also his benefits earned until his appointment to the board of management on Oct. 15, 2019

The total remuneration paid to former members of the Board of Management, executive management, and their surviving dependents amounted to €2.6 million in fiscal year 2019 (2018: €2.3 million). Pension provisions of €67.2 million (2018: €60.1 million) were recognized at the end of 2019 to cover pension obligations to former members of executive management and their surviving dependents. Of that amount €28.9 million was covered by reinsurance policies (2018: €26.3 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 receives 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 committee meeting attended, and each member of the Audit Committee receives €3 thousand for each meeting. The chairmen of the Personnel, Governance, Ethics, Strategy, and Technology committees receive €3 thousand per meeting, and the Chairman of the Audit Committee receives €6 thousand per meeting. In addition, the Company pays an attendance fee of €400 for each meeting attended by the members of the Supervisory Board.

| € thousand | Board member since | Age as of the date of the release of the 2019 Annual Report | Period of service (appointed up to) | Basic remuneration | Additional remuneration | Total | |
|------------|--|---|-------------------------------------|--------------------|-------------------------|-------------|--------------|
| | Susanne Klatten (Chairwoman) ¹⁾ | 2009 | 57 | 2020 | 125.0 | 14.4 | 139.4 |
| | Georg Denoke (Deputy Chairman) ²⁾ | 2015 | 55 | 2020 | 75.0 | 20.4 | 95.4 |
| | Helmut Jodl (Deputy Chairman) | 2008 | 58 | 2023 | 75.0 | 10.4 | 85.4 |
| | Ana Cristina Ferreira Cruz | 2013 | 56 | 2023 | 50.0 | 2.4 | 52.4 |
| | Edwin Eichler | 2010 | 61 | 2020 | 50.0 | 2.4 | 52.4 |
| | Ingeborg Neumann | 2018 | 62 | 2023 | 50.0 | 19.4 | 69.4 |
| | Markus Stettberger | 2013 | 48 | 2023 | 50.0 | 11.4 | 61.4 |
| | Dieter Züllighofen | 2016 | 53 | 2023 | 50.0 | 11.4 | 61.4 |
| | Total | | | | 525.0 | 92.2 | 617.2 |

¹⁾ Chairwoman of the Personnel and Nomination Committee

²⁾ Chairman of the Audit Committee

Information according to Sections 289a and 315a of the HGB

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

Composition of subscribed capital

As of December 31, 2019, 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 23](#) of the notes).

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 2019 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 of 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 2019.

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 25](#) 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, 2019, the Company had issued a convertible bond maturing in 2023. The convertible bond 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 note could be converted into shares up to the reference date, which results 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 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, as regards the convertible bond, 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).

The corporate bond issued in 2019 for € 250 million, maturing in 2024, entitles investors to demand the premature repayment of their bonds against payment of 101% of the nominal amount (including any tax deduction from this premature repayment amount) and the interest accrued up to this date if (a) a person (with the exception of Ms. Klatten, BMW AG and its associated parties) directly or indirectly holds more than 35% of the voting shares of SGL Carbon SE, (b) the entire or almost the entire assets of SGL Carbon SE and its group companies are transferred to one person (with the exception of Ms. Klatten, BMW AG and its associated parties), or (c) the shares of SGL Carbon SE are no longer listed on the Frankfurt Stock Exchange or another European regulated market.

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, Corporate Governance and Compliance Report (unaudited)

The following Corporate Governance Declaration for SGL Carbon SE and SGL Carbon Group pursuant to Sections 289f and 315d of the German Commercial Code (HGB) is combined with the Corporate Governance and Compliance Report. The Corporate Governance Declaration combined with the Corporate Governance Report is also available on the Company's website (www.sgllcarbon.com, under "Company/Corporate Governance"). The statements made in the Corporate Governance Declaration pursuant to Sections 315d and 289f HGB are part of the management report of SGL Carbon SE or the Group management report. Pursuant to Section 317 [2] Sentence 6 HGB, the audit of the statements by the auditor in accordance with Sections 289f [2] and [5], 315d HGB is limited to whether the statements were made.

Declaration of Compliance with the German Corporate Governance Code

According to Article 9 [1] [c](iii) of the SE Regulation (SE-VO) in conjunction with Section 161 of the Stock Corporation Act (AktG), the Board of Management and the Supervisory Board of a publicly listed European joint stock company (Societas Europaea) with registered offices in Germany are required to declare at least once per year their compliance with the German Corporate Governance Code. They must also provide reasons if a recommendation of the Code was not or will not be applied. The Board of Management and Supervisory Board of SGL Carbon SE have regularly issued and published declarations of compliance since 2002. Each declaration of compliance is made publicly accessible for a period of five years on the Company's website (www.sgllcarbon.com under "Company/Corporate Governance"). The most recent declaration of compliance was issued and published in November 2019:

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

Since the last declaration of compliance in September 2019 and up to October 15, 2019, 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, amendment of this publication as of May 19, 2017) as published by the German Federal Ministry of Justice and Consumer Protection in the official section of the Federal Gazette, with the exception of the following deviation:

- Clause. 4.2.1 Sentence 1: The Company's CEO, Dr. Köhler, resigned from his position at short notice on August 14, 2019, with effect as of August 31, 2019. Between the departure of the CEO and until the appointment of Dr. Bühler as an additional member of the Board of Management, as well as the appointment of Dr. Majerus as spokesman of the Board of Management, each effective as of October 15, 2019, the Company did not fulfill the recommendation pursuant to Clause 4.2.1 Sentence 1 of the German Corporate Governance Code, which states that the Board of Management of a publicly listed company must consist of multiple members and shall have a CEO or a spokesperson.

SGL Carbon SE is once again in full compliance with the recommendations of the German Corporate Governance Code as of October 15, 2019 and will continue to be so in the future as well.

The corporate governance principles of SGL Carbon SE furthermore satisfy the majority of the non-obligatory suggestions of the German Corporate Governance Code.

Wiesbaden, November 27, 2019

For the Supervisory Board of SGL Carbon SE: Susanne Klatten (CEO of the Supervisory Board of SGL Carbon SE)

For the Board of Management of SGL Carbon SE: Dr. Michael Majerus (Board of Management of SGL Carbon SE)"

Composition and Procedures of the Board of Management

The management of SGL Carbon SE as a publicly listed European company (SE) with registered offices in Germany is essentially determined by Regulation (EC) No. 2157/2001 of the Council of October 8, 2001, on the Statute for a European company (SE-VO), the German SE Implementation Act, the agreement concerning worker/employee participation in SGL Carbon SE, and the German Stock Corporation Act (AktG), as well as the suggestions and recommendations of the German Corporate Governance Code and the Articles of Incorporation of SGL Carbon SE.

Pursuant to Article 38 SE-VO in conjunction with Section 5 of the Articles of Incorporation of SGL Carbon SE, SGL Carbon SE is governed by the dualistic system. This is characterized by a separation of personnel between the executive body (Board of Management) as company management and executive body,

and the supervisory body (Supervisory Board) as the monitoring body. The Board of Management and Supervisory Board of SGL Carbon SE work closely together for the benefit of the Company. Their common objective is the sustained growth of the Company's enterprise value.

Pursuant to the Articles of Incorporation, the Board of Management of SGL Carbon SE consists of several members, the number of which is determined by the Supervisory Board. As of December 31, 2019, the Board of Management consisted of two members, and thus no Board of Management committees were formed.

SGL Carbon SE and the SGL Carbon Group are managed by the Board of Management on its own responsibility in the Company's interest. The principle of collective responsibility applies, i.e. the Board of Management members share responsibility for company management, although each Board of Management member is given authority for specific portfolios. For more detailed information on the individual Board of Management members and their portfolios, please refer to the Company's website (www.sglcarbon.com, under "Company/About us/Board of Management"). Nevertheless, certain matters defined by the entire Board of Management are handled by the entire Board of Management and require its consent. The CEO or spokesperson of the Board of Management coordinates the work of the Board of Management members.

The Board of Management develops corporate and group strategy, and ensures its implementation in consultation with the Supervisory Board. The Board of Management's responsibilities also include the management and monitoring of operational activity, as well as the setup and monitoring of an appropriate and efficient control and risk management system. The Board of Management ensures compliance with legislation, official regulations, and internal guidelines, and ensures that they are also observed by group companies. The Board of Management prepares the Company's interim financial reports, the annual financial statements of SGL Carbon SE, the consolidated financial statements, the management reports of SGL Carbon SE and SGL Group, and the separate non-financial report for SGL Group.

The Board of Management informs the Supervisory Board on a regular basis, in a timely manner, and comprehensively concerning all issues relevant to the Company and the Group, particularly those relating to strategy, planning, business development, the risk situation, risk management, and compliance. In this context, the Board of Management addresses situations in which the course of business deviates from the prepared

plans and objectives. The Board of Management promptly informs the chairperson of the Supervisory Board regarding important events of material importance to the Company, and the chairperson of the Supervisory Board subsequently instructs the Supervisory Board and convenes a meeting of the Supervisory Board if needed.

Composition and Procedure of the Supervisory Board and its Committees

Supervisory Board

Pursuant to Section 8 (1) of the Articles of Incorporation, the Supervisory Board of SGL Carbon SE consists of eight members, half of whom represent the shareholders and half of whom represent the employees. The shareholder representatives are appointed by the Annual General Meeting of SGL Carbon SE and the employee representatives are appointed by the SE Works Council in accordance with the Company's agreement with its employees concerning co-determination within the Company. The Supervisory Board elects from among its members a chairperson of the Supervisory Board, as well as one deputy chairperson each from among the shareholder representatives and the employee representatives. If resolutions are to be adopted with a simple majority, the chairperson of the Supervisory Board shall cast the deciding vote in the event of a tie, and if the chairperson is not participating in the adoption of the resolution, the deputy chairperson appointed to the Supervisory Board as a shareholder representative shall cast the deciding vote. In addition, the chairperson of the Supervisory Board shall coordinate the work within the Supervisory Board and represent the interests of the Supervisory Board externally.

The Supervisory Board advises and supervises the Board of Management in the management of the Company. It appoints and dismisses members of the Company's Board of Management, decides on the remuneration system for Board of Management members, and sets their individual remuneration. The Supervisory Board receives reports from the Board of Management at regular intervals concerning the Company's strategy, corporate planning, sales growth, profitability, business development, and position, as well as the internal controlling system, the risk management system, and the compliance management system. It is directly involved in decisions that are of fundamental importance for SGL Carbon SE and the Group; these include entries into new areas of business or exits from existing areas or the issuance of bonds. Section 11 of the Articles of Incorporation of SGL Carbon SE contains a schedule of

transactions for which the Board of Management requires the Supervisory Board's consent (the Articles of Incorporation of SGL Carbon SE can be viewed on the Company's website (www.sglcarbon.com, under "Company/Corporate Governance")). Under certain circumstances, related-party transactions also require by law the prior consent of the Supervisory Board or the Audit Committee. Finally, the Supervisory Board is responsible for auditing the annual financial statements and management report of SGL Carbon SE, the consolidated financial statements and management report, and the recommendation for appropriation of profits. The Supervisory Board's activity in fiscal 2019 is explained in the "Report of the Supervisory Board" (see page 6).

The Supervisory Board has adopted rules of procedure that notably include, in addition to the Supervisory Board's functions and responsibilities, the convening and preparation of its meetings as well as the adoption of resolutions. The rules of procedure are available on the Company's website (www.sglcarbon.com, under "Company/Corporate Governance").

Objectives of the Supervisory Board with respect to its composition

In accordance with the requirements of the German Corporate Governance Code, the Supervisory Board has defined objectives for its composition and has prepared a competence profile for 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 72 years. 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 a court appointment to the Supervisory Board are not considered. If a Supervisory Board member holds a material equity interest in the Company as defined by 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 foregoing rule and there is thus no time restriction on this member's candidacy. Each Supervisory Board member shall also ensure that he or she has sufficient time to fulfil his or her mandate.

All Supervisory Board members must be in a position to duly perform the duties of their office. To ensure that all responsibilities associated with the Company's financial accounting are duly performed, at least one member of the Supervisory Board shall be an independent financial expert with specialized

knowledge and experience in the fields of financial accounting and/or financial auditing. In addition, at least one member of the Supervisory Board should have relevant professional experience and industrial expertise in SGL Carbon Group's fields of business and its key customer industries. Furthermore, at least one member should have in-depth experience in each of the areas of corporate management and strategy, compliance and risk management, innovation expertise (including digitization), and extensive professional experience in leadership development and human resources. The number of members with experience in technical fields (particularly chemistry and engineering) and the number of members with commercial backgrounds shall be well-balanced overall. The composition of the Supervisory Board should also 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 Supervisory Board members on the shareholder side shall be independent; this is currently the case, since the Supervisory Board considers Ms. Neumann and Messrs. Denoke and Eichler to be independent representatives.

With respect 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 and public sectors) of April 24, 2015, which applies for the Company, also requires the Company's Supervisory Board to have at least 30% female and 30% male members.

The Supervisory Board's aforementioned objectives for its composition and the competence profile for the entire board as set out above are taken into account in proposals for the appointment of new members to the Supervisory Board and efforts are taken to ensure that the competence profile is maintained. The current composition of this body meets all requirements for relevant expertise and the aspects of diversity and independence based upon the objectives and the competence profile of the Supervisory Board.

For more detailed information on the individual members of the Supervisory Board, please refer to the Company's website (www.sglcarbon.com, under "Company/About us/Supervisory Board").

Rules for possible conflicts of interest

Members of the Supervisory Board must disclose any conflicts of interest to the chairperson of the Supervisory Board. This includes both concrete conflicts of interest and sufficiently probable potential conflicts of interest. Any significant conflicts of interest of a Supervisory Board member that are not merely temporary in nature shall lead to that member's resignation from the Board. Related-party transactions are reviewed and approved by the Supervisory Board or the Audit Committee in accordance with statutory requirements. In addition, the Audit Committee examines whether there are indications of impermissible influence in the event of transactions between SGL Carbon group companies and Supervisory Board members, related parties, and shareholders with a shareholding of more than 5% of voting rights in SGL Carbon SE. No conflicts of interest requiring immediate disclosure to the Supervisory Board were reported by members of the Supervisory Board or Board of Management during the period under review. There were also no contracts for advisory or other services between Supervisory Board members and the Company during the period under review. Relationships with related parties are presented in the notes to the consolidated financial statements Note 28.

Committees of the Supervisory Board

The Supervisory Board has a total of three permanent committees, which work in accordance with the requirements of the German Corporate Governance Code, the Stock Corporation Act, and the Articles of Incorporation of the Company and the Supervisory Board's rules of procedure. 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 its current and former Board of Management members. It reviews the remuneration of the Board of Management members and submits proposals to the plenary sessions of the Supervisory Board for a final decision. The committee also 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 function 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 (i.e. Ms. Neumann and Messrs. Denoke and Eichler, in addition to Ms. Klatten) are members of this committee, which is chaired by Ms. Klatten.

Audit Committee

The Audit Committee consists of four members. The Audit Committee is chaired by Mr. Denoke. The other members are Ms. Neumann and Messrs. Stettberger and Züllighofen. The committee's responsibilities include auditing accounts and monitoring the Company's financial accounting process, risk management, compliance, and therefore also its internal control and auditing system. It is also in charge of checking the Group's related-party transactions. In particular, it is responsible for the preliminary audit of the annual financial statements of SGL Carbon SE and the Group, the management report and consolidated management report (including the separate non-financial report), and the recommendation for appropriation of profits.

The committee also handles the relationship between the Company and its 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, performs the preparatory work related to appointing the auditor, and reviews in advance the commissioning of non-audit services by the auditor.

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

Efficiency test of Supervisory Board

At regular intervals, the Supervisory Board assesses the effectiveness and efficiency of its work and that of its committees. The Supervisory Board last performed this self-assessment at the end of 2019. In an extensive questionnaire, the members of the Supervisory Board provided their assessment of current practices relating to various topics, such as collaboration within the Supervisory Board and the Board of Management, as

well as work in the committees, and could also make recommendations for improvement. The results were analyzed by a notary, prepared in an anonymized format, and subsequently discussed within the Supervisory Board. In the overall conclusion, the members of the Supervisory Board rated collaboration within the Supervisory Board as positive.

Corporate Governance Practices

SGL Carbon Code of Conduct

The SGL Carbon Code of Conduct emphasizes the obligation of SGL Carbon and its employees to engage in responsible, legal actions and reflects the common values of the Group, its corporate culture, and its goals for business conduct. One significant factor in the sustained success of SGL Carbon is its responsible and appropriate treatment of all persons with whom the Company has business relationships – employees, customers, shareholders, government authorities, and the general public. The purpose of the Code of Conduct is to make a significant contribution to building and maintaining trust among all interest groups. It emphasizes the obligation of the Company and its employees to comply with applicable laws and provides employees with guidelines for responsible conduct. The SGL Carbon Code of Conduct is available on the Company's website [www.sglcarbon.com, under "Company/Compliance/Code of Conduct"].

SGL Corporate Governance Principles

The SGL Corporate Governance Principles summarize the relevant statutory regulations, the Company's Articles of Incorporation, and supplemental practices of the Company and the Group that have evolved over the years. Their purpose is to ensure responsible and transparent corporate management and control, and to sustain and promote the trust of our stakeholders, business partners, and employees, as well as the general public. The Principles are reviewed at least once per year and are adapted to changes in laws, recommendations, and market practices. In addition to the rules of procedure for the Board of Management and Supervisory Board and the organizational principles of the SGL Carbon Group, the SGL Corporate Governance Principles also cover the essential corporate guidelines for group-wide corporate governance and compliance.

One fundamental aspect of this is the aforementioned SGL Carbon Code of Conduct, which emphasizes the obligation of the Group and its employees to comply with laws and internal

guidelines, and sets standards for legal and ethical conduct. Based not least upon the Code of Conduct, the Company has also developed detailed corporate guidelines, which apply equally for SGL Carbon SE and for the Group and are likewise part of the SGL Corporate Governance Principles, such as:

- Guideline for compliance with antitrust regulations
- Guideline for compliance with regulations under capital markets law
- Whistleblower guideline for reporting particularly serious compliance incidents
- Principles for giving and accepting gifts and other gratuities in dealings with business partners and government officials
- Guideline for protecting information and the Company's underlying infrastructure
- Guideline for establishing procedural structures to identify and monitor core risks of the Company, its business units, and functions

Compliance as part of the management and corporate culture

Compliance is a fundamental responsibility of the Board of Management at SGL Carbon. 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 embody this in their day-to-day transactions. In this way compliance will sustainably support the success of our Company.

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 necessary comprehensive organizational, communications, and control structures for SGL Carbon at all sites, to review them regularly, and to adjust them as needed. The objective is to ensure that compliance exceeds mere adherence to legal and formal requirements and structures, and becomes an integral part of value-oriented corporate management within the organization.

The management and executives of SGL Carbon serve as important role models for this based upon their responsibilities

for employees and their leadership roles. The topic of compliance is therefore a fixed agenda item in the annual Group Communication Forum (GCF), where managers of our top-level management are repeatedly sensitized and trained on the topic of compliance.

In addition to the compliance representatives in the business units and corporate functions (see CSR Report, page 11), the SGL Carbon compliance organization includes a network of regional and local compliance officers. All members of the network receive appropriate introductory training when assuming their roles. The significant elements of our compliance program, as well as the role and responsibility of the compliance network, are also described in the Compliance Manual. All documents are available to the members on a dedicated SharePoint page. The compliance representatives of the business units as well as the corporate functions are part of the Compliance Committee, which meets twice per year. In the Compliance Committee strategic compliance topics as well as changes to the existing compliance program are discussed and adopted. To ensure transfer of knowledge between the Compliance network and Group Compliance, teleconferences are held on average three to four times per year, and in-person meetings are held every two years in the form of regional compliance conferences in Europe, Asia and North America. The teleconferences are intended to ensure an ongoing exchange of information about the compliance program and discussion of current topics. The compliance conferences are specifically intended for the further refinement of the compliance program, while considering site-specific needs and the training of local compliance representatives.

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 Group Compliance department when introducing compliance initiatives at the various sites. In 2019, this included in particular the introduction of the updated eLearning program for the Code of Conduct (see CSR Report, page 13).

Our primary objective for compliance is that all of our employees should know and respect the requisite regulations in order to reduce the risk of breaking the law and thus avoid possible harm to SGL Carbon. Our compliance policies are therefore a permanent part of our hiring documents and are issued to all new employees. Twice-yearly reporting by the Local Compliance Representatives (LCRs) to Group Compliance confirms that this process is operating correctly. A confirmation of receipt, providing written documentation that the employee is aware of the regulations in the Code of Conduct, is also placed

in the employee's file. The Code of Conduct, the guideline for gifts and invitations, the guideline on antitrust law, and the guideline on the whistleblower system are available in a total of nine local languages. Employees can download the guidelines from the intranet and from our SharePoint site. The intranet was completely revised in 2019 and is now available to employees with a new structure. The Compliance page was also revised as part of this relaunch. With a few clicks, employees can reach the most important information and components of our compliance program.

Our employees also participate in mandatory compliance training sessions, which are conducted as face-to-face and eLearning training (see CSR Report, page 13). The initial training session is generally done online. The local HR departments register new employees through an SAP Onboarding training catalog for this purpose.

SGL Carbon introduced its comprehensive worldwide antitrust law compliance program already in 2001. One key element is regular mandatory training, which is offered as face-to-face and eLearning sessions. These mandatory training sessions are aimed at all managers in the top three levels of management within the Group, as well as all purchasing, sales and marketing employees. A total of 570 employees participated in training on antitrust law in 2019. As part of an update to the policy, the target group was expanded to include employees from the Human Resources, Legal, and Compliance departments, as well as all members of the compliance network. All new employees in this target group are given the SGL Carbon antitrust compliance guidelines with their hiring documents or when changing positions, and must sign these. They then participate in the mandatory online training. All employees in this target group participate in regular refresher courses, which are held in both face-to-face and online formats. This process is also part of an internal check in the context of our ICS (internal control system).

Another key component of the compliance program is our preventative anti-corruption measures (see CSR Report "Anti-corruption and bribery", page 13).

SGL Carbon introduced a Supplier Code of Conduct in 2015. Under this code, all SGL suppliers and their subcontractors must also undertake to comply with legal, ethical, and sustainable conduct (see CSR Report "Responsibility for the supply chain", page 14).

SGL Carbon aims to create an environment in which all compliance matters can be discussed in an open manner. All employees are encouraged to discuss any integrity-related issues and questions with their superiors, the Compliance department, or a member of the compliance network. In addition to existing communication and reporting channels, SGL Carbon also has a whistleblower system in the form of the Compliance Helpdesk. This allows employees to confidentially report potential compliance violations in accordance with the whistleblower guideline. The whistleblower guideline also governs the mandatory protection of the reporting party. The email address can also be reached by third parties via SGL Carbon's website.

The Group Compliance department reviews reported compliance-related incidents as part of the internal compliance review. This department is tasked with ensuring that non-compliant actions and violations are detected and prevented in a timely manner, that our Company's activities comply with the applicable laws and statutory provisions, and that potential improvements to our internal business activities are identified.

During the period under review, SGL Carbon recorded all notices relating to potential violations of anti-trust law, anti-corruption, export controls and customs, protection of trade secrets, and anti-fraud that could result in financial damage or harm to the Group's reputation. These were all handled without exception so that specific measures could be identified and carried out as needed. SGL Carbon is convinced that the aforementioned components of the compliance management system and our monitoring processes are optimally suited to ensure conduct that conforms with the law in all areas of SGL Carbon in the future as well.

Other compliance measures relate to capital market laws and compliance with the respective Group policy, which regulates issues including trading in SGL Carbon SE securities by members of the Board of Management and 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. This 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 comply with the respective internal and external requirements [see CSR Report "Responsibility for the supply chain", page 14].

In 2019, the Group Internal Audit department, on behalf of Group Compliance, reviewed whether individual subsidiaries observed the implementation of anti-corruption and anti-fraud management as part of their regular audits. The focus was on obtaining assurance that the local companies were upholding the defined compliance regulations and identifying individual violations of the regulations. If the compliance audits reveal the need to optimize workflows or strengthen control measures, corrective action is promptly undertaken.

Regular risk assessments are part of an effective compliance management system. In past years, both a top-down risk assessment and a bottom-up approach were implemented for the areas defined as core compliance risks, namely antitrust law, anti-corruption, export control and customs, the protection of trade secrets, and anti-fraud. This regular compliance risk assessment is performed either in the context of the annually submitted BU compliance questionnaire or through interviews. Appropriate interviews will be conducted once again in 2020 with the management of the business units as well as the sites.

In order to adjust the time period of the annual compliance report to the fiscal year, the Audit Committee of the Supervisory Board will deal with the report in future at its March meeting, rather than in December as previously. This change was already implemented for the reporting period of January 1, 2019 – December 31, 2019, and the Audit Committee of the Supervisory Board will therefore deal thoroughly with the compliance report at its meeting in March 2020.

Systematic Risk Management

To ensure the responsible handling of risks as part of good corporate governance practice, the SGL Carbon Group developed a risk management system at an early stage. The system ensures that the Company's risk management and control procedures are adequate and effective. It is designed to identify any business or financial risks as early as possible so that appropriate countermeasures can be taken. The system is continually refined and adapted to reflect changing circumstances. The Board of Management reports at regular intervals to the Supervisory Board and in particular to the Audit Committee concerning existing risks and risk trends. Further information on the risk management system [RMS] can be found in the report on opportunities and risks on pages 65 - 72.

Statements concerning the “Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen” [Act on equal opportunities for women and men for executive positions] and Statements concerning Minimum Percentages on the Supervisory Board

In accordance with the Act on equal opportunities for women and men for executive positions in the private and public sectors of April 2015, the Company has established targets for the percentage of women on the Board of Management and in the other management levels, and the implementation period for these targets. The Supervisory Board established a target of 0% for the percentage of women on the Board of Management of SGL Carbon SE to be achieved by December 31, 2019 [percentage of women when the resolution was adopted: 0%]. The Board of Management for its part adopted a target of at least 20% for the percentage of women in the management level of SGL Carbon SE below the Board of Management to be achieved by December 31, 2019 [percentage of women when the resolution was adopted: 20%]. The Company was unable to set a percentage of women for a second management level below the Board of Management, since the flat hierarchical structure of SGL Carbon SE as a pure group parent company has only one relevant management level (with relevant human resources and leadership responsibilities) below the Board of Management. These two targets were achieved: on December 31, 2019, the percentage of women was 0% on the Board of Management of SGL Carbon SE and 20.83% in the management level below the Board of Management.

At the conclusion of the period ending on December 31, 2019, the Board of Management and Supervisory Board adopted targets for the following period. The Supervisory Board once again set a target of 0% to be achieved by December 31, 2022 for the percentage of women on the Board of Management of SGL Carbon SE [percentage of women when the resolution was adopted: 0%]. The Board of Management adopted as its target at least 20.83% for the percentage of women in the management level of SGL Carbon SE below the Board of Management to be achieved by December 31, 2022 [percentage of women when the resolution was adopted: 20.83%]. The Company was unable to set a percentage of women for a second management level below the Board of Management, since the flat hierarchical structure of SGL Carbon SE as a pure group parent company has

only one relevant management level (with relevant human resources and leadership responsibilities) below the Board of Management.

Moreover, the Act on equal opportunities for women and men for executive positions also requires that the Supervisory Board of SGL Carbon SE must consist of at least 30% women and at least 30% men. The Company met these requirements in the composition of its Supervisory Board, which includes three female members and five male members on the reporting date.

Diversity Concepts for Company Management

According to the Company's corporate governance principles, diversity must be taken into account in the composition of the Board of Management. This refers firstly to diversity in terms of subject matter, which manifests itself in the Company's existing structure in that at least one of the Board of Management members in each case possesses comprehensive experience in the Company's operations, in strategic company management, and in financial, controlling, and reporting processes. Another determining factor is that the international presence of SGL Carbon must also be taken into account through comprehensive professional experience in or with other countries. With respect to gender diversity, no extensive quota was considered proper given the size of the Company's Board of Management, which usually consists of only two members, and therefore no such quota was set (see above “Decisions in accordance with the Act on equal opportunities for women and men for executive positions and statements concerning minimum percentages on the Supervisory Board”). With respect to the age structure, it is specified that the age limit for members of the Board of Management is 65 years (age limit). The Supervisory Board will use these requirements as the basis for new appointments in the Company's interest, in order to recruit the best candidates for vacant positions in each case. The current composition of the Board of Management fulfills the Company's objectives in this regard.

The Company is striving to develop suitable candidates from within the Company for vacancies on the Board of Management. Naturally, this does not rule out the possibility that the Supervisory Board's selection process will include external candidates, either exclusively or in addition to internal candidates, depending upon the specific situation. The Company uses a systematic management development approach with the following main elements to identify and develop employees with

appropriate leadership potential for duties in top management: (i) early identification of suitable candidates with differing specialties, nationalities and sexes, (ii) systematic development of top-tier management by assigning tasks with increased responsibility, if possible in different areas of business and functions, (iii) regular and systematic review of individual qualification requirements for the contemplated target levels (relevant areas of expertise, professional experience, and leadership role within the corporate culture). Using the competence profile as prepared by the Supervisory Board, the Company will identify candidates who can be included in a selection to be made by the Supervisory Board. This should enable the Supervisory Board to provide sufficient variety in terms of professional education and experience, cultural background, and diversity when making appointments to the Board of Management. Regardless of these criteria, the Company is convinced that in the final analysis, only a holistic assessment of each individual can be the decisive factor for appointment to the Board of Management. The Company will consistently utilize the services of qualified human resources consulting companies to ensure an appropriate selection of external candidates based upon the required areas of expertise for a Board of Management position.

With respect to its own composition, the Supervisory Board of the Company defined a competence profile and established detailed objectives for itself in order to reflect different outlooks and experiential backgrounds within the board. The details of this diversity concept are described above in this report under "Composition and Procedure of the Supervisory Board and its Committees/Objectives of the Supervisory Board with respect to its composition." These objectives are taken into account in proposals for the appointment of new Supervisory Board members. The current composition of the Supervisory Board meets the aforementioned objectives for appropriate composition.

Other Statements

Shareholders and Annual General Meeting

The shareholders of SGL Carbon SE exercise their rights during the Company's Annual General Meeting. In particular, the Annual General Meeting elects the shareholder representatives for the Supervisory Board and adopts resolutions concerning the ratification of acts by the Board of Management and the Supervisory Board, as well as the selection of an auditor. It decides on the appropriation of profits, capital measures, and consent to intercompany agreements, and also the remunera-

tion of the Supervisory Board and amendments to the Company's Articles of Incorporation. The Annual General Meeting is held once per year. Each share entitles the bearer to 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 until the end of general debate. Shareholders can also submit their votes in writing by mail without issuing a power of attorney to a representative.

Active and transparent shareholder communication

One of the primary objectives for the Board of Management is to report comprehensively to all target groups, particularly our shareholders, and to communicate the same information at the same time. Regularly recurring events (such as the Annual General Meeting and conferences – including conference calls – with analysts and investors) and reports or notices (such as the annual report, interim reports, presentations at the Annual General Meeting, press releases, and ad hoc notices) are published on the Company's website.

Information on the auditors

KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, Frankfurt office, has been the auditor of SGL Carbon SE and the SGL Carbon Group since fiscal 2017 (January 1, 2017 to December 31, 2017). Mr. Janz has signed as the responsible public auditor since fiscal 2017. This appointment followed a tender and selection process for the audit pursuant to Article 16 (3) of Regulation (EU) no. 537/2014 of the European Parliament and of the Council of April 16, 2014 (Audit Regulation).

For details on the auditor's fees, please refer to page 156 of the 2019 annual report.

At the 2020 Annual 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 2020 (and, in the event of any audit reviews of financial information during the year, for these audit services as well).

Deductible for D&O insurance

The Company has purchased liability insurance for the members of the Board of Management and the Supervisory Board

[D&O insurance] with a deductible of 10% of the loss up to the amount of one and a half times the fixed annual remuneration of the member in question.

Directors' dealings

Pursuant to the relevant provisions of capital markets law, the members of the Board of Management and the Supervisory Board and parties closely related to them are obliged to disclose their own dealings in equities or debt instruments of SGL Carbon SE or certain other financial instruments linked to these if the total value of these transactions exceeds a threshold value within a calendar year. Reports are published on the Company's website (www.sglcarbon.com, under "Company/Investor Relations/Share/Managers' Transactions").

Wiesbaden, March 9, 2020

SGL Carbon SE
The Board of Management of SGL Carbon SE

Dr. Michael Majerus

Dr. Stephan Bühler

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Consolidated Income Statement

for the period from January 1 to December 31

| €m | Note | 2019 | 2018 |
|--|--------------|----------------|----------------|
| Sales revenue | 6, 29 | 1,086.7 | 1,047.5 |
| Cost of sales | | -878.9 | -839.1 |
| Gross profit | | 207.8 | 208.4 |
| Selling expenses | | -108.6 | -100.2 |
| Research and development costs | 6 | -36.8 | -33.0 |
| General and administrative expenses | 6 | -43.7 | -54.5 |
| Other operating income | 7 | 11.4 | 50.3 |
| Other operating expenses | 7 | -5.8 | -6.0 |
| Result from investments accounted for At-Equity | 8 | 15.4 | 16.8 |
| Restructuring expenses | 9 | 0.7 | -0.9 |
| Impairment loss | 10 | -74.7 | 0.0 |
| Operating profit/loss | | -34.3 | 80.9 |
| Interest income | 11 | 1.7 | 1.6 |
| Interest expense | 11 | -33.7 | -27.6 |
| Other financing result | 11 | -6.9 | -3.6 |
| Result from continuing operations before income taxes | | -73.2 | 51.3 |
| Income tax expense | 12 | -16.2 | -0.6 |
| Result from continuing operations | | -89.4 | 50.7 |
| Result from discontinued operations, net of income taxes | | -0.1 | -9.0 |
| Net result for the year | | -89.5 | 41.7 |
| Thereof attributable to: | | | |
| Non-controlling interests | | 0.5 | 0.4 |
| Consolidated net result (attributable to the shareholders of the parent company) | | -90.0 | 41.3 |
| Earnings per share basic (in €) | 13 | -0.74 | 0.34 |
| Earnings per share, diluted (in €) | 13 | -0.74 | 0.34 |
| Earnings per share continuing operations, basic and diluted (in €) | | -0.74 | 0.41 |

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31

| €m | Note | 2019 | 2018 |
|--|------|---------------|-------------|
| Net result for the year | | -89.5 | 41.7 |
| Items that may be reclassified subsequently to profit or loss | | | |
| Cash flow hedges ¹⁾ | 28 | 0.4 | -2.0 |
| Currency translation ²⁾ | | 8.6 | 6.5 |
| Items that will not be reclassified to profit and loss | | | |
| Actuarial gains/losses on pensions and similar obligations ³⁾ | 26 | -27.2 | 0.2 |
| Other comprehensive income | | -18.2 | 4.7 |
| Comprehensive income | | -107.7 | 46.4 |
| Thereof attributable to: | | | |
| Non-controlling interests | | 0.4 | 0.4 |
| Consolidated net result (attributable to the shareholders of the parent company) | | -108.1 | 46.0 |

¹⁾ Includes tax effects of minus €0.1 million (2018: €0.6 million)

²⁾ Includes tax effects of €0.9 million (2018: €0.0 million)

³⁾ Includes tax effects of €0.6 million (2018: €2.7 million)

Consolidated Balance Sheet

as of December 31

| ASSETS €m | Note | Dec. 31, 19 | Dec. 31, 18 |
|---------------------------------------|------|----------------|----------------|
| Non-current assets | | | |
| Goodwill | 14 | 41.7 | 41.3 |
| Other intangible assets | 14 | 45.0 | 56.5 |
| Property, plant and equipment | 15 | 669.6 | 675.5 |
| Investments accounted for At-Equity | 8 | 56.7 | 52.3 |
| Other non-current assets | 16 | 7.0 | 4.3 |
| Deferred tax assets | 21 | 0.9 | 11.3 |
| | | 820.9 | 841.2 |
| Current assets | | | |
| Inventories | 17 | 306.4 | 310.4 |
| Trade receivables and contract assets | 18 | 209.1 | 216.8 |
| Other receivables and other assets | 19 | 31.3 | 34.4 |
| Liquidity | 20 | 137.1 | 180.6 |
| <i>Time deposits</i> | | 4.0 | 58.1 |
| <i>Cash and cash equivalents</i> | | 133.1 | 122.5 |
| | | 683.9 | 742.2 |
| Assets held for sale | | - | 1.7 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Total assets | | 1,504.8 | 1,585.1 |

| EQUITY AND LIABILITIES €m | Note | Dec. 31, 19 | Dec. 31, 18 |
|--|-----------|----------------|----------------|
| Equity | | | |
| Issued capital | 22 | 313.2 | 313.2 |
| Capital reserves | 22 | 1,041.6 | 1,046.6 |
| Accumulated losses | | -936.2 | -828.2 |
| Equity attributable to the shareholders of the parent company | | 418.6 | 531.6 |
| Non-controlling interests | | 10.3 | 10.7 |
| Total Equity | | 428.9 | 542.3 |
| Non-current liabilities | | | |
| Provisions for pensions and similar employee benefits | 23 | 318.7 | 293.2 |
| Other provisions | 24 | 31.4 | 36.3 |
| Interest-bearing loans | 25 | 404.4 | 396.5 |
| Other financial liabilities | 25 | 34.2 | 67.9 |
| Other liabilities | 25 | 5.3 | - |
| Deferred tax liabilities | 21 | 2.0 | 4.1 |
| | | 796.0 | 798.0 |
| Current liabilities | | | |
| Other provisions | 24 | 67.1 | 91.1 |
| Current portion of interest-bearing loans | 25 | 3.2 | 2.2 |
| Trade payables | 25 | 108.7 | 108.1 |
| Other financial liabilities | 25 | 73.4 | 18.8 |
| Other liabilities | 25 | 27.5 | 24.1 |
| | | 279.9 | 244.3 |
| Liabilities in connection with assets held for sale | 20 | - | 0.5 |
| Total equity and liabilities | | 1,504.8 | 1,585.1 |

Consolidated Cash Flow Statement

for the period from January 1 to December 31

| €m | Note | 2019 | 2018 |
|--|------|-------------|-------------|
| Cash flow from operating activities | | | |
| Result from continuing operations before income taxes | | -73.2 | 51.3 |
| Adjustments to reconcile the result from continuing operations to cash flow from operating activities: | | | |
| Interest expense (net) | | 32.0 | 26.0 |
| Change in value of contract assets (IFRS 15) | | 3.2 | -17.6 |
| Result from the disposal of property, plant and equipment | | 0.3 | -3.6 |
| Depreciation/amortization expense | | 82.4 | 75.0 |
| Income from business combination achieved in stages | 5 | - | -28.4 |
| Impairment loss | 10 | 74.7 | 0.0 |
| Restructuring expenses | 9 | -0.7 | 0.9 |
| Result from investments accounted for At-Equity | 8 | -15.4 | -16.8 |
| Amortization of refinancing costs | | 3.4 | 2.7 |
| Interests received | | 2.1 | 1.1 |
| Interests paid | | -19.6 | -18.2 |
| Income taxes paid | 12 | -4.8 | -3.3 |
| Changes in provisions, net | | -33.0 | -9.4 |
| Changes in working capital | | | |
| Inventories | | 4.2 | -43.8 |
| Trade receivables | | 14.3 | -5.0 |
| Trade payables | | -4.7 | 14.7 |
| Changes in other operating assets/liabilities | | -3.3 | -2.0 |
| Cash flow from operating activities – continuing operations | | 61.9 | 23.6 |
| Cash flow from operating activities – discontinued operations | | - | -4.6 |
| Cash flow from operating activities – continuing and discontinued operations | | 61.9 | 19.0 |

| €m | Note | 2019 | 2018 |
|--|-----------|--------------|---------------|
| Cash flow from investing activities | | | |
| Payments to purchase intangible assets and property, plant and equipment | | -95.1 | -78.1 |
| Proceeds from the sale of intangible assets and property, plant and equipment | | 1.4 | 4.7 |
| Payments received for divestitures | | 3.6 | 3.4 |
| Dividend payments from investments accounted for At-Equity | | 10.9 | 11.0 |
| Payments for the acquisition of subsidiaries, net of cash acquired | 5 | - | -23.1 |
| Cash flow from investing activities – continuing operations | | -79.2 | -82.1 |
| Changes in time deposits | | 54.1 | -58.1 |
| Cash flow from investing activities and cash management activities – continuing operations | | -25.1 | -140.2 |
| Cash flow from investing activities and cash management activities – discontinued operations | | -9.4 | 62.6 |
| Cash flow from investing activities and cash management activities – continuing and discontinued operations | | -34.5 | -77.6 |
| Cash flow from financing activities | | | |
| Proceeds from the issuance of financial liabilities | | 257.4 | 159.3 |
| Repayment of financial liabilities | | -256.8 | -354.8 |
| Payment of principal portion of lease liabilities | | -8.7 | - |
| Payments in connection with financing activities | | -8.7 | -4.4 |
| Other financing activities | | -0.3 | -1.0 |
| Cash flow from financing activities – continuing operations | | -17.1 | -200.9 |
| Cash flow from financing activities – discontinued operations | | 0.0 | 0.0 |
| Cash flow from financing activities – continuing and discontinued operations | | -17.1 | -200.9 |
| Effect of foreign exchange rate changes | | 0.3 | 0.1 |
| Net change in cash and cash equivalents | | 10.6 | -259.4 |
| Cash and cash equivalents at beginning of year | | 122.5 | 382.9 |
| Cash and cash equivalents at end of year | | 133.1 | 123.5 |
| Time deposits at end of year | | 4.0 | 58.1 |
| Total liquidity | | 137.1 | 181.6 |
| Less: Cash and cash equivalents of discontinued operations at end of year | | - | 1.0 |
| Liquidity | 20 | 137.1 | 180.6 |

Consolidated Statement of Changes in Equity

for the period from January 1 to December 31

| €m | Equity attributable | | |
|--|---------------------|------------------|-------------------------|
| | Issued capital | Capital reserves | Accumulated profit/loss |
| Balance as of Dec. 31, 17 | 313.2 | 1,032.9 | -847.2 |
| Cumulative adjustment on initial application of IFRS 15 and IFRS 9 | | | 15.4 |
| Balance as of 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 as of Dec. 31, 18 | 313.2 | 1,046.6 | -790.3 |
| Cumulative adjustment on initial application of IFRS 16 | | | 0.1 |
| Balance as of Jan. 1, 19 | 313.2 | 1,046.6 | -790.2 |
| Net result for the year | | | -90.0 |
| Other comprehensive income | | | -27.2 |
| Comprehensive income | | | -117.2 |
| Dividends | | | |
| Equity component of convertible bonds ²⁾ | | -5.0 | |
| Other changes in equity | | | |
| Balance as of Dec. 31, 19 | 313.2 | 1,041.6 | -907.4 |

¹⁾ After deduction of transaction costs of €0.2 million

²⁾ Effects of €5.0 million in connection with the redemption of the 2015/2020 convertible bond, see Note 22

to the shareholders of the parent company

| Accumulated losses | | Accumulated other comprehensive income | | | Equity attributable to the shareholders of the parent company | Non-controlling interests | Total equity |
|----------------------|------------------------|---|--------------------|--------|---|---------------------------|--------------|
| Currency translation | Cash flow hedges (net) | Results from the mark-to-market valuation of securities | Accumulated losses | | | | |
| -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 | 0.0 | 46.0 | 46.0 | 0.4 | 46.4 | |
| | | | 0.0 | 0.0 | -1.0 | -1.0 | |
| | | | 0.0 | 0.0 | | 0.0 | |
| -37.5 | -0.4 | | -828.2 | 531.6 | 10.7 | 542.3 | |
| | | | 0.1 | 0.1 | 0.0 | 0.1 | |
| -37.5 | -0.4 | 0.0 | -828.1 | 531.7 | 10.7 | 542.4 | |
| | | | -90.0 | -90.0 | 0.5 | -89.5 | |
| 8.7 | 0.4 | | -18.1 | -18.1 | -0.1 | -18.2 | |
| 8.7 | 0.4 | - | -108.1 | -108.1 | 0.4 | -107.7 | |
| | | | 0.0 | 0.0 | -0.3 | -0.3 | |
| | | | 0.0 | -5.0 | | -5.0 | |
| | | | 0.0 | 0.0 | -0.5 | -0.5 | |
| -28.8 | 0.0 | - | -936.2 | 418.6 | 10.3 | 428.9 | |

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, 2019 were authorized for publication by the Board of Management on March 9, 2020.

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. Due to rounding, the figures may not add up to the totals stated.

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, impairment tests as well as provisions for pensions and similar employee benefits] and also, in particular, in [Notes 6, 10, 21, 23 and 24](#).

These are the first consolidated financial statements of SGL Carbon in which IFRS 16 *Leases* was applied. The related 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 these through its power over the investee. As of December 31, 2019, the scope of consolidation included 15 German [2018: 15] and 32 [2018: 35] foreign subsidiaries in addition to SGL Carbon SE. One [2018: one] jointly controlled company and two [2018: two] associates were accounted for At-Equity. 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 32](#). A total of three companies was disposed of.

Business combinations

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.

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, trade receivables and contract liabilities

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 the production period.

The assessment whether an asset is highly tailored to a specific customer is particularly important for revenue recognition over the production 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.

Contract assets, contract liabilities and trade receivables

If one of the parties to a contract with a customer fulfills its contractual obligations, a contract asset or a contract liability is reported, depending on the relationship between service provision by SGL Carbon and the customer's payment. Contract assets primarily result from sales of goods where control is transferred to the customer before SGL Carbon has obtained an unconditional right to receive a consideration. Contract liabilities mainly result from advance payments received for products not yet delivered. Contract assets and contract liabilities are offset on an individual contract level and reported as current items since they are incurred within the normal operating cycle. Receivables are reported when the claim to receive a consideration is no longer subject to any conditions. Loss allowances on contract assets and trade receivables for credit risks are recognized in accordance with the accounting principles used for financial assets measured at amortized cost.

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

Warranties promise the customer that the delivered product is as specified in the contract. Thus, 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 impairment losses on receivables from contracts with customers, please refer to [Note 28](#) "Additional disclosures on financial instruments-Credit risks".

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. 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:

| <u>Property, plant and equipment – useful lives</u> | |
|---|----------------|
| 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

A lease is a contract that conveys the right to use an asset (the leased asset) for an agreed period of time in exchange for consideration.

Until December 31, 2018, a lease was defined as an agreement in which the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or a series of payments. In accordance with IAS 17, beneficial ownership of the leased asset was attributed to the lessee provided such lessee retained substantially all risks and rewards of ownership of the leased asset. If beneficial ownership was attributed to SGL Carbon as lessee, the asset was capitalized at the lower of fair value and present value of the minimum lease payments. A lease liability of equal value was recorded under non-current liabilities. Subsequent measurement was based on amortized cost calculated using the effective interest method.

Since January 1, 2019, SGL Carbon as lessee generally recognizes in the balance sheet in accordance with IFRS 16 assets

for the right to use the leased assets and liabilities for the payment obligations assumed at present value for all leases. The lease liabilities include the following lease payments:

- fixed payments, less any lease incentives provided by the lessor,
- variable payments that depend on an index or rate,
- the exercise price of a purchase option if it is reasonably certain that the option will be exercised.

Lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. Otherwise, the incremental borrowing rate is used as the discount rate. SGL Carbon applies a single discount rate to a portfolio of leases with reasonably similar characteristics. Right-of-use assets are measured at cost comprising the lease liability plus any directly attributable costs. They are subsequently measured at amortized cost. The right-of-use assets are depreciated on a straight-line basis over the contract period.

Practical reliefs are made use of for leased assets of low value and for short-term leases (less than twelve months), meaning that the payments are recognized as expenses in the income statement on a straight-line basis over the lease term. In the case of contracts that contain both lease components and non-lease components, the option not to separate these components is exercised for property, plant and equipment. In addition, in accordance with IFRS 8 on segment reporting, intragroup leases generally continue to be presented in future as operating leases in accordance with IAS 17 in line with internal management. SGL Carbon also makes use of the practical expedient not to reassess whether a contract is, or contains, a lease at the date of the initial application in accordance with the definitions of IFRS 16. Accordingly, contracts that are not, or did not contain, a lease according to IAS 17 or IFRIC 4 are not reassessed.

If SGL Carbon concludes contracts as lessor, such contracts are classified as finance leases pursuant to IFRS 16 if substantially all the risks and rewards incidental to ownership of the leased asset are transferred to the lessee. All other short-term rentals and leases are classified as operating leases in accordance with IFRS 16. If the Company enters into finance lease contracts as lessor, the lease installments payable by the lessee in the future are recognized as a lease receivable in the amount of the net investment value from the lease contract. These are measured on the basis of the simplified impairment model in accordance with IFRS 9. In the case of operating leases, the Company carries the leased asset at amortized cost under

property, plant and equipment. The lease installments received during the period are shown under sales revenue.

Impairment test of property, plant and equipment and other intangible assets

SGL Carbon assesses at each balance sheet date whether there are indications (trigger events) 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.

Financial instruments

A financial instrument in accordance with IAS 32 is a contractually agreed right or a contractually agreed obligation which results in an inflow or outflow of financial assets and in the issue of equity instruments. This includes primary, i.e. non-derivative, financial instruments such as trade receivables and payables, securities and financial assets, borrowings, and other financial liabilities. It also includes derivative financial instruments that are used to hedge against risk arising from changes in exchange rates and interest rates.

Financial instruments are generally recognized at their fair value upon initial measurement. Transaction costs directly attributable to the acquisition or issue of financial instruments are only recognized in determining the carrying amount. Embedded derivatives are separated from the host contract (financial instrument) subject to certain preconditions and measured separately at fair value. A regular way purchase or sale of financial assets is recognized as of the trade date. Subsequent measurement of financial instruments is based on the category to which they are allocated: financial assets and liabilities measured at amortized cost, financial assets measured at fair value through other comprehensive income as well as financial assets and liabilities measured at fair value through profit or loss. Financial assets and financial liabilities are grouped into the following main IFRS 9 classes:

Financial assets measured at amortized cost: Cash and cash equivalents, trade receivables as well as contract assets that are held under the business model "Held to collect contractual cash flows" and whose contractual cash flows solely represent payment of principal and interest are measured at amortized cost.

Financial liabilities measured at amortized cost: SGL Carbon measures financial liabilities at amortized cost using the effective interest method, with the exception of derivatives.

Financial assets measured at fair value through other comprehensive income: 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 and liabilities measured at fair value through profit or loss: 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. This also includes trade receivables that are intended for sale based on a factoring agreement. 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.

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.

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 28](#) for further information on financial instruments.

Impairment of financial assets

Loss allowances are recorded for expected credit losses which represent a forward-looking estimate of future credit losses and require significant accounting judgments. In general, a 3-stage model has to be followed 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 already 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-).

SGL applies a simplified approach as regards trade receivables and contract assets, which allows for loss allowances to be measured based on the lifetime expected credit losses.

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 carryforwards are recognized only to the extent that the enterprise has sufficient taxable temporary differences or there is 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. If there is 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.

Provisions 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 the net financing result. 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 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 30](#).

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.

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 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 and closures.

3. First-time application of recently published financial reporting standards

IFRS 16 Leases

Since January 1, 2019, SGL Carbon has been applying IFRS 16 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/accumulated losses as of January 1, 2019.

The first-time application affects the lease contracts that previously were classified as operating leases at SGL Carbon.

Upon the first-time application of IFRS 16, the right-of-use asset included in operating leases was generally measured at the amount of the lease liability, using the interest rate applicable as of the date of first-time application. The average interest rate amounted to around 3.4% as of January 1, 2019. Initial direct costs were not taken into account in the measurement of the right-of-use asset as of the date of first-time application. The following categories of leases were identified which were previously recognized as operating leases and which are now accounted for as leases within the meaning of the new standard due to the transition to IFRS 16 as of January 1, 2019: land rights, buildings, plant and machinery as well as office furniture and equipment.

The reconciliation of off-balance sheet lease obligations as of December 31, 2018 to the recognized lease liabilities as of January 1, 2019 is as follows:

| € million | Jan. 1, 19 |
|---|-------------|
| Transition lease liabilities | |
| Off-balance sheet lease obligations as of December 31, 2018 | 44.2 |
| Relief option for short-term leases | -0.5 |
| Relief option for low value asset leases | -0.7 |
| Operating lease obligations as of January 1, 2019 [gross, without discounting] | 43.0 |
| Operating lease obligations as of January 1, 2019 [net, discounted] | 38.2 |
| Present value of finance lease liabilities as of January 1, 2019 | 16.9 |
| Total lease liabilities as of January 1, 2019 | 55.1 |

The following table summarizes the effects from the introduction of IFRS 16 on the consolidated income statement and the statement of other comprehensive income for the financial year 2019:

| €m | Amounts without adoption of IFRS 16 | IFRS 16 adjustments | As reported |
|--|-------------------------------------|---------------------|--------------|
| Cost of sales | -880.0 | 1.1 | -878.9 |
| thereof: depreciation and amortization expense | 73.7 | -8.7 | 82.4 |
| Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring items | 110.2 | 9.8 | 120.0 |
| Net financing result | -37.7 | -1.2 | -38.9 |
| Income tax expense | -16.2 | | -16.2 |
| Net result for the year | -89.4 | -0.1 | -89.5 |
| Other comprehensive income | -18.1 | -0.1 | -18.2 |

IFRS 16 also affects the structure of the cash flow statement of SGL Carbon: The cash flow from operating activities and the free cash flow increased by €8.7 million and the cash flow from financing activities declined by €8.7 million.

The quantitative effects of the first-time application of IFRS 16 on the consolidated balance sheet as of December 31, 2018 and January 1, 2019, respectively, are presented in the following table. The table also shows the effects of IFRIC 23 Uncertainty over Income Tax Treatments:

| €m | Dec. 31, 18 | IFRS 16 adjustments | Netting | Reclassifi- cation due to IFRIC 23 | Jan. 1, 19 |
|---|-------------|------------------------|---------|--|-------------|
| Assets | | | | | |
| Property, plant and equipment | 675.5 | 36.9 | | | 712.4 |
| Other receivables and other assets | 31.4 | 1.4 | | | 32.8 |
| Deferred tax assets | 11.3 | 10.7 | -10.7 | | 11.3 |
| Liabilities | | | | | |
| Other provisions | 127.4 | | | -5.6 | 121.8 |
| <i>thereof: non-current liabilities</i> | <i>36.3</i> | | | <i>-1.7</i> | <i>34.6</i> |
| <i>thereof: current liabilities</i> | <i>91.1</i> | | | <i>-3.9</i> | <i>87.2</i> |
| Other financial liabilities | 86.7 | 38.2 | | | 124.9 |
| <i>thereof: non-current liabilities</i> | <i>67.9</i> | <i>28.9</i> | | | <i>96.8</i> |
| <i>thereof: current liabilities</i> | <i>18.8</i> | <i>9.3</i> | | | <i>28.1</i> |
| Deferred tax liabilities | 4.1 | 10.7 | -10.7 | | 4.1 |
| Other liabilities - current | 24.1 | | | 5.6 | 29.7 |
| Equity | | | | | |
| Accumulated losses | -828.2 | 0.1 | | | -828.1 |
| Equity ratio | 33.5% | | | | 32.8% |

IFRIC 23 Uncertainty over Income Tax Treatments

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 or adjust the income tax treatment. The effect of uncertainty for each uncertain tax treatment is reflected by using the most likely amount in assessing the liability. The first-time application as of January 1, 2019, did not result in any changes to the financial performance and to the financial position of SGL Carbon. As regards the net assets, IFRIC 23 led to a reclassification from other provisions to other liabilities in the amount of €5.6 million.

4. Recently issued accounting pronouncements

The IASB has published further standards, interpretations and amendments to standards and interpretations which are not yet required to be applied as well and some of which still have to be endorsed by the EU before they may be applied. SGL Carbon currently expects that the application of these standards and interpretations will not have a material impact on the consolidated financial statements.

5. Acquisitions and disposals

Fiscal year 2019

In 2019, the Company sold – as planned – the 50.9% stake in the fully-consolidated SGL CARBON KARAHM LTD. (Korea). The effect from deconsolidation amounted to €0.2 million (after taxes).

Fiscal year 2018

The **acquisition** of SGL Automotive Carbon Fibers GmbH & Co. KG, Munich (Germany) was completed in January 2018. Accordingly, SGL is the sole owner of the former joint venture with BMW Group (renamed in SGL Composites GmbH & Co. KG; in the following SGL Composites DE). The U.S. company of SGL ACF (in the following SGL Composites US) 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. In a business combination achieved in stages (as is the case here), 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 total purchase price amounted to €149.1 million. An amount of USD 62.2 million of the cash component was deferred until the end of 2020, as agreed.

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

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 29](#) "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 €36.8 million [2018: €33.0 million]. Broken down by business segment, research and development costs were as follows: €12.3 million [2018: €11.3 million] in the reporting segment Graphite Materials & Systems (GMS), and €13.0 million [2018: €12.8 million] in the reporting segment Carbon Fibers & Materials (CFM). Research and development costs on a corporate level amounted to €11.5 million [2018: €8.9 million].

General and administrative expenses declined by 20% compared to the prior year. The decline resulted mainly from lower expenses for management incentive plans.

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

| €m | 2019 | 2018 |
|---|---------------|---------------|
| Wages and salaries (including bonus) | -273.1 | -270.4 |
| Social security contributions, post-employment and other employee benefit costs (thereof for pensions: 2019 minus €18.9 million; 2018: minus €16.9 million) | -77.3 | -70.6 |
| Total | -350.4 | -341.0 |

Depreciation and amortization

At €82.4 million, amortization and depreciation of intangible assets and property, plant and equipment were above the prior-year level [2018: €75.0 million] and include carry forwards of hidden reserves realized as part of the purchase price allocations of SGL Composites GmbH (previously Benteler SGL) and SGL Composites DE and US in a total amount of €10.8 million [2018: €11.7 million]. Amortization of intangible assets in the

amount €12.6 million [2018: €14.2 million] primarily relate to the depreciation of the customer base from the purchase price allocation of SGL Composites DE. Depreciation of property, plant and equipment totaled €69.8 million in 2019 [2018: €60.8 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 2019, the number of SGL Carbon employees had increased slightly compared with the prior year. This number includes 476 employees with fixed-term contracts [2018: 517]. In our reporting segment GMS, the number of employees rose due to the strong demand, in particular in production-related areas. In contrast, the number of employees in the Corporate segment 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 as well as to parts of the investment Brembo SGL Carbon Ceramic Brakes, which is accounted for At-Equity.

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

| Headcount | Dec. 31, 19 | Dec. 31, 18 | Change |
|---------------------------------|--------------|--------------|-------------|
| Graphite Materials & Systems | 3,141 | 3,008 | 4.4% |
| Composites – Fibers & Materials | 1,698 | 1,722 | -1.4% |
| Corporate | 288 | 301 | -4.3% |
| Total | 5,127 | 5,031 | 1.9% |

| Headcount | Dec. 31, 19 | Dec. 31, 18 |
|--------------------------|--------------|--------------|
| Germany | 2,341 | 2,271 |
| Europe excluding Germany | 1,461 | 1,448 |
| USA | 829 | 824 |
| Asia | 496 | 488 |
| Total | 5,127 | 5,031 |

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

| Headcount | 2019 | 2018 |
|---------------------------------|--------------|--------------|
| Production and auxiliary plants | 3,802 | 3,590 |
| Sales and marketing | 343 | 342 |
| Research and development | 164 | 155 |
| Administration, other functions | 806 | 840 |
| Total | 5,115 | 4,927 |

7. Other operating income/expense

Other operating income

| €m | 2019 | 2018 |
|--|-------------|-------------|
| Income from business combination achieved in stages | - | 28.4 |
| Exchange-rate gains | 2.4 | 4.1 |
| Gains on the sale of intangible assets and property, plant and equipment | 0.4 | 4.1 |
| Grants received | 3.6 | 2.9 |
| Insurance compensations | 1.5 | 0.5 |
| Miscellaneous other operating income | 3.5 | 10.3 |
| Total | 11.4 | 50.3 |

The income from business combinations achieved in stages reported in the prior year refers to the excess of the fair value of the previously held shares over the carrying amount of SGL Composites DE and US as of the acquisition date (see [Note 5](#) "Acquisitions").

Other operating expenses

| €m | 2019 | 2018 |
|--|-------------|-------------|
| Exchange-rate losses | -2.8 | -2.4 |
| Losses on the sale of non-current assets | -0.9 | -0.4 |
| Other operating expenses | -2.1 | -3.2 |
| Total | -5.8 | -6.0 |

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 under other income or other expenses.

In addition, other operating income and other operating expenses included a number of insignificant individual transactions carried out by the 48 (2018: 51) fully consolidated companies.

8. Investments accounted for At-Equity

Result from investments accounted for At-Equity

| €m | 2019 | 2018 |
|--|-------------|-------------|
| Share in the net result of the year | 15.4 | 16.9 |
| <i>Thereof joint ventures</i> | <i>13.8</i> | <i>15.9</i> |
| <i>Thereof associates</i> | <i>1.6</i> | <i>1.0</i> |
| Other adjustments affecting profit or loss | 0.0 | -0.1 |
| <i>Thereof joint ventures</i> | <i>0.0</i> | <i>-0.1</i> |
| Result from investments accounted for At-Equity | 15.4 | 16.8 |

| €m | Dec. 31, 19 | Dec. 31, 18 |
|-----------------------------|-------------|-------------|
| Interests in joint ventures | 46.1 | 42.7 |
| Interests in associates | 10.5 | 9.6 |
| Carrying amount | 56.7 | 52.3 |

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. The following tables summarize the financial performance and the financial position of BSCCB, as reported in their own financial statements (taking into account IFRS 15 effects). 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 €10.0 million (2018: €11.0 million).

| €m | 2019 | 2018 |
|--|--------------|--------------|
| Ownership interest | 50.0% | 50.0% |
| Income statement | | |
| Sales revenue (100%) | 181.2 | 180.1 |
| Operating profit/loss | 38.7 | 43.6 |
| Net financing result | -0.5 | -0.1 |
| Net result for the year (100%) | 27.7 | 31.7 |
| Share of SGL Carbon in the net result for the year (50%) | 13.8 | 15.9 |

| Balance sheet €m | Dec. 31, 19 | Dec. 31, 18 |
|---|-------------|-------------|
| Non-current assets | 70.3 | 49.6 |
| Current assets | 69.8 | 71.3 |
| <i>Thereof cash and cash equivalents</i> | <i>25.6</i> | <i>12.5</i> |
| Non-current liabilities | 24.6 | 8.7 |
| <i>Thereof financial debt</i> | <i>0.0</i> | <i>0.0</i> |
| Current liabilities | 30.5 | 34.1 |
| <i>Thereof financial debt</i> | <i>2.0</i> | <i>1.0</i> |
| Net assets (100%) | 85.0 | 78.2 |
| Share of SGL Carbon in net assets (50%) | 42.5 | 39.1 |
| Goodwill/customer base | 3.6 | 3.6 |
| Carrying amount of material joint ventures | 46.1 | 42.7 |

The increase in non-current assets and non-current liabilities compared to December 31, 2018 is attributable to the first-time application of IFRS 16.

Associates

In addition, SGL Carbon holds shares in two associates which, taken individually, are immaterial and which contributed a total of €1.6 million (2018: €1.0 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 | 2019 | 2018 |
|---|------------|-------------|
| Income/Expenses from initiated restructuring measures | 0.7 | -0.9 |
| Total | 0.7 | -0.9 |

Restructuring expenses include a reversal of restructuring provisions in the amount of €0.7 million (2018: €1.5 million) as well

as prior-year gains from the disposal of property, plant and equipment in the amount of €6.5 million, with these items of property, plant and equipment being impaired in prior periods due to restructuring measures. In the prior year, 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. Impairment loss

| €m | 2019 | 2018 |
|---|--------------|----------|
| Impairment loss of intangible assets other than goodwill and of property, plant and equipment | -74.7 | - |
| Total | -74.7 | - |

Impairment tests

Based on the preliminary status of the new five-year plan, SGL Carbon conducted event-driven impairment tests as of September 30, 2019 in relation to intangible assets and property, plant and equipment for the CGUs Carbon Fibers & Composite Materials (CF/CM) as well as Composites DE (previously SGL ACF), primarily due to the low starting base level for 2019 as well as the persisting weakness in the market segments of textile fibers, wind energy and industrial applications in the CFM reporting segment. No goodwill is allocated to the carrying amount of CF/CM while the carrying amount of Composites DE includes a goodwill of €19.5 million.

The forecast cash flows for CF/CM and Composites DE, respectively, were then adjusted to the new five-year plan and a pre-tax discount rate of 8.7% (CF/CM) and an after-tax discount rate of 6.5% (SGL Composites DE), respectively, was applied. For the purpose of determining the terminal value at Composites DE, a steady state was derived by means of objective analyses and the resulting cash flows were extrapolated using the same growth rate as in the last impairment test. Also unchanged compared with the last impairment test, a detailed planning period of more than five years was used as a basis to reflect the necessary qualifications of the products at the customer industries.

As a result of the updated planning, an impairment loss was recognized for other intangible assets and property, plant and equipment at CF/CM in the amount of €74.7 million (of which €3.1 million relate to intangible assets). No requirement to recognize an impairment loss was identified for Composites DE, i.e. the CGU's amount determined on the basis of the value-in-use

was estimated to be higher than its carrying amount. This excess of the value-in-use over the carrying amount would be reduced to zero in case of an increase in the discount rate by 0.6% points or in case of a reduction of the cash flows in the terminal value by 17%.

11. Net financing result

| €m | 2019 | 2018 |
|---|--------------|--------------|
| Interest in other securities, other interest and similar income | 1.7 | 1.6 |
| Interest on financial liabilities and other interest expense ¹⁾ | -19.1 | -14.1 |
| Interest component of additions to provisions for pensions | -6.4 | -5.8 |
| Imputed interest convertible bonds ¹⁾ | -4.7 | -5.1 |
| Imputed interest on lease liabilities and other financial liabilities ¹⁾ | -3.5 | -2.6 |
| Interest expense | -33.7 | -27.6 |
| Interest expense. net | -32.0 | -26.0 |
| Amortization of refinancing costs ¹⁾ | -3.4 | -2.7 |
| Foreign currency valuation of intercompany loans | 1.6 | -0.4 |
| Effect resulting from the early redemption of the convertible bond 2015/2020 | -5.5 | - |
| Other financial income/expenses | 0.4 | -0.5 |
| Other financing result | -6.9 | -3.6 |
| Net financing result | -38.9 | -29.6 |

¹⁾ Total interest expense from financial instruments

| | | |
|--|-------|-------|
| | -30.7 | -24.5 |
|--|-------|-------|

Interest expenses in particular included interest from the corporate bond issued in April 2019 at an interest rate of 4.625% and cash interest component (coupon) of the 2018/2023 convertible bond with an 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 deterioration of the net financing result compared to 2018 is largely due to the corporate bond newly issued in April 2019. In addition, the other financing result was negatively affected by the recognition of an expense from the early repurchase of the 2015/2020 convertible bond in the amount of €5.5 million.

12. Income tax expense

The calculation of deferred taxes for the domestic companies for the years 2019 and 2018 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 29.9%. The calculation of deferred taxes for the foreign companies was based on country-specific corporate income tax rates.

The breakdown of tax expense is as follows:

| €m | 2019 | 2018 |
|-----------------------------|--------------|-------------|
| Current income taxes | | |
| Germany | -0.8 | -1.2 |
| Other countries | -5.6 | -3.9 |
| Total | -6.4 | -5.1 |
| Deferred taxes | | |
| Germany | -2.8 | 3.7 |
| Other countries | -7.0 | 0.8 |
| Total | -9.8 | 4.5 |
| Total sum | -16.2 | -0.6 |

Actual tax expense includes taxes for prior years from domestic and foreign companies in the amount €0.0 million [2018: €0.3 million]. The amount of deferred tax income attributable to the reversal of temporary differences, including valuation allowances, is €1.2 million [2018: €4.7 million].

The SGL Carbon's reported tax expense differs from the SGL Carbon's anticipated tax expense (calculated on the basis of an expected tax rate of 29.9%) as follows:

| €m | 2019 | 2018 |
|--|--------------|--------------|
| Result from continuing operations before income taxes | -73.2 | 51.3 |
| Expected tax expense/income at 29.9% | 21.8 | -15.3 |
| Increase/decrease in income tax charge from: | | |
| Income adjustments | -4.1 | -2.9 |
| Change in expected tax rate | -4.0 | -2.2 |
| Changes in valuation allowances/recognition adjustments | -35.4 | 11.0 |
| Tax effect on investments accounted for At-Equity | 4.5 | 1.7 |
| Tax free income | 0.5 | 4.5 |
| Tax rate changes | 1.7 | 0.1 |
| Tax from prior periods | -2.1 | 0.6 |
| Other | 0.9 | 1.9 |
| Effective tax expense | -16.2 | -0.6 |

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 allowances/recognition adjustments takes into account the changes from unrecognized deferred tax assets after the assessment of their future usability.

During the reporting year, the actual tax expense was reduced by €2.1 million (2018: €3.5 million) million by taking into account previously unrecognized tax losses.

13. 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 for the interest expense (interest payments and non-cash imputed interest cost) for the convertible bonds and recognized in the net financing result. In the future, these instruments may become fully dilutive. The table below details the calculation of earnings per share for fiscal years 2019 and 2018:

Reconciliation of basic and diluted earnings per share

| €m | Overall potentially dilutive financial instruments 2019 | Dilutive financial instruments used for the calculation 2019 | Share of net result attributable to the shareholders of the parent company 2019 | Share of net result attributable to the shareholders of the parent company 2018 |
|--|---|--|---|---|
| Numerator for basic earnings per share (share of net result attributable to the shareholders of the parent company) | -90.0 | -89.9 | -90.0 | 41.3 |
| plus: increase of the income by the interest costs of the convertible bonds | | | | |
| Numerator for diluted earnings | -90.0 | -89.9 | -90.0 | 41.3 |
| 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 2018/2023 (see Note 25) | 12,233,143 | | | |
| Denominator for potentially diluted earnings per share | 134,504,120 | 122,270,977 | 122,270,977 | 122,270,977 |
| Thereof to be included for dilution (adjusted weighted average) | | 122,270,977 | 122,270,977 | 122,270,977 |
| Basic earnings per share (€) | | -0.74 | -0.74 | 0.34 |
| Diluted earnings per share (€) | | -0.74 | -0.74 | 0.34 |

14. Intangible assets

| €m | Industrial rights, software and similar rights | Customer relationships | Capitalized development costs | Goodwill | Total |
|---|--|---------------------------|----------------------------------|-------------|--------------|
| Historical costs | | | | | |
| Balance as of Jan. 1, 19 | 65.8 | 52.7 | 18.4 | 66.9 | 203.8 |
| Foreign currency translation | 0.1 | 0.0 | 0.0 | 0.4 | 0.5 |
| Reclassifications | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 |
| Additions | 4.3 | 0.0 | 0.0 | 0.0 | 4.3 |
| Disposals | -1.0 | 0.0 | 0.0 | 0.0 | -1.0 |
| Balance as of Dec. 31, 19 | 69.4 | 52.7 | 18.4 | 67.3 | 207.8 |
| Accumulated amortization/Impairment losses | | | | | |
| Balance as of Jan. 1, 19 | 52.4 | 13.2 | 14.8 | 25.6 | 106.0 |
| Additions | 2.0 | 9.9 | 0.7 | 0.0 | 12.6 |
| Impairment loss ¹⁾ | 2.4 | 0.0 | 0.7 | 0.0 | 3.1 |
| Disposals | -0.6 | 0.0 | 0.0 | 0.0 | -0.6 |
| Balance as of Dec. 31, 19 | 56.2 | 23.1 | 16.2 | 25.6 | 121.1 |
| Net carrying amount as of Dec. 31, 19 | 13.2 | 29.6 | 2.2 | 41.7 | 86.7 |
| Historical costs | | | | | |
| Balance as of 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 as of Dec. 31, 18 | 65.8 | 52.7 | 18.4 | 66.9 | 203.8 |
| Accumulated amortization/Impairment losses | | | | | |
| Balance as of 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 |
| Additions | 2.1 | 10.6 | 1.5 | 0.0 | 14.2 |
| Disposals | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 |
| Balance as of 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 |

¹⁾ Refer to Note 10

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 (or, for Composites DE, already as of September 30, 2019, see associated explanations in [Note 10](#)) of CGUs to which goodwill has been allocated:

| €m | Recognized goodwill | Discount rate after tax | Long-term growth rate |
|---------------------------|---------------------|-------------------------|-----------------------|
| Sep. 30/Oct. 1, 19 | | | |
| Graphite Specialties | 20.8 | 8.1% | 1.0% |
| Process Technology | 1.9 | 8.1% | 1.0% |
| Composites DE | 19.5 | 6.5% | 1.0% |
| 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% |

No requirement to recognize an impairment loss was identified for the three CGUs analyzed in fiscal year 2019, 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 0.5%-points) and a simultaneous reduction of the cash flows in the terminal value by 8% points. The corresponding disclosure for Composites DE is presented in [Note 10](#).

15. 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 | | | | | | |
| Balance as of Jan. 1, 19 | 483.4 | 1,139.8 | 63.4 | 58.5 | 19.8 | 1,764.9 |
| Recognition of right-of-use asset from initial application of IFRS 16 | 26.7 | 6.7 | 3.5 | 0.0 | 0.0 | 36.9 |
| Balance as of Jan. 1, 19 (adjusted) | 510.1 | 1,146.5 | 66.9 | 58.5 | 19.8 | 1,801.8 |
| Foreign currency translation | 4.4 | 10.9 | 0.3 | 0.2 | 0.0 | 15.8 |
| Reclassifications | 15.0 | 25.7 | 1.3 | -42.2 | 0.0 | -0.2 |
| Additions | 6.0 | 28.2 | 2.8 | 53.8 | 0.0 | 90.8 |
| Additions to right-of-use assets | 0.5 | 1.1 | 1.2 | 0.0 | 0.0 | 2.8 |
| Disposals | -0.9 | -8.5 | -1.0 | -0.2 | 0.0 | -10.6 |
| Balance as of Dec.31, 19 | 535.1 | 1,203.9 | 71.5 | 70.1 | 19.8 | 1,900.4 |
| Accumulated depreciation/Impairment losses | | | | | | |
| Balance as of Jan. 1, 19 | 246.1 | 783.8 | 51.5 | 0.1 | 7.9 | 1,089.4 |
| Foreign currency translation | 1.6 | 7.7 | 0.2 | 0.0 | 0.0 | 9.5 |
| Additions | 16.8 | 46.3 | 6.1 | 0.0 | 0.6 | 69.8 |
| Impairment loss ¹⁾ | 9.5 | 46.7 | 2.0 | 13.4 | 0.0 | 71.6 |
| Disposals | -0.7 | -7.9 | -0.9 | 0.0 | 0.0 | -9.5 |
| Balance as of Dec.31, 19 | 273.3 | 876.6 | 58.9 | 13.5 | 8.5 | 1,230.8 |
| Net carrying amount as of Dec. 31, 19 | 261.8 | 327.3 | 12.6 | 56.6 | 11.3 | 669.6 |
| Historical costs | | | | | | |
| Balance as of 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 as of Dec.31, 18 | 483.4 | 1,139.8 | 63.4 | 58.5 | 19.8 | 1,764.9 |
| Accumulated depreciation/Impairment losses | | | | | | |
| Balance as of 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 as of 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 |

¹⁾ Refer to Note 10

Leases

Leases are accounted for in line with the explanations set out in [Note 2](#) Summary of significant accounting policies–Leasing.

Leases as lessee

SGL Carbon has entered into lease contracts for various land rights, buildings, plant and machinery as well as office furniture and equipment which the Company uses for its operations. Lease contracts for properties normally have a term of between one and 15 years. The term for plant and machinery as well as office furniture and equipment normally ranges from three to

| €m | Land, land rights and buildings | Plant and machinery | Office furniture and equipment | Total |
|--------------------------------------|---------------------------------|---------------------|--------------------------------|-------------|
| Balance as of Jan. 1, 19 (adjusted) | 26.7 | 6.7 | 3.5 | 36.9 |
| Additions to right-of-use assets | 0.5 | 1.1 | 1.2 | 2.8 |
| Depreciation in the reporting period | -4.1 | -2.3 | -2.3 | -8.7 |
| Foreign currency translation | 0.1 | 0.1 | | 0.2 |
| Balance as of Dec. 31, 19 | 23.2 | 5.6 | 2.4 | 31.2 |

The maturity analysis of lease liabilities is presented in Note 25.

Amounts recognized in the income statement:

| €m | |
|---|-------|
| 2019 - Lease agreements in accordance with IFRS 16 | |
| Income from subleases of right-of-use assets | 0.5 |
| Expenses for short-term leases | -3.8 |
| Expenses for leases for low value assets | -3.2 |
| Depreciation of right-of-use assets | -8.7 |
| Interest expenses from lease liabilities | -1.2 |
| 2018 - Operating leases in accordance with IAS 17 | |
| Lease expenses | -13.4 |

The cash outflows of SGL Carbon for leases amounted to €15.7 million in 2019 (2018: €13.4 million). In addition, the Company reported non-cash additions to right-of-use assets and lease liabilities of €2.8 million.

Leases as lessor

From the viewpoint of the lessor, all leases are classified as operating leases. This does not apply to a sublease which SGL Carbon has classified as a finance lease due to the matching

ten years. SGL Carbon leases IT equipment with contractual terms of one to three (in single cases up to five) years. These lease agreements normally are either of a short-term nature and/or their underlying assets are of low value. SGL Carbon decided not to recognize right-of-use assets and lease liabilities for these leases. Information about leases with SGL Carbon as lessee are presented in the following.

Right-of-use assets

The following table shows the carrying amounts of the recognized right-of-use assets and the changes during the reporting period:

maturities between head lease and sublease: This lease is recognized as a lease receivable in the amount of the net investment. Both head lease and sublease expire at the end of 2022.

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. SGL Carbon has classified this lease as an operating lease since not substantially all the risks and rewards of ownership have been transferred. The fair values of developed land and the land value of the expected development area totaled €28.0 million as of December 31, 2019 (December 31, 2018: €28.0 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 €1.5 million in fiscal year 2019 (2018: €1.1 million). Expenses amounted to €1.7 million (2018: €1.6 million). Since the lease may be terminated on short notice within a few months, the lease receivable to be received after the balance sheet date has a term of less than one year due to the non-cancelable lease in the amount of €1.1 million.

16. Other non-current assets

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

17. Inventories

| €m | Dec. 31, 19 | Dec. 31, 18 |
|--------------------------------|--------------|--------------|
| Raw materials and supplies | 99.2 | 99.8 |
| Work in progress | 115.6 | 109.1 |
| Finished goods and merchandise | 91.6 | 101.5 |
| Total | 306.4 | 310.4 |

In fiscal year 2019, cost of sales included a utilization of inventories in the amount of €826.0 million (2018: €766.4 million), which was recognized as an expense. The total carrying amount of inventories measured at net realizable value was €11.7 million as of December 31, 2019 (December 31, 2018: €12.8 million). Write-downs of inventories led to an increase in the overall cost of sales recognized by €2.9 million (2018: €2.1 million). Reversals of write-downs resulting from disposals in the amount of €1.2 million (2018: €1.4 million) reduced the cost of sales.

18. Trade receivables and contract assets

| €m | Dec. 31, 19 | Dec. 31, 18 |
|--|--------------|--------------|
| From customers | 119.2 | 130.8 |
| From investments accounted for At-Equity | 4.1 | 5.1 |
| Trade receivables | 123.3 | 135.9 |
| Contract assets | 85.8 | 80.9 |
| Trade receivables and contract assets | 209.1 | 216.8 |

Details on the extent of credit risks included in trade receivables and contract assets are set out in [Note 28](#) in the section "Credit risks."

19. Other receivables and other assets

| €m | Dec. 31, 19 | Dec. 31, 18 |
|--|-------------|-------------|
| Other tax claims | 9.0 | 13.2 |
| Advance payments for leases and insurance insurance premiums | 7.8 | 6.3 |
| Other receivables due from suppliers | 4.0 | 1.5 |
| Receivables due from employees | 1.5 | 1.4 |
| Lease receivable | 1.1 | - |
| Income tax assets | 1.1 | 1.4 |
| Positive fair values of financial instruments | 0.8 | 0.0 |
| Purchase price receivables | - | 3.0 |
| Other assets | 6.0 | 7.6 |
| Other receivables and other assets | 31.3 | 34.4 |

20. Liquidity

Liquidity declined mainly due to new borrowings and the repayment of financial liabilities. Within the context of the issue of the new corporate bond in April 2019, liquidity increased by €250.0 million (before transaction costs). In June 2019, the proceeds were used, together with the existing cash, to fully repay the still outstanding loans in the amount of €87.6 million of SGL Composites US to BMW Group. In addition, for the purpose of forward funding of the 2015/2020 convertible bond, the nominal amount of €167.0 million, plus the interest payments due until maturity in September 2020, was deposited on a nominee account for the benefit of the holders of this convertible bond. In July 2019, the convertible bond was repurchased early in its full amount by using the liquidity deposited on the nominee account. Accordingly, the Company has liquidity in a total amount of €137.1 million (December 31, 2018: €180.6 million), comprising cash and cash equivalents of €133.1 Million (December 31, 2018: €122.5 million) as well as time deposits of €4.0 million (December 31, 2018: €58.1 million).

The breakdown of liquidity as of December 31, 2019 was as follows: 54% in euros (December 31, 2018: 41%), 23% in US dollars (December 31, 2018: 44%), 10% in Chinese renminbi (December 31, 2018: 6%), 7% in Japanese yen (December 31, 2018: 5%), and 6% in other currencies (December 31, 2018: 4%). As in the prior year, there was no significant amount of cash on hand as of the balance sheet date. The reduction of liquidity in US dollars largely results from the expiration of the time deposit in the amount of USD 62 million, USD 50 million of which was used to redeem a loan of SGL Composites US from BMW Group.

21. Deferred taxes

As of December 31, 2019, German unrecognized domestic tax loss carryforwards amounted to €466.3 million for corporate tax (December 31, 2018: €471.5 million), €328.1 million for trade tax (December 31, 2018: €322.4 million), and €63.0 million for interest carryforwards (December 31, 2018: €54.3 million). Unrecognized usable foreign tax loss carryforwards also existed primarily in the USA, amounting to USD 479.9 million for federal tax (December 31, 2018: USD 511.4 million, reduction mainly due to utilization), and in the UK, amounting to GBP 111.2 million (December 31, 2018: GBP 86.0 million). Furthermore, as of December 31, 2019, there were unrecognized interest carryforwards and capital losses in the USA totaling USD 66.5 million (December 31, 2018: USD 69.7 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.

No deferred tax assets were recognized for the following items as of December 31, 2019 or December 31, 2018 due to uncertainty regarding their usability:

| €m | Deferred tax assets Dec. 31, 19 | Deferred tax liabilities Dec. 31, 19 | Deferred tax assets Dec. 31, 18 | Deferred tax liabilities Dec. 31, 18 | Income statement 2019 | Equity 2019 |
|---|------------------------------------|---|------------------------------------|---|--------------------------|----------------|
| Non-current assets | 36.1 | 55.7 | 37.4 | 69.8 | 12.0 | 0.8 |
| Inventories | 15.4 | 0.0 | 6.7 | 2.4 | 11.1 | |
| Receivables/other assets | 3.2 | 28.9 | 3.0 | 13.2 | -15.5 | |
| Provisions for pensions and similar employee benefits | 124.8 | 54.9 | 82.4 | 21.1 | -5.7 | 7.5 |
| Other provisions | 11.3 | 0.5 | 12.6 | 0.6 | -1.2 | |
| Liabilities/other liabilities | 20.7 | 2.2 | 7.0 | 2.2 | 13.7 | |
| From tax loss carry forwards, interest carry forwards and tax credits | 315.6 | 0.0 | 309.4 | 0.0 | 6.2 | |
| Gross amount | 527.1 | 142.2 | 458.5 | 109.3 | 27.4 | 8.3 |
| Valuation allowances | -386.0 | 0.0 | -342.0 | 0.0 | -30.4 | -6.8 |
| Netting | -140.2 | -140.2 | -105.2 | -105.2 | 0.0 | |
| Carrying amount | 0.9 | 2.0 | 11.3 | 4.1 | | |
| Changes of the year recognized in equity | | | | | | 1.5 |
| Deferred tax expense | | | | | -8.3 | |

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.

| €m | Dec. 31, 19 | Dec. 31, 18 |
|--|----------------|----------------|
| From recognition and measurement differences | 223.7 | 165.9 |
| From tax loss carry forwards and tax credits | 1,794.4 | 1,681.6 |
| Total | 2,018.1 | 1,847.5 |

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. The development of deferred taxes is also shown in the following table:

SGL Carbon reports accumulated deferred tax effects of 46.1 million (2018: €44.6 million) on items recognized outside profit or loss, mainly from pension provisions, in equity.

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.

22. Equity

Issued capital

As of December 31, 2019, the issued capital of the parent company SGL Carbon SE amounted to €313,194,183.68 [December 31, 2018: €313,194,183.68] and was divided into 122,341,478 [December 31, 2018: 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 2019]. Authorized Capital 2019 was created by the Annual General Meeting on May

10, 2019 and is exercisable until May 9, 2024. In principle, the shareholders will be entitled to subscription rights if the Authorized Capital 2019 is utilized. However, preemptive rights should be or may be disappplied 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.

The Authorized Capital 2017, which was created by a resolution adopted by the Annual General Meeting on May 17, 2017 in the amount of €31,319,040.00 was fully rescinded by a resolution adopted by the Annual General Meeting on May 10, 2019.

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 30] as well as to service convertible bonds [see Note 25].

Conditional capital as of December 31, 2019

| 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 | €76,202.56 = 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 [10] | May 10, 2019 | €31,319,040.00 =12,234,000 shares | To fulfill subscription rights of convertible bonds/bonds with warrants to be issued based on the enabling resolution of the general meeting dated May 10, 2019 | Convertible bonds/bonds with warrants not issued as of December 31, 2019, on the basis of which a capital increase could occur |
| Section 3 [11] | 30.04.2015 | €25,600,000.00 = 10,000,000 shares | To be used for the 2015 convertible bond | Convertible bond 2015 no longer outstanding, thus conversion to shares is no longer possible |
| 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. |

¹⁾ SAR Plan = Stock Appreciation Rights Plan, see Note 30

Compared with the balance as of December 31, 2018, the former conditional capital pursuant to Section 3 [14] of the Articles of Incorporation (old version) in the amount of €20,480,000.00 € was rescinded by resolution of the Annual General Meeting on May 10, 2019, and new conditional capital was created in accordance with Section 3 [10] in the amount of €31,319,040.00.

Changes in share capital

| Number of shares | 2019 | 2018 |
|-------------------------------|--------------------|--------------------|
| 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, 2019, 70,501 (December 31, 2018: 70,501) treasury shares were held at a carrying amount of €180,482.56 (December 31, 2018: €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 financial debt, leverage ratio (net financial debt/EBITDA), and the equity ratio. Net financial 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 an equity ratio of $\geq 30\%$ and a leverage ratio (net financial debt to EBITDA before non-recurring items) of ≤ 2.5 .

In the year under review, the proceeds from the issue of the corporate bond were used to repay both the 2015/2020 convertible bond and the remaining loans to BMW Group.

In September of the previous year, SGL Carbon SE issued a convertible bond in a nominal amount of €159.3 million due in September 2023 [see [Note 25](#)].

The key figures developed as follows:

| €m | Dec. 31, 19 | Dec. 31, 18 |
|---|-------------|-------------|
| Net financial debt ²⁾ | 288.5 | 242.2 |
| Equity attributable to the shareholders of the parent company | 418.6 | 531.6 |
| Equity ratio | 27.8% | 33.5% |
| Leverage ratio | 2.40 | 1.90 |

¹⁾Prior year including liquidity of discontinued operations of €1.0 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 Carbon 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 SGL Carbon's credit quality. As of November 2019, SGL Carbon has ratings of "B3" from Moody's and "B-" from Standard & Poor's.

Change in control agreement

As of December 31, 2019, the Company had issued one convertible bond maturing in 2023. The convertible bond 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. A change in control exists for the convertible bond 2023 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 already 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].

The corporate bond issued by the Company in the amount of €250 million and maturing in 2024 entitles investors to demand early repayment of their notes in return for payment of 101% of the principal amount (including a potential tax deduction from this early repayment amount) as well as of the interest accrued until the repayment date when (a) an individual or entity (with the exception of Ms. Klatten, BMW AG and persons or entities attributable to them) directly or indirectly obtains more than 35% of the voting shares of SGL Carbon SE, (b) all or substantially all of the assets of SGL Carbon SE and its Group companies are transferred to an individual or entity (with the exception of Ms.

Klatten, BMW AG and persons or entities attributable to them), or (c) the share of SGL Carbon SE are no longer listed at the Frankfurt Stock Exchange or another European regulated market.

Other

In 2019, SGL Carbon SE, the parent company of SGL Carbon, reported a net loss for the year of €111.9 million in accordance with the German Commercial Code (HGB). Taking into account the loss brought forward in the amount of €931.0 million, the accumulated loss totaled €1,042.9 million. In accordance with the German Stock Corporation Act, dividends may only be paid out of the accumulated net profit reported by SGL Carbon SE in its annual financial statements prepared pursuant to the provisions of the German Commercial Code (HGB).

23. Provisions for pensions and similar employee benefits

The employees of SGL 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 are 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 2019 amounted to 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 additional 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. In addition, senior management is able to contribute short- and/or long-term incentives into 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, 2019, amounts to 78.2% (December 31, 2018: 78.0%). This plan is subject to the legal and regulatory framework of the U.S. Employee Retirement Income Security Act (ERISA). In accordance with this framework, defined benefit plans have to ensure a minimum funding level in order to avoid a reduction of benefit payments. The current funding ratio pursuant to ERISA does not result in any obligations to pay further contributions. In addition, post-employment healthcare plans and an additional pension plan for senior managers, both of which are unfunded, exist in the USA.

In the U.S. pension fund, the plan assets are invested solely for the purpose of providing future pension benefits to the beneficiaries and minimizing the costs of administering the assets. SGL 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 2019, the effective return on plan assets was 19.0% (2018: minus 5.1%) in the U.S., which is above the expected interest based on the discount rate of 4.2% as of December 31, 2018.

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, 2019, 46.0% of the plan assets in the USA were invested fixed-interest securities (December 31, 2018: 29.4%), 40.7% in equities and interests in companies (December 31, 2018: 58.0%), 8.7% in real estate (December 31, 2018:

4.7%), 3.8% in hedge funds (December 31, 2018: 6.7%), and 0.8% in bank deposits (December 31, 2018: 1.2%).

The future benefit obligations in relation to healthcare plans are calculated using actuarial methods based on prudent estimates of the relevant parameters. The calculation parameters may be influenced to a significant degree by the assumptions with respect to the increase in costs within the healthcare sector. In the year under review, the assumed rates of increase for medical costs (first/last/year) amounted to (6.47%/4.5%/2027) for beneficiaries of less than 65 years of age and (7.36%/4.5%/2027) for beneficiaries of more than 65 years of age. The assumed rates for 2018 were (7.74%/5.0%/2026) and (8.46%/5.0%/2026), 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 2019.

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 | |
|---|--------------|-------|----------|-------|
| | 2019 | 2018 | 2019 | 2018 |
| Discount rate as of Dec. 31 | 1.10% | 1.90% | 3.20% | 4.20% |
| Projected salary increase as of Dec. 31 | 2.25% | 2.25% | 3.00% | 3.00% |
| Projected pension increase as of Dec. 31 | 1.50% | 1.90% | | |
| Expected return on plan assets in fiscal year | 1.10% | 1.90% | 3.20% | 4.20% |
| Duration (years) | 17.1 | 16.7 | 14.9 | 13.8 |

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 2019 was as follows:

| €m | Germany 2019 | USA 2019 | Other 2019 | Total 2019 |
|--|-----------------|--------------|---------------|---------------|
| Present value of the defined benefit obligation at beginning of year | 291.1 | 98.2 | 11.2 | 400.5 |
| Service cost | 4.5 | 2.4 | 0.2 | 7.1 |
| Interest cost | 5.5 | 4.1 | 0.2 | 9.8 |
| Actuarial gains [-]/losses [+] | 25.7 | 12.0 | 2.3 | 40.0 |
| Benefits paid | -9.8 | -4.7 | -1.1 | -15.6 |
| Plan amendments | 1.0 | 0.0 | 0.0 | 1.0 |
| Other changes | 0.7 | 0.1 | -1.3 | -0.5 |
| Currency differences | | 2.0 | 0.0 | 2.0 |
| Present value of the defined benefit obligation at end of year¹⁾ | 318.8 | 114.1 | 11.5 | 444.4 |
| Fair value of plan assets at beginning of year | 48.7 | 60.8 | 0.8 | 110.3 |
| Actual return on plan assets | 4.0 | 11.8 | 0.0 | 15.8 |
| Employer contributions | 3.3 | 4.2 | 0.6 | 8.1 |
| Employee contributions | 0.7 | 0.1 | 0.0 | 0.8 |
| Benefits paid | -1.2 | -4.7 | -0.6 | -6.5 |
| Currency differences | | 1.2 | 0.0 | 1.2 |
| Fair value of plan assets at end of year²⁾ | 55.5 | 73.3 | 0.9 | 129.7 |
| Funded status as of Dec. 31 | 263.3 | 40.8 | 10.6 | 314.7 |
| Amount recognized | 263.3 | 40.8 | 10.6 | 314.7 |
| Termination benefits | | 0.8 | 3.2 | 4.0 |
| Provisions for pensions and similar employee benefits | 263.3 | 41.5 | 13.9 | 318.7 |

¹⁾ Of which €6.3 million relate to post-retirement health care benefits

²⁾ This item also includes assets of €4.9 million to cover pension entitlements recognized as other non-current assets

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 year¹⁾ | 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 year²⁾ | 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 consolidated statement of comprehensive income includes the following amounts:

| €m | Germany 2019 | USA 2019 | Other 2019 | Total 2019 | Total 2018 |
|---|-----------------|-------------|---------------|---------------|---------------|
| Actuarial gains (+)/losses (-) on pensions | -25.7 | -12.0 | -2.3 | -40.0 | 4.3 |
| Actual return on plan assets | 4.0 | 11.8 | 0.0 | 15.8 | -3.5 |
| Less expected return on plan assets | -1.0 | -2.6 | 0.0 | -3.5 | -3.0 |
| Currency effects | | | 0.0 | 0.0 | -0.3 |
| Gains (+)/losses (-) for the reporting year (gross) recognized in equity | -22.7 | -2.8 | -2.3 | -27.8 | -2.5 |
| Tax effect | 6.8 | 0.7 | 0.3 | 7.8 | 2.9 |
| Valuation allowances on deferred taxes | -6.5 | -0.7 | 0.0 | -7.2 | -0.2 |
| Gains (+)/losses (-) for the reporting year (net) recognized in equity | -22.4 | -2.8 | -2.0 | -27.2 | 0.2 |

The cumulative net amount of actuarial losses recognized in equity (accumulated profit/loss) was €239.9 million (2018: €212.7 million).

In fiscal year 2019, the following developments influenced the present value of the defined benefit obligation: an actuarial loss in the amount of €55.7 million resulting from the reduction

of the discount factor used for pension plans and an actuarial gain of €16.1 million from the reduction of the projected pension increase for German plans from 1.9% to 1.5% (2018: decrease by €4.2 million resulting from the increase of the interest rate after taking into account an offsetting effect due to the increase of the projected pension increase for German plans from 1.5%

to 1.9%), increase by €0.7 million as a result of taking into account new mortality tables in the USA (2018: effect from new mortality tables in Germany and the USA in the amount of €3.2 million) as well as reduction by €1.1 million (2018: €1.2 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 6.7%/plus 7.8% [discount factor] and plus 4.6%/minus 4.3% [projected pension increase]. Pension provisions with a maturity of less than one year amounted to €13.8 million (December 31, 2018: €13.8 million).

SGL Carbon has pension and healthcare obligations in the amount of €126.3 million (December 31, 2018: €102.9 million) arising from fund-financed pension plans. Pension obligations arising from non-fund-financed pension plans amounted to

€318.1 million (December 31, 2018: €297.6 million). The actual return on plan assets in 2019 amounted to a total of €15.8 million (2018: minus €3.5 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, 2019, the asset value included in the pension provisions totaled €29.6 million (December 31, 2018: €29.7 million). The expected return corresponds to the discount rate for the pension obligations. In fiscal year 2019, one-time payments totaling €0.4 million were made to reinsurers (2018: €0.7 million). The benefits under the insurance policies have been pledged to the relevant members of the Board of Management. The pension expense for active members of the Board of Management is detailed in [Note 27](#).

The breakdown of pension expenses for 2019 and 2018 is as follows:

| €m | Germany 2019 | USA 2019 | Other 2019 | Total 2019 | Total 2018 |
|---|-----------------|-------------|---------------|---------------|---------------|
| Current service costs | 4.5 | 2.4 | 0.2 | 7.1 | 7.5 |
| Plan amendments | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| Service cost | 5.5 | 2.4 | 0.2 | 8.2 | 7.5 |
| Interest cost | 5.5 | 4.1 | 0.2 | 9.8 | 8.7 |
| Expected return on plan assets | -0.9 | -2.5 | 0.0 | -3.4 | -2.9 |
| Net interest expense | 4.6 | 1.6 | 0.2 | 6.4 | 5.8 |
| Pension expenses for defined benefit plans | 10.1 | 4.0 | 0.4 | 14.5 | 13.3 |
| Pension expenses for defined contribution plans | 6.7 | 1.7 | 2.3 | 10.7 | 9.4 |
| Pension expenses | 16.8 | 5.7 | 2.7 | 25.2 | 22.7 |

Contributions to state plans of SGL Carbon amounted to €22.3 million in 2019 (December 31, 2018: €20.6 million). Employer contributions to plan assets and reinsurance policies in 2020 are estimated at €5.0 million (actual amount for 2018: €6.2 million). As of December 31, 2019, 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 |
|---------------|------|
| 2019 | 15.2 |
| Due 2020 | 14.4 |
| Due 2021 | 15.2 |
| Due 2022 | 15.3 |
| Due 2023 | 16.0 |
| Due 2024 | 16.2 |
| Due 2025-2029 | 92.2 |

24. Other provisions

| €m | Taxes | Personnel | Warranties, price reductions and guarantees | Restruc- turing | Other | Total |
|--|------------|-------------|---|--------------------|-------------|-------------|
| Balance as of Jan. 1, 19 (adjusted) | 1.5 | 58.6 | 9.1 | 35.0 | 17.6 | 121.8 |
| Utilizations | -1.0 | -36.2 | -3.7 | -2.3 | -6.6 | -49.8 |
| Releases | -0.1 | -1.4 | -1.6 | -0.7 | -1.3 | -5.1 |
| Additions | 1.8 | 19.4 | 2.0 | 0.0 | 8.1 | 31.3 |
| Other changes/exchange differences | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.3 |
| Balance as of Dec. 31, 19 | 2.2 | 40.6 | 5.8 | 32.0 | 17.9 | 98.5 |
| <i>thereof with a maturity of up to one year</i> | <i>2.2</i> | <i>35.4</i> | <i>5.0</i> | <i>7.5</i> | <i>17.0</i> | <i>67.1</i> |
| <i>thereof with a maturity of more than one year</i> | <i>-</i> | <i>5.2</i> | <i>0.8</i> | <i>24.5</i> | <i>0.9</i> | <i>31.4</i> |

Provisions for personnel expenses mainly comprise provisions for variable bonuses of €13.4 million (December 31, 2018: €30.6 million), provisions for anniversary benefits of €5.2 million (December 31, 2018: €4.5 million), and provisions for outstanding vacation days of €12.9 million (December 31, 2018: €12.6 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. In 2019, an amount of

€0.2 million expense from the compounding of interest on provisions expense was recorded. As a result from the change in discounting rate, the provision increased by €3.9 million.

The item "Other" includes provisions for outstanding invoices in the amount of €5.7 million (December 31, 2018: €6.0 million). In addition, other provisions consist of various individual items of minor value from our 48 (December 31, 2018: 51) fully consolidated companies.

25.Liabilities

| €m | Dec. 31, 19 | Remaining term to maturity > 1 year | Dec. 31, 18 | Remaining term to maturity > 1 year |
|--|--------------|-------------------------------------|--------------|-------------------------------------|
| Interest-bearing loans | | | | |
| Corporate bond | 250.0 | 250.0 | - | - |
| <i>Nominal value of convertible bonds</i> | <i>159.3</i> | | <i>326.3</i> | |
| <i>Less IFRS equity component</i> | <i>-10.7</i> | | <i>-20.8</i> | |
| Convertible bonds | 148.6 | 148.6 | 305.5 | 305.5 |
| Bank loans, overdrafts and other financial liabilities | 16.3 | 13.1 | 97.4 | 95.2 |
| Refinancing costs | -7.3 | -7.3 | -4.2 | -4.2 |
| | 407.6 | 404.4 | 398.7 | 396.5 |
| Trade payables | 108.7 | 0.0 | 108.1 | 0.0 |
| Other financial liabilities | | | | |
| Derivative financial instruments | - | - | 0.9 | 0.0 |
| Lease liabilities | 48.9 | 34.2 | 16.9 | 15.7 |
| Miscellaneous other financial liabilities | 58.7 | 0.0 | 68.9 | 52.2 |
| | 107.6 | 34.2 | 86.7 | 67.9 |
| Income tax liabilities | 7.9 | 0.0 | 1.2 | 0.0 |
| Miscellaneous other liabilities | 24.9 | 5.3 | 22.9 | 0.0 |
| Other liabilities | 140.4 | 39.5 | 110.8 | 67.9 |
| Total | 656.7 | 443.9 | 617.6 | 464.4 |

Interest-bearing loans

Corporate bond

In April 2019, SGL Carbon SE issued a senior secured corporate bond. The nominal amount is €250.0 million and a term until September 30, 2024, and was issued in denominations of €100,000. The coupon amounts to 4.625%, payable semi-annually.

The terms of the corporate bond also include normal market provisions with regard to financial covenants and financial restrictions. The corporate bond is admitted to trading in the Open Market of the Frankfurt Stock Exchange.

The issue proceeds, together with available cash, was used for funding the convertible bond ("2015/2020 convertible bond"), to fully repay a loan in connection with the BMW joint venture as well as to settle the transaction costs related to the corporate bond.

The US dollar loan of BMW Group to SGL Composites US in an equivalent amount of €87.6 million was fully repaid in June 2019 and the convertible bond 2015/2020 was redeemed in July 2019.

As of December 31, 2019, the market value of the exchange-listed corporate bond was €245.7 million.

Convertible bonds

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 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 has to be paid semi-annually on March 20 and September 20, respectively. 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 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 July 2019, SGL Carbon redeemed the convertible bond with a nominal amount of €167.0 million issued in 2015 which was originally due in September 2020.

As of December 31, 2019, the Company had one outstanding convertible bond. The terms of the convertible bond provide for protection against dilution for investors. This ensures that the bond's conversion price is 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 price of the convertible bond changed as follows:

| € | Conversion price as of Dec. 31, 19 | Original conversion price per share | Change |
|----------------------------|------------------------------------|-------------------------------------|--------|
| Convertible bond 2018/2023 | 13.02 | 13.02 | 0.00 |

Summary of convertible bond

| €m | Volume of issue | Outstanding volume | Carrying amount as of Dec. 31, 19 | Market price ¹⁾ as of Dec. 31, 19 | Coupon % p.a. | Issue price |
|----------------------------|-----------------|--------------------|-----------------------------------|--|---------------|-------------|
| Convertible bond 2018/2023 | 159.3 | 159.3 | 146.1 | 133.2 | 3.000% | 100.0% |

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 2019 was 3.8% p.a. (2018: 3.7% p.a.). Including the non-cash imputed interest cost on the convertible bonds, the weighted average effective interest rate for 2019 was 4.8% p. a. (December 31, 2018: 5.0% p.a.). As of the balance sheet date, bank loans, overdrafts and other financial liabilities amounted to €16.3 million (2018: €97.4 million). As of year-end 2019, they were entirely subject to fixed interest, while in the previous year €11.0 million was subject to fixed interest and €86.4 million was subject to variable interest. The variable-interest loans were entirely attributable to SGL Composites US.

Syndicated credit facility

In addition to the convertible bond and the corporate bond, SGL Carbon also has a secured syndicated credit facility totaling €175.0 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 line was agreed with SGL Carbon's core banks and matures in January 2023, subject to a prolongation option for another year. This syndicated credit line 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 €108.7 million as of December 31, 2019 (December 31, 2018: €108.1 million) and, as in fiscal year 2018, were primarily due to third parties and due for payment within one year. Trade payables include contract liabilities of €15.5 million (December 31, 2018: €3.7 million), referring to pre-payments received from customers for the construction of plants for which revenue is recognized over a specific period.

Other liabilities

As of December 31, 2019, other financial liabilities include lease liabilities of €48.9 million (December 31, 2018: €16.9 million). The increase results from the first-time application of the new lease standard IFRS 16.

Miscellaneous other financial liabilities of €58.7 million (December 31, 2018: €68.9 million) primarily comprise the discounted outstanding purchase price liability for the acquisition of SGL Composites US of €54.2 million (December 31, 2018: €52.1 million). Moreover, this item comprises interest accruals of €4.5 million for the outstanding convertible bond and corporate bond. In the previous year, miscellaneous other financial

liabilities included the cash settlement payment for the sale of the former AS business (€10.6 million) and accrued interest (€2.8 million).

Miscellaneous other liabilities totaled €24.9 million (December 31, 2018: €22.9 million) as of December 31, 2019 and included liabilities for payroll and church taxes of €7.9 million (December 31, 2018: €7.6 million), social security liabilities of €0.4 million

(December 31, 2018: €0.7 million), other tax liabilities of €3.2 million (December 31, 2018: €1.1 million), and deferred income of €7.8 million (December 31, 2018: €8.0 million).

The following table shows all contractually agreed upon payments as of December 31, 2019 for repayments of principal and payment of interest on recognized financial liabilities, including derivative financial instruments.

| €m | 2020 | 2021 | 2022 | 2023 | 2024 | More than five years |
|--|--------------|-------------|-------------|--------------|--------------|----------------------|
| Non-derivative financial liabilities | | | | | | |
| Corporate bond | 11.6 | 11.6 | 11.6 | 11.6 | 258.7 | |
| Convertible bonds | 4.8 | 4.8 | 4.8 | 162.7 | | |
| Bank loans, overdrafts and other financial liabilities | 3.7 | 3.3 | 3.3 | 2.7 | 1.6 | 3.5 |
| Lease liabilities | 15.5 | 7.6 | 6.1 | 3.6 | 3.1 | 50.5 |
| Trade payables | 108.7 | | | | | |
| Miscellaneous other financial liabilities | 59.7 | | | | | |
| Derivative financial liabilities | - | | | | | |
| Total | 204.0 | 27.3 | 25.8 | 180.6 | 263.4 | 54.0 |

The major change over the disclosures in the previous year is due to the newly issued convertible bond in the amount of €250 million and the early repayment of the convertible bond 2015/2020. Furthermore, as a result of the first-time application of the new lease standard IFRS 16, operating leases are accounted for as lease liabilities as of January 1, 2019.

Financial liabilities were determined using undiscounted contractual cash flows for the subsequent fiscal years.

The following table shows the development of interest-bearing loans.

| €m | Balance as of Jan. 1, 19 | Additions | Repayments | Effect of foreign exchange rate changes | Imputed interest/ amortisation | Balance as of Dec. 31, 19 |
|--|--------------------------|--------------|---------------|---|--------------------------------|---------------------------|
| Corporate bond | | 250.0 | | | | 250.0 |
| Convertible bonds | 326.3 | | -167.0 | | | 159.3 |
| Bank loans, overdrafts and other financial liabilities | 97.4 | 7.4 | -89.8 | 1.3 | | 16.3 |
| Interest-bearing loans (nominal amount) | 423.7 | 257.4 | -256.8 | 1.3 | 0.0 | 425.6 |
| Remaining imputed interest for the convertible bonds | -20.8 | | 5.4 | | 4.7 | -10.7 |
| Refinancing costs | -4.2 | -6.5 | | | 3.4 | -7.3 |
| Interest-bearing loans (carrying amount) | 398.7 | 250.9 | -251.4 | 1.3 | 8.1 | 407.6 |

26. 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 €16.2 million as of December 31, 2019 (December 31, 2018: €25.3 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 €7.0 million as of December 31, 2019 (December 31, 2018: €5.0 million). There were no contingent liabilities relating to investments accounted for At-Equity or other guarantee obligations.

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 financial debt and credit lines, respectively. These agreements are restricted to share pledge agreements and/or corporate guarantees for a selected number of companies in the SGL Carbon. The shares of the following companies serve as collateral: SGL Carbon GmbH, SGL Carbon Beteiligung GmbH, SGL Technologies GmbH, SGL Composites GmbH&Co. KG., SGL Carbon GmbH AT, SGL Composites GmbH, SGL Graphite Solutions Polska sp. z o.o., SGL Carbon LLC. Of the liabilities to banks, a total of €15.9 million was secured by a land charge as of December 31, 2019.

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 Carbon 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.

27. Related-party transactions

Joint ventures and associates

SKion GmbH, Bad Homburg, holds a share of approximately 28.55% in SGL Carbon SE according to notifications pursuant to the German Securities Trading Act (WpHG). No transactions from the sale of goods and rendering of services were conducted with SKion GmbH. SKion GmbH holds a nominal amount of €30 million of the 2018/2023 convertible bond, and a nominal amount of €25 million of the bond.

In fiscal years 2019 and 2018, 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 26](#)). Please refer to [Note 8](#) for information on joint ventures and associates.

The following table presents the volume of transactions with related companies included in SGL Carbon:

2019

| | 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 | 18.1 | 9.4 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 |
| Associates | 0.0 | 0.2 | 64.2 | 0.5 | 2.0 | 0.0 | 10.7 |
| Total | 18.1 | 9.6 | 64.2 | 0.5 | 4.1 | 0.0 | 10.7 |

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 |

Related persons

Related persons include members of the Board of Management and the Supervisory Board.

For fiscal 2019, 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 €2,698 thousand (2018: €2,767 thousand). In addition, pension expenses (service cost) in the amount of €309 thousand in fiscal 2019 (2018: €351 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, 2019 amounted to €1,211 thousand (December 31, 2018: €3,611 thousand).

Remuneration for the members of the Board of Management in fiscal 2019 amounted to a total net expense of €3.025 thousand (2018: €4,481 thousand).

The net amounts outstanding to members of the Board of Management as of December 31, 2019 in the amount of €318 thousand (December 31, 2018: €1,545 thousand) consisted of provisions for annual bonuses. A total of 306,799 PSUs (December 31, 2018: 452,101) from the LTI Performance Share Units (PSUs) were granted to active members of the Board of Management as of December 31, 2019. The allotment value at grant date for all outstanding LTI tranches amounted to €5.2 million as of December 31, 2019 (December 31, 2018: €3.7 million). In the 2019 fiscal year, 220,475 new PSUs were granted to the members of

the Board of Management active in 2019 from the LTI tranche 2019-2022.

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 €2,016 thousand (2018: €1,758 thousand). As of December 31, 2019, the pension provisions recognized for former members of the Board of Management (defined benefit obligation, DBO) amounted to €45,465 thousand (December 31, 2018: €41,826 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 €617 thousand (2018: €696 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 €401 thousand (2018: €390 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 2019 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.

28. Additional disclosures on financial instruments

The following table shows the reconciliation of balance sheet items to the classes and measurement categories of financial instruments:

| €m | Measurement category under IFRS 9 | Carrying amount as of Dec. 31, 19 | Carrying amount as of Dec. 31, 18 |
|---|-----------------------------------|-----------------------------------|-----------------------------------|
| Financial assets | | | |
| Cash and cash equivalents | 1] | 133.1 | 122.5 |
| Time deposits | 1] | 4.0 | 58.1 |
| Trade receivables and contract assets | 1] | 207.0 | 216.8 |
| Trade receivables | 2] | 2.1 | - |
| Marketable securities and similar investments | 2] | 4.9 | 4.0 |
| Other financial assets | 1] | 0.0 | 3.0 |
| Derivative financial assets | | | |
| Derivatives without hedging relationship | 3] | 0.8 | 0.0 |
| Derivatives with a hedging relationship | n.a. | 0.0 | 0.0 |
| Financial liabilities | | | |
| Corporate bond | 4] | 250.0 | - |
| Convertible bonds | 4] | 148.6 | 305.5 |
| Bank loans, overdrafts and other financial liabilities | 4] | 16.3 | 97.4 |
| Refinancing costs | 4] | -7.3 | -4.2 |
| Lease liabilities | n.a. | 48.9 | 16.9 |
| Trade payables | 4] | 108.7 | 108.1 |
| Miscellaneous other financial liabilities | 4] | 58.7 | 68.9 |
| Derivative financial liabilities | | | |
| Derivatives without hedging relationship | 5] | 0.0 | 0.2 |
| Derivatives with a hedging relationship | n.a. | 0.0 | 0.7 |
| Thereof aggregated by measurement category in accordance with IFRS 9 | | | |
| 1) Financial assets measured at amortized costs | | 344.1 | 400.4 |
| 2) Financial assets measured at fair value through profit and loss | | 7.0 | 4.0 |
| 3) Other financial assets measured at fair value through profit and loss | | 0.8 | 0.0 |
| 4) Financial liabilities measured at amortized costs | | 575.0 | 575.7 |
| 5) Financial liabilities measured at fair value through profit and loss | | 0.0 | 0.2 |

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. The fair value for trade receivables intended for sale due to a factoring agreement is the nominal value less the factoring fee. This measurement is based on unobservable market inputs and is therefore allocated to fair value hierarchy level 3. 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 25](#) for disclosures on the market value of the corporate bond and the convertible bonds as of the balance sheet date.

SGL Carbon calculates the fair value of liabilities to banks, other financial liabilities, and liabilities from finance leases by discounting the estimated future cash flows using interest rates

applicable to similar financial liabilities with comparable residual 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.

As of December 31, 2019, the item "Derivative financial assets" includes embedded derivatives for the contractually agreed early repayment options regarding the corporate bond. The embedded derivatives are measured using a generally accepted option pricing model. 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, 2019 and 2018:

| Dec. 31, 19 | Level 1 | Level 2 | Level 3 | Total |
|---|---------|---------|---------|-------|
| Marketable securities and similar investments | 4.9 | | | 4.9 |
| Trade receivables | | | 2.1 | 2.1 |
| Derivative financial assets | | 0.8 | | 0.8 |
| Derivative financial liabilities | | | | - |

| 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 |

The following table shows the changes in level 3 trade receivables in the reporting period 2019:

| €m | Trade receivables |
|--------------------------------------|-------------------|
| Balance as of Jan. 1, 19 | - |
| Additions | 2.2 |
| Losses recognized in profit and loss | -0.1 |
| Balance as of Dec. 31, 19 | 2.1 |

Net gains or losses recognized for financial instruments by measurement category in accordance with IFRS 9 were as follows:

Net gains/losses by measurement category

| €m | 2019 | 2018 |
|---|------|------|
| Financial assets measured at amortized costs | 0.6 | 0.9 |
| Financial assets measured at fair value through profit and loss | 0.5 | -0.9 |
| Other financial assets and financial liabilities measured as fair value through profit and loss | -2.7 | -0.4 |
| Financial liabilities measured at amortized cost | -0.2 | -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 mainly 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 28 “Credit risks”](#).

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. In order to ensure SGL Carbon's solvency as well as its financial flexibility, SGL Carbon carries out regular liquidity planning at short intervals for the immediate future to cover day-to-day operations. This is done 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).

As an element of liquidity management, the Company concluded factoring agreements for trade receivables in the fiscal year 2019. The volume of the receivables sold amounts to €17.1 million as of December 31, 2019 (December 31, 2018: €0.0 million).

The Company's liquidity as of year-end 2019 totals €137.1 million. This amount represents a sufficient liquidity reserve for the fiscal year 2020. Please refer to [Note 25](#) for information on the maturity of financial liabilities.

Credit risk [counterparty default risk]

To reduce credit risk, contracts for derivative financial instruments, and financial transactions are concluded with SGL 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, 2019 and 2018, respectively, as follows:

| Risk classes | Equivalent to S&P Rating | Gross carrying amount 31. Dec. 19 | Gross carrying amount as of Dec. 31, 18 |
|--------------|--------------------------|-----------------------------------|---|
| Low risk | AAA to AA- | 71.1 | 91.3 |
| Medium risk | A+ to BBB- | 92.2 | 85.6 |
| High risk | BB+ to C | 49.3 | 45.5 |
| Total | | 212.6 | 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 €137.1 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, 2019 and December 31, 2018:

| Dec. 31, 19 in €m | Gross carrying amount | Loss rate [weighted average] | Impairment losses | Restricted credit rating |
|---------------------------|-----------------------|------------------------------|-------------------|--------------------------|
| Not overdue | 190.5 | 0.3% | 0.6 | No |
| 1- 29 days overdue | 12.7 | 1.6% | 0.2 | No |
| 30- 60 days overdue | 3.0 | 3.3% | 0.1 | Yes |
| 61- 90 days overdue | 1.3 | 15.4% | 0.2 | Yes |
| more than 90 days overdue | 5.1 | 88.2% | 4.5 | Yes |
| Total | 212.6 | | 5.6 | |

| Dec. 31, 18 in €m | Gross carrying amount | Loss rate [weighted average] | Impairment losses | Restricted credit rating |
|---------------------------|-----------------------|------------------------------|-------------------|--------------------------|
| Not overdue | 189.1 | 0.2% | 0.4 | No |
| 1- 29 days overdue | 25.3 | 0.8% | 0.2 | No |
| 30- 60 days overdue | 2.5 | 4.0% | 0.1 | Yes |
| 61- 90 days overdue | 1.1 | 72.7% | 0.8 | Yes |
| more than 90 days overdue | 4.4 | 93.2% | 4.1 | Yes |
| Total | 222.4 | | 5.6 | |

The following table shows the development of loss allowances on trade receivables and contract assets:

| in €m | 2019 | 2018 |
|------------------------------|------------|------------|
| Balance as of Jan. 1 | 5.6 | 7.0 |
| Additions | 0.5 | 0.7 |
| Reversals | -0.4 | -0.5 |
| Utilizations | -0.1 | -1.6 |
| Balance as of Dec. 31 | 5.6 | 5.6 |

In fiscal year 2019, an amount of €0.2 million (2018: reversal of €0.1 million) was added for contract assets.

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 material remaining net currency positions. 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 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. Changes in cash inflows and outflows in foreign currencies do not result in any material net

currency positions for the fiscal year 2020. Against this backdrop, the Company does not hold any currency forwards in its portfolio. Any material net currency positions that are identified during the regular reviews of these net currency positions can be hedged at any time by currency forwards.

Since SGL Carbon only had immaterial net currency positions, the Company 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 Carbon generally 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. The hedges designated as cash flow hedges (recorded in the hedging reserve in equity) amount to €0.0 million as of December 31, 2019 since there were no derivatives held in the portfolio as of the year-end (December 31, 2018: minus €0.5 million before taxes).

The effectiveness of designated hedges, if any, 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. If this matching is given, 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.

Nevertheless, SGL Carbon does not hold any currency forwards as of December 31, 2019. 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 years 2019 and 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.

| €m | Nominal amounts | | | Total Dec. 31, 19 | Carrying amounts | | | |
|-------------------|-------------------------|---------------------|----------------------|----------------------|---|--|---|--|
| | Purchase Dec. 31, 19 | Sale Dec. 31, 19 | Total Dec. 31, 19 | | Balance sheet disclosure of hedging instruments | Gains and losses recognized in other comprehen- sive income | Gains/losses transferred from equity (cash flow hedge) to profit and loss ¹⁾ | Disclosure of the reclassified amount in profit and loss |
| Forward contracts | - | - | - | - | - | -1.4 | 1.9 | Sales revenue |

¹⁾ Positive amounts are losses in the income statement

| €m | Nominal amounts | | | Total Dec. 31, 18 | Carrying amounts | | | |
|-------------------|-------------------------|---------------------|----------------------|----------------------|---|--|---|--|
| | Purchase Dec. 31, 18 | Sale Dec. 31, 18 | Total Dec. 31, 18 | | Balance sheet disclosure of hedging instruments | Gains and losses recognized in other comprehen- sive income | Gains/losses transferred from equity (cash flow hedge) to profit and loss ¹⁾ | Disclosure of the reclassified amount in profit and loss |
| Forward contracts | 24.0 | 41.7 | 65.7 | -0.9 | Other liabilities | -1.9 | -0.7 | Sales revenue |
| Thereof: | | | | | | | | |
| USD | | 8.2 | 8.2 | -0.1 | | | | |
| PLN | 24.0 | | 24.0 | -0.1 | | | | |
| JPN | | 33.5 | 33.5 | -0.7 | | | | |

¹⁾ Negative amounts are gains in the income statement

The following is a reconciliation of the accumulated other comprehensive income from hedging relationships (cash flow hedges):

| €m | Cash flow hedge 2019 | Cash flow hedge 2018 |
|---|----------------------------|----------------------------|
| Balance as of January 1, | -0.5 | 2.1 |
| Changes of the year recognized in equity | -1.4 | -1.9 |
| Reclassifications from equity to profit and loss because the transaction originally hedged occurred | 1.9 | -0.7 |
| Balance as of December 31, | 0.0 | -0.5 |

In the previous year, SGL Carbon had entered into time deposits firstly in the amount of USD 62 million and then USD 50 million to hedge net investments in foreign operations (USA). In the fis-

cal year 2018, this resulted in hedging gains of €2.9 million recognized in other comprehensive income (currency translation reserve). The time deposit in the amount of USD 50 million was used to repay a loan in the amount of USD 99.0 million as of June 28, 2019, which had been granted by BMW Holding B.V. to SGL Composites US. The remaining loan principal was serviced through the purchase of USD 37 million via a currency forward and through own liquidity in the amount of USD 12.0 million. In fiscal 2019, hedging gains of €3.3 million were recognized in other comprehensive (currency translation reserve) to hedge net investments in foreign operations. 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 Carbon in addition to the derivative hedging instruments (in the previous year) used in the operating activities. Specifically, these include liquidity of €40.8 million (December 31, 2018: €86.9 million), trade receivables of €61.2 million (December 31, 2018: €58.7 million), and trade payables of €72.7 million (December 31, 2018: €48.8 million). Furthermore, foreign currency effects from internal lending activities recognized in profit or loss or directly in equity are also included. It is assumed that the balance as of the reporting date is representative of the reporting period as a whole. 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 Carbon.

The following table provides a comparison between the amounts reported as of December 31, 2019, and December 31, 2018. The analysis is based on a hypothetical 10% increase in the value of the euro against the other currencies at the balance sheet date.

| €m | Hypothetical exchange rate | | Change in fair value/equity | | Thereof: change in net profit/loss | | Thereof: change in hedging reserve | |
|-------|----------------------------|-------------|-----------------------------|-------------|------------------------------------|-------------|------------------------------------|-------------|
| | Dec. 31, 19 | Dec. 31, 18 | Dec. 31, 19 | Dec. 31, 18 | Dec. 31, 19 | Dec. 31, 18 | Dec. 31, 19 | Dec. 31, 18 |
| USD | 1.2357 | 1.2595 | -20.7 | -16.2 | -1.4 | -16.8 | -19.3 | 0.6 |
| PLN | 4.6844 | 4.7300 | -0.6 | -2.3 | -0.2 | -0.3 | -0.4 | -2.0 |
| GBP | 0.9359 | 0.9840 | -2.9 | -2.0 | -0.2 | -2.0 | -2.7 | 0.0 |
| JPN | 134.1340 | 138.4350 | -2.3 | -0.1 | -2.3 | -2.5 | 0.0 | 2.3 |
| Other | - | - | 1.6 | 1.1 | 0.5 | 1.1 | 1.2 | 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 no longer exist as of the balance sheet date following the full repayment of the loans granted by BMW Group to the former joint venture SGL ACF (December 31, 2018: €86.4 million). As of the balance sheet date, SGL Carbon had financial liabilities in a principal amount of €425.6 million (December 31, 2018: €423.7 million). They have a fixed interest rate and are therefore not subject to interest rate risk.

The variable interest rate liabilities were offset by liquidity (December 31, 2018: including amounts in the held-for-sale assets) totaling €137.1 million (December 31, 2018: €181.1 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 €1.4 million (2018: €1.8 million).

29. Segment reporting

The following segment information is based on the "management approach" pursuant to which segment information must be presented on the basis of the internal management reporting. The Board of Management of SGL 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, capital expenditure, cash generation, and capital employed. However, Group financing (including financial income and expense) as well as income taxes are managed uniformly on a SGL Carbon-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, 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.

In the 2019 financial year, the business with gas diffusion layers for fuel cells was reclassified from the central research department Central Innovation to the GMS reporting segment in order to accelerate commercialization.

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" supports, among other things, the other segments through the provision of services.

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 |
|--|--------------|--------------|-------------|---------------------------|----------------|
| 2019 | | | | | |
| External sales revenue | 431.6 | 622.5 | 32.6 | 0.0 | 1,086.7 |
| Intersegment sales revenue | 3.9 | 0.7 | 33.9 | -38.5 | 0.0 |
| Total sales revenue | 435.5 | 623.2 | 66.5 | -38.5 | 1,086.7 |
| Timing of revenue recognition | | | | | |
| Products transferred at point in time | 427.1 | 632.3 | 32.6 | 0.0 | 1,092.0 |
| Products and services transferred over time | 4.5 | -9.8 | 0.0 | 0.0 | -5.3 |
| Total sales revenue | 431.6 | 622.5 | 32.6 | 0.0 | 1,086.7 |
| Sales revenue by customer industry | | | | | |
| Mobility | 230.2 | 61.5 | 9.0 | 0.0 | 300.7 |
| Energy | 54.4 | 151.7 | | 0.0 | 206.1 |
| Industrial Applications | 60.3 | 183.0 | 23.6 | 0.0 | 266.9 |
| Chemicals | | 134.0 | | 0.0 | 134.0 |
| Digitalization | | 92.3 | | 0.0 | 92.3 |
| Textile Fibers | 86.7 | | | 0.0 | 86.7 |
| Total sales revenue | 431.6 | 622.5 | 32.6 | 0.0 | 1,086.7 |
| Operating profit/loss before non-recurring items | -8.3 | 85.5 | -28.8 | 0.0 | 48.4 |
| Non-recurring items ¹⁾ | -83.2 | 0.1 | 0.4 | 0.0 | -82.7 |
| Operating profit/loss after non-recurring items | -91.5 | 85.6 | -28.4 | 0.0 | -34.3 |
| Amortization/depreciation on intangible assets and property, plant and equipment | 33.4 | 28.1 | 10.1 | 0.0 | 71.6 |
| Earnings before interest, taxes, depreciation and amortization (EBITDA) before non-recurring items | 25.1 | 113.6 | -18.7 | 0.0 | 120.0 |
| Capital expenditure ²⁾ | 27.8 | 55.8 | 11.5 | 0.0 | 95.1 |
| Working capital (Dec. 31) ³⁾ | 157.0 | 269.7 | -19.9 | 0.0 | 406.8 |
| Capital employed (Dec. 31) ⁴⁾ | 580.9 | 541.1 | 97.8 | 0.0 | 1,219.8 |
| Cash generation ⁵⁾ | -1.2 | 53.0 | -14.5 | 0.0 | 37.3 |
| Result from investments accounted for At-Equity | 15.4 | | | 0.0 | 15.4 |
| Total sales revenue of investments accounted for At-Equity ⁶⁾ | 259.4 | 0.0 | 0.0 | 0.0 | 259.4 |
| Return on capital employed in % (ROCE _{EBIT}) ⁷⁾ | -1.3 | 16.3 | | | 3.9 |

¹⁾ Non-recurring items comprise release of restructuring provision in a total amount of €0.7 million (Note 9), impairment loss of 74.7 million (Note 10), and the carrying forward of the purchase price allocation SGL Composites DE and US and SGL Composites AT of minus €8.7 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 as 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

Sales revenue with a customer of the CFM reporting segment amount to almost €123 million of the Group's total revenue (2018: €120 million).

| €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 |
| Digitalization | 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 (Dez. 31) ³⁾ | 158.5 | 262.9 | -2.3 | 0.0 | 419.1 |
| Capital employed 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 |
| Result from investments accounted for At-Equity | 16.8 | | | 0.0 | 16.8 |
| 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 Composites DE and US) of €28.4 million (Note 5) and the carrying forward of the purchase price allocation SGL Composites DE und US and Benteler SGL 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 as 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 | USA | Asia | Other | SGL Carbon |
|---|---------|--------------------------------|-------|-------|-------|---------------|
| 2019 | | | | | | |
| Sales revenue (by destination) | 341.0 | 189.3 | 158.6 | 350.5 | 47.3 | 1,086.7 |
| Sales revenue (by company headquarters) | 431.8 | 313.1 | 268.5 | 73.3 | | 1,086.7 |
| Capital expenditure | 41.7 | 31.4 | 14.6 | 7.4 | | 95.1 |
| Non-current assets ¹⁾ | 269.9 | 173.4 | 294.2 | 34.0 | | 771.5 |
| 2018 | | | | | | |
| Sales revenue (by destination) | 358.4 | 193.4 | 156.2 | 291.8 | 47.7 | 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 |

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)

30. 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. 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.

For the fiscal year 2019, the STI was 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. The target bo-

nus was adjusted accordingly since the agreement on individual targets was dispensed with. The same principle has applied since fiscal year 2019 also for non-exempt employees within the context of the voluntary SGL Bonus PLUS plan. The maximum bonus potential that can be achieved therefore comprises the two following target categories of SGL Carbon and relevant business unit. The following criteria apply: sales revenue and income before taxes at SGL Carbon level, and sales revenues, operating profit (EBIT) before non-recurring items, and average committed working capital (DWC-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% | 40% | 80% |
| MG2 | 0% | 30% | 60% |
| MG3 | 0% | 25% | 50% |

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.

A further harmonization of the short-term incentive approaches for the employees below the SGL management levels will be introduced starting in fiscal year 2020 at the locations outside of Germany.

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 in-

dicators. 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, 2019.

| Tranche | Allocation value ¹⁾ | Price ²⁾ | PSU ³⁾ | Performance | Fair value ⁴⁾ |
|----------------|--------------------------------|---------------------|-------------------|-------------|--------------------------|
| | €m | € | Number | 0% - 150% | €m |
| LTI 2016-2019 | 4.5 | 13.38 | 337,840 | 65 | 1.0 |
| LTI 2017-2020 | 4.5 | 8.28 | 542,374 | 25 | 0.6 |
| LTI 2018 -2021 | 4.6 | 11.34 | 408,855 | 0 | 0.0 |
| LTI 2019 -2022 | 4.9 | 7.17 | 680,597 | 0 | 0.0 |

¹⁾ PSU-number outstanding as at Dec. 31, 19 multiplied with price at grant of each tranche

²⁾ Fair value at grant date

³⁾ Outstanding at Dec. 31, 19

⁴⁾ PSU-number weighted with the performance and the average share price of 4.62€, calculated on the basis of the last 20 trading days prior to Dec.31, 19

| Target indicators ROCE | Minimum | Target | Maximum |
|------------------------|---------|--------|---------|
| 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% |
| Plan 2019-2022 | 6.2% | 8.7% | 10.7% |

The provisions for the existing LTI plans of the selected executives as of December 31, 2019 amount to €1.5 million (December 31, 2018: €3.9 million). In fiscal year 2019, €2.2 million were reversed through profit or loss (2018: expense of €1.1 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 1,580,592 SARs may still be exercised. The range of exercise prices is between €20.23 – €27.84.

In 2019, no SARs were exercised from one of the replaced long-term incentive plans. The weighted average term to maturity for the SAR Plan is 2.3 years.

31. 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 assurance 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. This item also includes assurance services in connection with the issue of the corporate bond. Tax advisory services mainly comprise support for enhancing the tax compliance system, while other services include accounting-related advisory services.

| €m | 2019 | 2018 |
|--------------------------|------------|------------|
| Audit fees | 0.6 | 0.7 |
| Other assurance services | 0.4 | 0.5 |
| Tax advisory services | 0.0 | 0.1 |
| Other services | 0.1 | 0.0 |
| Total | 1.1 | 1.3 |

32. List of shareholdings pursuant to Section 313 (2) of the German Commercial Code (HGB)

| A. | Consolidated Companies | Site | Interest in % | held via |
|----|--|-----------|---------------|----------|
| a) | Germany | | | |
| 1 | SGL Carbon SE | Wiesbaden | | |
| 2 | SGL CARBON GmbH ¹⁾ | Meitingen | 100 | 1 |
| 3 | Dr. Schnabel GmbH ¹⁾ | Limbürg | 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 | Site/Country | Interest in % | held via |
|------------|--|------------------------------|---------------|----------|
| bj) | 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 | SGL BUSINESS SERVICES, UNIPESSOAL, LDA | Lavradio, Portugal | 100 | 2 |
| 26 | SGL Carbon Holdings B.V. | Rotterdam, Netherlands | 100 | 4 |
| 27 | SGL GRAPHITE SOLUTIONS POLSKA sp. z o.o. | Nowy Sącz, Poland | 100 | 26 |
| 28 | SGL CARBON Holding S.A.S. | Paris, France | 100 | 1.4 |
| 29 | SGL CARBON S.A.S. | Passy (Chedde), France | 100 | 28 |
| 30 | SGL CARBON Technic S.A.S. | Saint-Martin d'Herès, France | 100 | 28 |
| 31 | SGL CARBON Ltd. | Alcester, United Kingdom | 100 | 1 |
| 32 | SGL CARBON, LLC | Charlotte, NC, USA | 100 | 4 |
| 33 | SGL Technologies LLC | Charlotte, NC, USA | 100 | 32 |
| 34 | SGL COMPOSITES INC. | Gardena, CA, USA | 100 | 33 |
| 35 | SGL Technic LLC | Valencia, CA, USA | 100 | 32 |
| 36 | SGL CARBON TECHNIC LLC | Strongsville, OH, USA | 100 | 32 |

| A. | Consolidated Companies | Site/Country | Interest in % | held via |
|------------|--|-------------------------|---------------|----------|
| bj) | Other countries | | | |
| 37 | SGL Composites LLC | Moses Lake, WA, USA | 51.0 | 33 |
| 38 | SGL LAND HOLDING Inc. | Lachute, Québec, Canada | 100 | 1 |
| 39 | SGL CARBON INDIA Pvt. Ltd. | Maharashtra, India | 100 | 1 |
| 40 | SGL CARBON Far East Ltd. | Shanghai, China | 100 | 1 |
| 41 | SGL CARBON Japan Ltd. | Tokyo, Japan | 100 | 1 |
| 42 | SGL CARBON Korea Ltd. | Seoul, Korea | 100 | 1 |
| 43 | SGL CARBON ASIA-PACIFIC SDN BHD | Kuala Lumpur, Malaysia | 100 | 1 |
| 44 | SGL Quanghai Carbon (Shanxi) Co.Ltd. | Yangquan, China | 84.5 | 4 |
| 45 | SGL PROCESS TECHNOLOGY PTE. LTD. | Singapore | 100 | 1 |
| 46 | SGL CARBON Graphite Technic Co. Ltd. | Shanghai, China | 100 | 45 |
| 47 | Graphite Chemical Engineering Co. Ltd. | Yamanashi, Japan | 100 | 45 |
| 48 | SGL Graphite Solutions Taiwan Ltd. | Taipei City, Taiwan | 100 | 2 |

| B. | Equity investments over 20% | Site/Country | Interest in % | held via |
|-----------|---|------------------|---------------|----------|
| a) | Germany | | | |
| 49 | SGL Lindner GmbH & Co. KG i.L. ^{1) 2)} | Arnstorf | 51.0 | 4 |
| b) | Other countries | | | |
| 50 | Brembo SGL Carbon Ceramic Brakes S.p.A. | Stezzano, Italy | 50.0 | 5 |
| 51 | MCC-SGL Precursor Co. Ltd. | Tokyo, Japan | 33.3 | 5 |
| 52 | Fisigen, S.A. | Lisbon, Portugal | 49.0 | 24 |

¹⁾ No control due to contractual arrangements

²⁾ Liquidated on February 20, 2020

33. Declaration of Conformity with the German Corporate Governance Code

The annual declaration of conformity with the German Corporate Governance Code according to Section 161 of the German Stock Corporation Act (AktG) was issued by the Board of Management and the Supervisory Board of SGL Carbon SE on September 12, 2019 and on November 27, and have been published on the website of SGL Carbon SE.

34. Subsequent events

Effective July 1, 2020, the Supervisory Board of SGL Carbon SE appointed Dr. Torsten Derr as Chief Executive Officer of SGL Carbon SE for a term of five years. With this appointment, Dr. Torsten Derr is succeeding Dr. Jürgen Köhler, who resigned from

his mandate as Chief Executive Officer of SGL Carbon SE effective August 31, 2019.

Wiesbaden, March 9, 2020

[SGL Carbon SE](#)

[The SGL Carbon Board of Management](#)

Dr. Michael Majerus

Dr. Stephan Bühler

Additional Information

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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 and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and 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 1 January to 31 December 2019, and 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 1 January to 31 December 2019. In accordance with German legal requirements we have not audited the content of those components of the group management report specified in the "Other Information" section of our auditor's report.

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 at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019, 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. Our opinion on the group management report does not cover the content of those components of the group management report specified in the "Other Information" section of the auditor's report.

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). *[Where compliance with ISAs is also relevant add: We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs)].* Our responsibilities under those requirements and principles *[in case of supplementary compliance with the ISAs, replace this with: requirements, principles and standards]* 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 1 January to 31 December 2019. 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.

Valuation of intangible and fixed assets of the cash generating unit CFCM

With respect to the accounting policies applied, we refer to Note 2, and with respect to the disclosure of amount of impairment recorded, we refer to Note 10 in the notes to the consolidated financial statements. The financial performance of the business unit Carbon Fibers & Materials (CFM), to which the cash generating unit "Carbon Fibers & Composite Materials" (CFCM) is allocated, is described in the section "Composites - Fibers & Materials: Earnings impacted by cyclical and structural declines" and the expected development along with its chances and risks is described in the section "Opportunities and Risk Report" of the Group management report.

THE FINANCIAL STATEMENT RISK

In August 2019 it became evident that the revenue- and earning targets of the cash generating unit CFCM planned for 2019 could not be met. Consequently, SGL has reduced the planned earnings of the cash generating unit CFCM for 2019 and in the course of the updated planning for the following years. Thereof resulted a trigger for an impairment of the intangible and tangible assets allocated to the cash generating unit CFCM so that SGL has performed an impairment test.

The impairment test was performed on the level of the cash generating unit. As such SGL calculates the recoverable amount of the cash generating unit CFCM and compared it with the respective book value. If the book value is higher than the recoverable amount, an impairment is recorded. The recoverable amount is the higher amount of fair value less costs to sell and the value in use of the cash generating unit. The value in use is determined based on a discounted-cashflow-model. The reduction of expected future cash inflows based on the presented changes in planning lead to an impairment charge of EUR 74.7m for the cash generating unit CFCM. This has been allocated pro-rata to non-current assets of and corporate assets allocated to the cash generating unit. The remaining book value of the cash generating unit amounts to EUR 119.7m.

The impairment test for intangible and tangible assets is complex and is based on several judgmental assumptions. These are i.e. the future cashflows, the terminal growth rate, and the discount rates used.

There is a risk relating to the group financial statements, that the impairment charge was not recorded appropriately at period end.

OUR AUDIT APPROACH

At first, we have obtained an understanding of the process of the entity for determining the recoverable amount of the cash generating unit by descriptions from personnel responsible for the impairment tests and inspection of relevant documentation for the impairment test. With involvement of our valuation specialists we have assessed the adequacy of the significant assumptions as well as the valuation methods. In doing so we have discussed with personnel responsible for the planning process the future cashflows as well as the assumed terminal growth rate. Additionally, we have performed reconciliations to internally prepared prognosis,

e.g. the budget prepared by management and taken note of by the supervisory board. The reasonableness of growth rates was assessed based on external market expectations.

We have assessed the company's previous prognosis quality by comparing the previous prepared budgets for former years with the actual realized results and have analyzed deviations. Because of the deviations in the current year, we have critically considered management's identified measures to improve the earnings.

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 composition of the underlying peer groups regarding its appropriateness. To account for the inherent uncertainty of the prognosis we have further analyzed the effects of potential changes in discount rates and the expected cashflows on the recoverable amount, by calculating alternative scenarios and comparing these with the results of the company (sensitivity analysis). Additionally, we have reconciled the book value of the cash generating unit and assessed the appropriateness of the allocation of corporate assets.

OUR OBSERVATIONS

The method applied for impairment test of intangible and tangible assets of the cash generating unit CFCM is reasonable and in accordance with applicable accounting policies. The assumptions and parameters used by the company are reasonable.

Other Information

Management respectively supervisory board are responsible for the other information. The other information comprises the following components of the group management report, whose content was not audited:

- the separate group non-financial report, which is referred to in the group management report and
- the separate group corporate governance statement, referred to in the group management report, and
- information extraneous to management reports and marked as unaudited.

The other Information includes also the remaining parts of the annual report.

The other Information does not include the consolidated financial statements, the group management report extraneous to management reports and our auditor's report thereon.

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, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report information audited for content 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] *[and supplementary compliance with the ISAs]* 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 (systems) 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 10 May 2019. We were engaged by the supervisory board on 27 November 2020. We have been the group auditor of the SGL Carbon SE without interruption 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].

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dirk Janz.

Frankfurt / Main, 9 March 2020

KPMG AG

Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Janz
Wirtschaftsprüfer
[German Public Auditor]

Becker
Wirtschaftsprüfer
[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 9, 2020

SGL Carbon SE
The Board of Management of SGL Carbon SE

Dr. Michael Majerus

Dr. Stephan Bühler

Corporate Bodies

Board of Management

[Status: December 31, 2019]

Dr. Jürgen Köhler

Chairman/Chief Executive Officer of SGL Carbon SE

Until Aug. 31, 2019

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. Stephan Bühler

Member of the Board of Management

Since Oct. 15, 2019

Responsible for:

Compliance
 Legal

Internal board memberships:

Brembo SGL Carbon Ceramic Brakes S.p. A., Stezzano, Italy ¹⁾
 [since Nov. 19, 2019]
 SGL Carbon Holding SAS, Saint Martin d'Herès, Frankreich

Dr. Michael Majerus

Chief Financial Officer of SGL Carbon SE

Since Sept. 1, 2019 Spokesperson of the Board of Management

Responsible for:

Group Accounting
 Group Controlling
 Group Treasury
 Financial Reporting
 Legal (until Oct. 15, 2019)
 Information Technology
 Information Security
 Purchasing
 Investor Relations
 Group Taxes
 Risk Management
 Internal Audit

Since Sept. 1, 2019 additionally:

Human Resources
 Management Development
 Compliance (until Oct. 15, 2019)
 Corporate Development / Strategy
 Corporate Communications
 Innovation
 Environment Protection, Health & Safety Affairs
 Business Process Excellence
 Global Engineering & Construction

Internal board memberships:

SGL CARBON GmbH, Meitingen (until June 19, 2019)
 SGL CARBON LLC, Charlotte, USA

External board memberships:

B.R.A.I.N. Biotechnology Research and Information Network AG,
 Zwingenberg

¹⁾ Shareholder Committee

With memberships outside Germany, the respective country is mentioned.

Supervisory Board

[Status: December 31, 2019]

Susanne Klatten

Chairwoman of the Supervisory Board of SGL Carbon SE
Chairwoman of the Personnel and Nomination Committee

Entrepreneur

Board memberships pursuant to Sec. 125 (1) 5 AktG
ALTANA AG, Wesel
BMW AG, Munich
UnternehmerTUM GmbH, Munich ¹⁾

Georg Denoke

Deputy Chairman of the Supervisory Board of SGL Carbon SE
Chairman of the Audit Committee

Managing director and CEO of ATON GmbH, Munich

Board memberships pursuant to Sec. 125 (1) 5 AktG:
EDAG Engineering Group AG, Arbon, Switzerland ²⁾

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

Board memberships pursuant to Sec. 125 (1) 5 AktG:
Amatheon Agri Holding N.V., Schiphol, The Netherlands ¹⁾

SMS Group GmbH, Duesseldorf ¹⁾

Ingeborg Neumann

Managing partner of Peppermint Holding GmbH, Berlin

Board memberships pursuant to Sec. 125 (1) 5 AktG:
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

¹⁾ Chairwoman/Chairman of the supervisory board

²⁾ Chairman of the advisory committee

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 Carbon 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 Carbon 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.

Wide-bandgap semiconductor

Semiconductors with a wide band gap are materials whose band gap (energy gap between valence and conduction band) is at the upper end of the range of semiconductors (3 eV to over 4 eV). Traditional silicon-based semiconductors have a band gap of 1.1 eV. Examples of wide-bandgap semiconductor materials are GaN, SiC. Such materials are distinguished from traditional semiconductors by advantages such as processing higher voltages, operating at higher temperatures, processing higher frequencies and greater reliability. They are therefore suitable for applications in power electronics, low-noise amplifiers and for high-frequency and microwave amplifiers.

List of Acronyms

| | |
|---|--|
| A AktG German Stock Corporation Act (Aktengesetz) | IT Information technology |
| C CFRP Carbon Fiber Reinforced Plastic | L LTCI Long Term Cash Incentive |
| D DAX German Stock Index (large caps) | LTI Long Term Incentive |
| E EBIT Earnings before Interest and Taxes | M MDAX MidCap DAX |
| EBITDA Earnings before Interest, Taxes, Depreciation and Amortization | R REACH Registration, Evaluation, Authorization and Restriction of Chemicals |
| EHSA Environment, Health & Safety Affairs | ROCE Return on Capital Employed |
| EPS Earnings per Share | S SAR Stock Appreciation Rights |
| H HGB German Commercial Code | SDAX SmallCap DAX |
| I IAS International Accounting Standards | V VorstAG Act on Appropriateness of Management Board Remuneration |
| IASB International Accounting Standards Board | W WpHG German Securities Trading Act |
| IFRIC International Financial Reporting Interpretations Committee | |
| IFRS International Financial Reporting Standards | |

Financial Calendar

March 12, 2020

- Publication of the 2019 Annual Report
- Year-end press conference, analyst conference, and conference call for analysts and investors

April 22, 2020

- Annual General Meeting

May 14, 2020

- Report on the first quarter 2020
- Conference call for analysts and investors

August 13, 2020

- Report on the first half of 2020
- Conference call for analysts and investors

November 12, 2020

- Report on the nine months 2020
- Conference call for analysts and investors

Contact

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Board of Management

Nils Hendrik Mueller

Chairwoman of the Supervisory Board

Michael Dannenmann

Produced inhouse with firesys

Five-year Financial Summary

| €m | Footnote | 2019 | 2018 | 2017 | 2016 | 2015 ¹⁾ |
|--|----------|---------|---------|---------|---------|--------------------|
| Financial performance | | | | | | |
| Sales revenue | | 1,086.7 | 1,047.5 | 860.1 | 769.8 | 789.5 |
| thereof outside Germany | | 69% | 66% | 74% | 73% | 73% |
| thereof in Germany | | 31% | 34% | 26% | 27% | 27% |
| EBITDA before non-recurring items | 2) | 120.0 | 127.2 | 90.7 | 69.9 | 63.9 |
| Operating profit/loss (EBIT) before non-recurring items | 2) | 48.4 | 64.6 | 40.1 | 20.7 | 13.7 |
| Result from continuing operations before income taxes | | -73.2 | 51.3 | -7.8 | -27.2 | -45.4 |
| Consolidated net result [attributable to the shareholders of the parent company] | | -90.0 | 41.3 | 138.9 | -111.7 | -295.0 |
| Return on sales (EBIT-margin) | 3) | 4.5% | 6.2% | 4.7% | 2.7% | 1.7% |
| Return on capital employed (ROCE _{EBIT}) | 4) | 3.9% | 5.4% | 4.6% | 2.5% | 1.6% |
| Return on capital employed (ROCE _{EBITDA}) | 5) | 9.6% | 10.5% | 10.5% | 8.4% | 7.9% |
| Earnings per share, basic (in €) | | -0.74 | 0.34 | 1.14 | -1.19 | -3.22 |
| Net assets | | | | | | |
| Equity attributable to the shareholders of the parent company | | 418.6 | 531.6 | 457.0 | 331.8 | 289.3 |
| Total assets | | 1,504.8 | 1,585.1 | 1,541.7 | 1,899.2 | 1,856.1 |
| Net financial debt | | 288.5 | 242.2 | 139.0 | 449.4 | 534.2 |
| Equity ratio | 6) | 27.8% | 33.5% | 29.6% | 17.5% | 15.6% |
| Gearing | 7) | 0.69 | 0.46 | 0.30 | 1.35 | 1.85 |
| Headcount | 8) | 5,127 | 5,031 | 4,732 | 5,384 | 5,658 |
| Financial position | | | | | | |
| Payments to purchase intangible assets and property, plant and equipment | | 95.1 | 78.1 | 52.9 | 34.6 | 44.4 |
| Depreciation/amortization expense | | 71.6 | 62.6 | 50.6 | 49.2 | 50.2 |
| Working capital | 9) | 406.8 | 419.1 | 318.5 | 254.2 | 255.1 |
| Free cash flow | 10) | -17.3 | -58.5 | -144.7 | -48.1 | -99.3 |

¹⁾ Adjusted to reflect PP as discontinued operations

²⁾ Before non-recurring items of minus €82.7 million in 2019, €16.3 million in 2018, €8.9 million in 2017, €3.0 million in 2016 and minus €6.8 million in 2015

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 December 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)

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