sgl carbon

Annual Report **2021**

Key Figures 2021

€m	Footnote	2021	2020	Change
Financial performance				
Sales revenue		1,007.0	919.4	9.5%
thereof outside Germany		69%	69%	-
thereof in Germany		31%	31%	-
EBITDA pre	1)	140.0	92.8	50.9%
Operating profit/loss (EBIT)		110.4	−93.7	-
Result from continuing operations before income taxes		82.1	−123.1	-
Consolidated net result (attributable to the shareholders of the parent company)		75.4	−132.2	-
EBITDA pre margin	2)	13.9%	10.1%	+3.8%-points
Return on capital employed (ROCE $_{\text{EBIT pre}}$)	3)	8.0%	1.8%	+6.2%-points
Earnings per share, basic and diluted (in €)		0.62	−1.08	-
Net assets				
Equity attributable to the shareholders of the parent company		371.5	220.7	68.3%
Total assets		1,376.3	1,258.8	9.3%
Net financial debt		206.3	286.5	−28.0%
Equity ratio	4)	27.0%	17.5%	+9.5%-points
Leverage Ratio	5)	1.5	3.1	51.6%
Headcount	6)	4,680	4,837	−3.2%
Financial position				
Payments to purchase intangible assets and property, plant and equipment		50.0	55.8	−10.4%
Depreciation/amortization expense		60.3	73.3	−17.7%
Working capital		341.2	351.8	−3.0%
Free cash flow	7)	111.5	93.9	18.7%

1) Before one-off effects/non-recurring items of €30.7 million in 2021 and minus €113.2 million in 2020
2) EBITDA pre to sales revenue
3) EBIT pre to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)
4) Equity attributable to the shareholders of the parent company to total assets
5) Net debt to EBITDA pre
6) Including employees with fixed-term contracts
7) Cash flow from operating activities (continued operations) minus cash flow from investing activities (continued operations)

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Interview with the Board of Management

Thomas Dippold [Chief Financial Officer] Dr. Torsten Derr [Chief Executive Officer]

Dr. Derr, when you took office as CEO in mid-2020, you announced early on that the company would have to undergo a transformation. Why was that? What did you achieve in 2021?

I'm someone who first takes the time to look at everything closely and question it critically. It quickly became clear that we had to realign our business in order to put SGL Carbon back on a healthy footing. We had to concentrate on the profitable areas of our business, simplify processes and structures and reduce costs. In the long term, it is necessary to incorporate a comprehensive rethinking within the organization.

In 2021, we achieved many of the transformation goals that were set for SGL Carbon as a whole in the autumn of 2020. We have identified more than 700 initiatives, which have resulted in cost savings of approx. €120 million to date. Unfortunately, this was also associated with the reduction of around 10% of the workforce. We have not only saved costs, we've positioned ourselves to be more customer-oriented. Since the beginning of 2021, the four newly defined business units have been responsible for their own results. They are better able to adapt to the requirements of their markets and customers and have become significantly more process-efficient. We also made cuts in the central units. Central functions were reduced from 20 to nine and resized to better fit SGL Carbon.

The introduction of "Formula Carbon" was also important for the internal realignment. This sets out our new way of thinking in four clear guiding principles: "Business first" – "Keep it simple" – "Deliver on promises" – "Act fast, think different." As it takes time to learn and apply new "behavioral patterns," we will implement further initiatives to refresh our corporate culture and improve employee satisfaction as part of our ESG strategy.

The success of the transformation has made a material contribution to stabilizing our business and our financial situation.

Mr. Dippold, as the Chief Financial Officer of SGL Carbon, how did you view the transformation? What were your main areas of focus?

When I took up my position on the Board of Management in October 2020, SGL Carbon was in a financial difficult situation. We were still in the midst of the coronavirus pandemic, which had a clear negative impact on the operational business. On top of that, we had an overly expensive organization with high fixed costs, high net debt and negative cash flow. The primary task was to restore the financial stability of SGL Carbon. We achieved that in fiscal 2021.

Consolidated sales increased from €919.4 million to €1,007.0 million and adjusted EBITDA, which is an important operating indicator for us, improved from €92.8 million to €140.0 million. We were able to show a positive consolidated net result – the first in a long time – of €75.4 million. Our net financial debt also improved significantly from €286.5 million to €206.3 million, which can be attributed to the increase in liquidity by €79.1 million to €220.9 million.

Dr. Derr, Mr. Dippold, is the transformation now complete?

Torsten Derr: The team did a great job during the year. We've already achieved our original cost reduction target, but we can see that there's still potential to improve and to act more efficiently and cost-consciously. All employees support us in identifying and implementing further transformation initiatives.

Thomas Dippold: In finance, too, we have to continue to work on securing and increasing financial stability. We must lay a stable foundation for the long term in order to enable future growth options.

Dr. Derr, how does the future look operationally? Which units are being expanded? Where do growth opportunities lie?

In 2022, we will concentrate on optimizing the existing business. We want to continue expanding in the growth markets of electromobility, semiconductors, LEDs and renewable energies such as wind and solar. We will therefore invest in expanding our capacities, e.g., in Poland in further plants for the production of graphite anode material for the battery industry and in the US to supply our customers there with tailor-made electromobility solutions, to name just two examples.

Furthermore, fiscal 2022 will be characterized by the consistent integration of our sustainability ambitions into the strategy of our business units. We want and need to improve our performance in this regard.

Dr. Derr, as an energy-intensive company, how do you intend to improve sustainability performance?

Economic success and sustainable action are not mutually exclusive for SGL Carbon. On the contrary, we see more opportunities for our business model than economic downsides, both in terms of costs and sales. As an energy-intensive company, electricity and gas are material cost factors, so it makes sense for us to use energy in a more efficient way – both ecologically and economically.

Last year we updated our sustainability strategy and set ourselves very clear targets. These include reducing our CO_2 emissions by 50% by 2025 by using renewable forms of energy. We want to be climate neutral by 2038. Through this, we'll be contributing to climate protection ourselves and reducing the carbon footprint of our products, which, in turn, helps our customers to meet their climate targets.

We want to contribute to environmental and climate protection as company, but also through our products. Carbon fibers are used in the wind industry, as well as to make electric vehicles lighter and therefore less fuel-intensive. Graphite anode material is essential in battery manufacturing, as well as in many other applications.

We want to grow particularly strongly with these products, which make a sustainable economy possible, and serve the increasing demand from our customers.

Dr. Derr, Mr. Dippold, it sounds like you have big plans for 2022. How will these plans affect the economic situation of SGL Carbon?

Thomas Dippold: Overall, together with all our colleagues, we achieved higher profitability in fiscal 2021 than we had expected at the start of the year. This was the reason for the forecast adjustment in mid-2021, which we also achieved at the upper end of the forecast range. We thus achieved an increase in sales and profit in 2021 that we had not originally expected to achieve until 2022. The sales and earnings forecast for 2022 therefore flattens out accordingly.

Months ago, we drew attention to the expiry of a supply contract with a major automotive manufacturer at the end of June 2022. We will be able to compensate for this loss with orders from wind energy, which will not have the same impact on sales and earnings as the expiring contract. In addition, there are ongoing challenges from continued high raw material and energy prices.

At the time of writing this interview, there is a terrible war going on in Ukraine, which we at SGL Carbon all deeply condemn. At present, no one can estimate how this devastating conflict will affect the geopolitical and economic fabric of Europe and the world. Let us hope that the war will soon be over and that peaceful coexistence will once again be possible.

However, at the present time we cannot rule out the possibility that the consequences of this war and the sanctions imposed will also have an impact on SGL Carbon's business performance. The planning for fiscal year 2022 was prepared on the basis of the general conditions prevailing at the time of its preparation. For the financial year 2022, we expect consolidated net sales to remain at the previous year's level and adjusted EBITDA to be between €110 - 130 million. Further explanations of the forecast can be found in the Outlook Report in this Annual Report.

Torsten Derr: It is not easy for me to talk about figures and performance when such a horrific war is currently raging in our immediate neighborhood. Nevertheless, our shareholders and our employees have a right to know what the future holds for our SGL Carbon. In 2022, we want to further stabilize the financial performance of SGL Carbon and expand our business. Only with a strengthened financial and operational base can we grow in a performance-oriented manner and achieve our medium-term targets. By the end of 2025, we want to achieve sales of between €1.3 billion and €1.4 billion and an adjusted EBITDA margin of between 15% and 18% with our existing business. We have not taken into account possible opportunities arising from the expansion of a European battery industry or the further development of fuel cells in our medium-term planning. The formation of a European battery industry is certain, the only question is when. We are now significantly better positioned than we were a year ago to take advantage of upcoming market opportunities. The financial stability of SGL Carbon supports us in taking advantage of any opportunities that may arise.

Torsten Derr and Thomas Dippold: We'll tackle all of the projects mentioned together. We can only achieve our goals with the support of all SGL employees. We would like to take this opportunity to sincerely thank them for their hard work, even in difficult times, for their commitment to SGL Carbon and their passion for our business.

Sincerely,

Derr

Dr. Torsten Derr
Chief Executive Officer

Thomas Dippold
Chief Financial Officer

Report of the Supervisory Board

Susanne Klatten, Chairwoman of the Supervisory Board

Dear Shareholders,

We do not have an easy year behind us, and SGL Carbon can nevertheless report a good result. Performance and profitability have improved and targets have been exceeded. In the reporting year, the Board of Management and employees achieved an increase in sales and net income that didn't seem possible until 2022. Capacity utilization was increased in almost all business units, and high-margin orders were won.

However, the pandemic also shaped the past fiscal year. Supply chains were repeatedly interrupted, and raw material and energy prices rose, in some cases significantly. This was also mitigated by our transformation program, which the Board of Management initiated at the end of 2020: costs were reduced and SGL Carbon was restructured. Some measures were painful, but they helped the company to stabilize. The Supervisory Board encourages the Board of Management to continue pushing the program forward.

SGL Carbon serves high-growth, promising markets, for example, in the automotive and semiconductor industries, and it is helping to shape the economic and social change specified by the Green Deal of the European Commission with its innovative products.

Green electricity requires wind turbines, and systems with larger blades are increasingly being built, especially offshore plants with spans of 150 meters and more. Such wings require special stability, for example, through components made of carbon fibers. In addition, carbon is a mainstay in electromobility, it makes vehicles lighter and protects occupants from fire and accident injuries.

Graphite is just as indispensable for e-mobility. It is the most important material for anodes in lithium-ion batteries. Graphite still mainly comes from Asia. If Europe wants to maintain its technological sovereignty in battery production, it must follow suit. Our company is one of the few manufacturers of the synthetic graphite anode material in Europe. We industrialize and further develop it for future battery technologies. SGL Carbon's contribution here is promising that the German federal government and the State of Bavaria have included the company in the EU funding project IPCEI — the "Important Projects of Common European Interest", which promotes the production of competitive and environmentally friendly batteries "made in Europe".

The Board of Management and SGL Carbon's employees have declared the objective of focusing even more on such sustainable innovations in the future. The Supervisory Board welcomes and supports this as well as the new and ambitious ESG and sustainability targets: CO_2 emissions are to be halved by 2025. Here, too, dear shareholders, the transformation is progressing We will report all further progress in this regard to you.

Cooperation between the Board of Management and the Supervisory Board

In the reporting year, the Supervisory Board duly performed the duties incumbent upon it under the law, the Articles of Incorporation and the Rules of Procedure. Dr. Derr as CEO of SGL Carbon SE, and Mr. Dippold as CFO, were in close contact with the chairwoman of the Supervisory Board and the Supervisory Board itself.

In the reporting year, the Supervisory Board supported the Board of Management in an advisory capacity in five full plenary sessions and in meetings of the various committees, while carefully and continuously monitoring the conduct of business. In doing so, the Supervisory Board was always able to convince itself of the legality, practicality and propriety of the activities of the Board of Management. The Board of Management informed the Supervisory Board regularly, promptly and comprehensively in writing and orally about the situation of the company and the material business events and projects. When law and the Articles of Incorporation stipulated that decisions had to be made by the Supervisory Board regarding individual transactions and projects of the Board of Management, the Supervisory Board passed a resolution after being involved at an early stage.

The Board of Management held talks with representatives of shareholders and employees in the run-up to some Supervisory Board meetings. The chairs of the committees also spoke to their colleagues on the Supervisory Board and members of the Board of Management in preparation for the committee meetings. During the Supervisory Board meetings, the Board of Management provided comprehensive and timely information — both verbally and through documents — on the items on the agenda. Deviations in the course of business from budgets and targets were explained in detail. The reasons for the deviations and the corresponding measures were discussed intensively. The members of the Supervisory Board and the committees had sufficient opportunity to critically examine the submitted documents and draft resolutions in the Supervisory Board and its committees. In addition, the Board of Management reported regularly on material business transactions, quarterly figures and how SGL Carbon was perceived on the financial markets.

As chairwoman of the Supervisory Board, I maintained regular and close dialog with Dr. Derr as chairman of the Board of Management and with Mr. Dippold regarding business development, planning and specific company-related issues. The chairman of the Audit Committee also maintained close and regular exchanges of information with the Board of Management between committee meetings.

The topics covered in the plenary sessions of the Supervisory Board

The company's economic situation and the outlook for the fiscal year were discussed at the Supervisory Board’s meetings in March, May, July, September and November. The regular topics of these meetings included — in addition to reports on the Covid-19 situation — the performance of operational and financial key figures, opportunities and risks as well as risk management including compliance risks. Regular and intensive discussions also focused on the progress made in implementing the transformation program, the strategic positioning and the growth projects of the business units. A consistently important topic was short and medium-term financial planning.

In the March meeting of the reporting year, the Supervisory Board discussed the final version of the Annual Financial Statements and the Consolidated Financial Statements for 2020 with the auditor and approved the Annual Report. The Board of Management reported on the effects of the pandemic on ongoing business, the negative impact of the sometimes sharp rise in raw commodity prices and the lack of availability of freight containers. The Board of Management also reported in detail on the status and implementation of the transformation program. In addition, the Supervisory Board resolved the Board of Management's target achievement for 2020; details can be found in the remuneration report. Finally, the items for resolution for the Annual General Meeting scheduled for May 21, 2021 were approved.

In the meeting after the virtual Annual General Meeting in May, the Board of Management gave the Supervisory Board an overview of various operational projects and presented the results of the first quarter of the fiscal year. The positive financial figures and the improvement in the equity ratio were highlighted. The sale of land not required for operations and the possibility of consolidating the network of sites were also discussed. The progress and sustainability of the transformation measures and the cultural change of the Company were also discussed in detail.

The Supervisory Board used the opportunity of the July Supervisory Board meeting at the Meitingen site to inspect the Gas Diffusion Layer (GDL) production facility. In addition, the Board of Management gave an update on the business position and the transformation process. The strategic direction of the company was discussed intensively with the Board of Management and the heads of the business units present, as was the strategy of the four operational business units, including specific projects in growth markets, especially in the units of gas diffusion layers and graphite anode material (GAM).

At the September meeting, the Supervisory Board scrutinized business development and the report on the first half of the year, with a focus on strategic issues. The Board of Management reported on the company's improved rating from Moody's to positive outlook, which reflects the pleasing development of key financial figures. Finally, the auditing company KPMG was again commissioned at the meeting to audit the Corporate Social Responsibility Report as the non-financial Group statement of SGL Carbon.

The focal points of the (virtual) meeting of the Supervisory Board in November were the report by the Board of Management on the current fiscal year, the budget for 2022 and the preliminary planning for the years 2022-2026. The year under review showed pleasing developments in all key financial indicators, such as sales revenue, EBITDA, free cash flow and net debt. The developments in the supply of raw materials and the considerable increases in energy and transport costs which are increasingly impacting earnings were also discussed intensively. The Supervisory Board scrutinized the update of the sustainability strategy and the targets set in detail. The Supervisory Board received a comprehensive report on this from the responsible specialist department and was satisfied that the Company was dedicating itself to these issues with the necessary intensity.

An updated Declaration of Conformity and the blackout periods for 2022 were also approved. The Company also reported that the certification of the compliance management system was successfully confirmed.

Activities of the committees

From the meetings of the respective committees, the committee chairmen reported extensively on the work of the committees at the Supervisory Board meetings.

The Audit Committee met in March, September and November in the year under review, with meetings also taking place as video conferences due to the coronavirus pandemic. The auditor also attended all meetings.

In addition, the Audit Committee had the financial statements explained to them in three telephone conferences prior to publication of the quarterly figures.

Business development and business risks were discussed at all meetings of the Audit Committee.

The main topic at the March meeting was the discussion of SGL Carbon SE's Annual Financial Statements and the Consolidated Financial Statements for 2020 as well as the Auditor's Report in this regard. In addition, the Audit Committee scrutinized important issues relating to compliance, the internal control system, the audits carried out by Internal Audit and the planned audit plan, as well as the non-financial Group statement in the Corporate Social Responsibility Report ("CSR Report").

One main topic of the September meeting was the audit of the Annual Financial Statements by KPMG. A review of the audit of the past fiscal year was carried out and the audit quality was assessed using defined criteria. The non-audit services provided by the auditor were assessed to identify any possible restriction of the auditor's independence. The organization, scope, focus and materiality of the audit were discussed in preparation for the audit of the 2021 Annual Financial Statements. The subject of the meeting was also the implementation of legal innovations regarding the risk management system and the remuneration report. Measures to restructure retirement benefit obligations within the Group were also discussed.

The topic of auditor rotation was discussed with the auditor in the November meeting. Other important topics were accounting issues and changes in Group structure. Furthermore, the results of a review of the effectiveness of internal controls were discussed, selected investment applications were examined and the re-certification of the compliance management system was reported on.

In the March and September meetings, the committee also scrutinized the Supervisory Board members' potential conflicts of interest as well as that of principal shareholders.

The Personnel Committee scrutinized personnel issues in a total of four meetings, some of which were held virtually. At the Committee's March meeting, the target attainment of the Board of Management members as part of their variable remuneration was discussed and a proposal for the plenary meeting was resolved after an initial assessment has been discussed in January based on the preliminary financial figures. At the September meeting, the Committee discussed the performance of target achievement for the current fiscal year. In addition, individual aspects of the Board of Management's remuneration were reviewed.

At the November meeting, the financial (for the variable short- and long-term salary components) and personal targets for the Board of Management for the 2022 fiscal year were discussed with the latter, in particular the selection of the financial key figures appropriate for the 2022 variable salary components.

Attendance at the Supervisory Board meetings was 100%. The Committees met in full in each case. In the reporting period, no conflicts of interest were reported by members of the Supervisory Board that would be necessary to disclose to the Supervisory Board without delay.

In September, the Supervisory Board was also informed of key legal changes and their impact on the Company at a separate event, such as the changes brought about by the German Act to Strengthen Financial Market Integrity (*Gesetz zur Stärkung* *der Finanzmarktintegrität*] or the new German Supply Chain Due Diligence Act [*Lieferkettensorgfaltspflichtengesetz*]. As the last efficiency review showed at the end of 2019, cooperation within the Supervisory Board and the Committees was very positive. As part of this efficiency review, the work of the Supervisory Board and its Committees was analyzed using an extensive questionnaire on an anonymous basis, and the results were discussed in detail by the Supervisory Board. The next efficiency review is scheduled for 2022.

Annual Financial Statements and Consolidated Financial Statements 2021

Both in the Audit Committee and in the plenary meeting in March 2022, the Supervisory Board verified that the accounting, the separate financial statements of SGL Carbon SE prepared pursuant to the German Commercial Code [*Handelsgesetzbuch, HGB*] and the Consolidated Financial Statements as of December 31, 2021 prepared pursuant to the stipulations of the International Financial Reporting Standards (IFRS) (as applicable within the European Union) as well as the Management Report of SGL Carbon SE and the Group were audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, and provided with an unqualified audit opinion. The Supervisory Board had previously assured itself of the independence of the auditor and the persons acting on behalf of it and commissioned the audit pursuant to the resolution of the Annual General Meeting on May 21, 2021. The Audit Reports for the Consolidated Financial Statements and Annual Financial Statements were sent to us in good time. The Audit Committee intensively scrutinized these documents; the full Supervisory Board also examined them. The auditor attended both the meetings of the Audit Committee and the Supervisory Board, where it discussed the Annual Financial Statements, reported on its audit and was available for additional questions and information. No objections to the results arose from the Audit Committee or our own review. The Supervisory Board approved the financial statements prepared by the Board of Management and therefore adopted the Annual Financial Statements. As the 2021 fiscal year of SGL Carbon SE ended with an accumulated loss after offsetting the net income for the financial year against the loss carried forward from the previous year, there was no proposal by the Board of Management on the appropriation of the unappropriated profit to be reviewed.

At its meeting in March 2022, the Supervisory Board also scrutinized the Report of the Supervisory Board, the Corporate Governance Declaration and the Corporate Governance and Compliance Report, the Remuneration Report and the disclosures pursuant to Sections 289a and 315a HGB. We refer to the corresponding disclosures in the annual report (see pages 7-105). The Supervisory Board complied the Remuneration Report together with the Board of Management and checked the other reports and determined their completeness and — to the extent within its competence — the accuracy of their contents.

KPMG issued an unqualified audit opinion for the separate non-financial Group Management Report. This means that, based on the audit procedures performed and the audit evidence obtained, no items came to light that would lead to the conclusion that the separate non-financial Group Report is not in compliance with Sections 315b, 315c in conjunction with 289c to 289e HGB.

On the basis of its own examination, the report of the Audit Committee regarding its preparatory assessment and the audit opinion of KPMG, the Supervisory Board also did not identify any reason to suggest that the correctness and appropriateness of the separate non-financial Group Report was not ensured.

Corporate Governance and Declaration of Conformity

At its meeting on November 25, 2021, the Supervisory Board scrutinized corporate governance issues and approved the Declaration of Conformity pursuant to Section 161 German Stock Corporation Act [*Aktiengesetz*]. In accordance with the German Corporate Governance Code, the Declaration of Conformity has been made permanently available on the company's website and is reproduced in the Corporate Governance Declaration of this Annual Report. You will also find further information on the Company's corporate governance there.

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

There were no personnel changes in the company's Board of Management and Supervisory Board during the reporting period.

Thanks from the Supervisory Board

The Supervisory Board would like to thank the Board of Management, the employees and the employee representatives of all Group companies for their work, without which it would not have been possible to meet the challenges in the corporate development of SGL Carbon in fiscal year 2021.

Wiesbaden, March 23, 2022

The Supervisory Board

S. Klatten

Susanne Klatten
Chairwoman of the Supervisory Board

CSR Report

About this report

We present our sustainability ambitions and goals in the following chapters. We report on our developments in regard to ESG aspects that are material to us and our stakeholders. We impose accountability on ourselves by making our goals, actions and metrics public.

Basics

This report constitutes the non-financial consolidated statement of SGL Carbon pursuant to Section 315b of the German Commercial Code (HGB) and complies with the content requirements as per Section 315c in conjunction with Section 289c HGB. Unless stated otherwise, the report covers the activities in fiscal year 2021 of the entire SGL Carbon Group with the four business units Graphite Solutions, Process Technology, Carbon Fibers and Composite Solutions. This year's report structure is based on the three ESG categories Environmental (including environmental and climate aspects), Social (including employee and social issues as well as respect for human rights) and Governance (including supply chain responsibility, compliance and combating corruption and bribery), which are also integrated into the mandatory reporting according to Section 315 c HGB.

In preparing the report, we followed the standards of the Global Reporting Initiative (GRI, "Core" option). Additional key performance indicators (KPIs) were developed to better reflect the specific requirements of SGL Carbon. The KPIs in use correspond to those of the previous year. The business model is described in detail in the "Group fundamentals" chapter of the Group Management Report. In addition, this report serves as the basis for the progress report for the UN Global Compact.

Review of the content of the separate non-financial Group report was performed by KPMG AG Wirtschaftsprüfungs-gesellschaft as part of an external limited assurance engagement (see also the notes on page 49).

Our ESG ambitions, strategy and goals

SGL Carbon is a technology-based company and a global leader in its focus markets in the development and manufacture of carbon-based solutions. Our materials and products made of special graphite, carbon fibers and composites are supplied to a wide variety of industries, including the automotive, semiconductor technology, LED and solar and wind energy industries, as well as manufacturers of lithium-ion batteries. Our aspirations include growing the company with products and technologies that benefit society and reduce our impact on the environment.

However, it's not just our products that are to predominantly stand for sustainability; our manufacturing and management processes, as well as our supply chains, are to also meet high environmental, social and governance standards.

We reviewed and revised our sustainability strategy (also known as our ESG strategy) in fiscal year 2021. We want to make even more strategic use of opportunities and positive sustainability effects of our activities as well as further reduce negative impacts. In accordance with the requirements of our stakeholders and the growing importance of individual ESG aspects, we have further developed our ambitions, defined and prioritized material ESG aspects and set for ourselves clear goals for the coming years.

Overview of SGL Carbon targets:

Environmental targets		Social targets		Governance targets	
-50%	Reduction of CO_2 emissions (scope 1 and 2) by 2025 (base year 2019)	< 2.5	Lost time injury (LTI) frequency rate by 2022	100%	Signature of Supplier Code of Conduct by relevant suppliers
0	Climate-neutral by 2038 (scope 1 and 2)	>90%	Apprentice takeover rate (Germany)		Analysis of suppliers' ESG performance
	Develop CO_2 scope 3 target(s) until end of 2022	20%	Women's quota of 20% (Senior Management) till 2025	0	No tolerance of compliance violations; supported by investigation and sanctioning
-1%	Energy intensity reduction by 1% p.a., respectively, 10% until 2027 (base year 2017)	100%	Roll-out of Human Rights Policy; management and office workers training by 2022		Maintain ISO 37301 certification

To track and further develop our ESG targets, we have put a new ESG governance structure in place for the Group from fiscal year 2022. The highest operational decision-making body of SGL Carbon is the Board of Management of SGL Carbon SE. Due to its strategic importance, we have embedded the topic of sustainability at the highest operational decision-making level. The Board of Management is supported in this area by an ESG Sounding Board made up of various experts in ESG-relevant areas. On the operational level, the ESG Coordination Team and the three ESG working groups (Environmental, Social and Governance Module) drive ESG measures and goals.

Based on the ambitions, goals and measures we have initiated and planned, our commitment to a culture of values and compliance and our innovative nature, both the environment and society should benefit. We intend to use these points of leverage to make our contribution to achieving the United Nations' Sustainable Development Goals (SDGs) within the scope of our business capabilities. Our membership in the UN Global Compact will also support further progress in these areas.

Our contribution:

Core SDGs

SDGs where SGL Carbon has most significant & direct contribution

SDG 8: Decent work and economic growth
SDG 9: Industry, innovation and infrastructure
SDG 13: Climate action
SDG 16: Peace, justice and strong institutions

Supportive SDGs

SDGs where SGL Carbon can leverage its influence to reach SDGs

SDG 4: Quality education
SDG 5: Gender equality
SDG 7: Affordable and clean energy
SDG 12: Responsible consumption and production

Stakeholder engagement and material issues

SGL Carbon strives to make sustainable use of human, natural and financial resources. We remain in close dialogue with our stakeholders along the way.

Relevant stakeholders for SGL Carbon are institutions or persons with whom we have a direct or indirect relationship through our business activities and who therefore have an interest in our actions. Most important stakeholder groups are our customers, employees, suppliers, owners, financiers and banks, media, neighbors of our locations and the representatives of associations, public authorities and non-governmental organizations (NGOs). We engage in dialogue with them on a regular basis in order to promote mutual understanding and we also seek to continuously identify topics that are important from the perspective of the context in which we operate. The relevance of the ESG issues identified was last assessed in the second half of 2021 in the form of an online stakeholder survey.

We identified the various external and internal stakeholder groups along our value chain. On this basis, we defined the composition of our stakeholder survey in a manner corresponding to its importance for our business model. In the online survey, we posed questions to the representatives of the stakeholder groups of employees, suppliers, capital market participants and banks about the most important ESG aspects for SGL Carbon, on the basis of which a ranking was created.

The ESG aspects we asked about are based on the materiality analysis performed in previous years as well as the “Roadmap to Sustainability” project. The ESG aspects were also updated to include additional ESG topics. For validation purposes, SGL’s functional managers and the top management of SGL Carbon again reviewed and prioritized the identified aspects in regard to their materiality. Based on both assessments, the material ESG aspects were identified (in accordance with Section 289c(3) HGB) and transferred to the materiality matrix according to their significance. The cumulative results were then presented for approval to the Board of Management as the highest decision-making body for ESG issues.

The review and update of ESG aspects that are material to SGL Carbon resulted in the following adjustments to the non-financial Group report 2021:

- Restructuring of non-financial Group reporting according to environmental, social and governance aspects. Reporting on the aspects previously presented in accordance with Section 289c(2) HGB will continue unchanged and be assigned to the three umbrella terms of Environmental, Social and Governance.
- The previous reporting will be expanded to include the newly added ESG aspects.

The following overview shows the allocation of the primary ESG aspects to the above-mentioned umbrella terms. Individual ESG aspects listed in the overview are grouped into chapters. For example, information on the management of hazardous substances can be found in the subchapter "Environmental concerns and waste management." Corporate ethics and the ethical conduct of companies plays a significant role in nearly all ESG criteria. In addition, the aspects of air quality and product packaging do not fall under the materiality definition of Section 289c(3) HGB. The chapters of this CSR report otherwise correspond to the individual ESG aspects. Voluntary reporting is also once again on "social commitment." This topic is not identified as a material topic and is therefore not part of the non-financial Group report.

Material ESG aspects for SGL Carbon:

Environmental topics

- GHG [1]-emissions (CO_2)
- Energy consumption
- Waste management
- Environmental product impact
- Hazardous materials management
- Circular economy
- Innovation and research
- Air quality
- Water management
- Product packaging

Social topics

- Occupational health & safety
- Diversity and equal opportunities
- Employability and development
- Human rights
- Product quality & safety

Governance topics

- Supply chain responsibility
- Compliance
- Information security
- Corporate governance
- Sustainable financial performance
- Data protection
- Transparency and reporting
- Business ethics

[1] Greenhouse gas

Material risks pursuant to Section 315c in conjunction with Section 289c(3)(3 and 4) HGB

For the separate non-financial Group reporting and thus for the defined ESG aspects, both the material risks arising from SGL Carbon's own business activities and the risks associated with SGL Carbon's business relationships, products and services were taken into consideration. The identified risks could have a serious negative impact on the ESG aspects defined in the context of non-financial reporting (Section 315c in conjunction with Section 289c(3)(3 and 4) HGB). The responsible departments first identified the primary risks that could arise from the defined ESG aspects. These risks were then assessed together with Group Risk Management, taking into account the monitoring and controlling measures and examined in particular to determine whether they have a serious negative impact. In summary, no material risks that have a serious negative impact on the above concerns have been identified. Further information can be found in the Group Management Report on page 73.

Environmental

Environmental concerns

As a production company with global operations, we consume natural resources and cause emissions. We are therefore particularly concerned about responsible conduct in regard to the environment and climate and such issues are integral to SGL Carbon's corporate culture. We maintain high standards in our productions and processes in order to comply with the relevant obligations and duties we have imposed upon ourselves. At the same time, acting in a manner that conserves resources and reduces emissions is also necessary for the company to be successful as a business on a lasting basis.

Nonetheless, a large number of the products we manufacture help to reduce CO_2 emissions, as they are used in the area of renewable energy (such as solar and wind power), LED technology and electromobility.

The primary obligations for production are specified in the national and international regulatory permits and regulations. The European regulations on noise pollution, emissions, water and waste, the implementation of such regulations in national law, and the REACH regulation on chemicals should be mentioned here as a basis.

In addition to meeting legal requirements, the importance of protecting the environment and climate is also reflected in the SGL Carbon Code of Conduct, which defines the guidelines for action for all SGL Carbon employees. These are supplemented and specified in detail by the Environment, Health & Safety Affairs (EHSA) Policy, which has been applicable to all locations worldwide since 2015. A Supplier Code of Conduct, which commits suppliers and their subcontractors to lawful, ethical and sustainable behavior, has also been in place since 2015. In addition, the quality assurance agreement has required key suppliers to comply with the applicable laws and regulations for environmental and energy management since 2020.

One focus of SGL Carbon's partnership with suppliers and customers is exchange of information with the aim of minimizing the risks associated with using chemical substances and hazardous materials. In an internal, globally standardized system, we create relevant product information such as safety data sheets, which are then made available to customers. SGL Carbon meets the national requirements for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) throughout the world. SGL Carbon also makes an important contribution to dealing with hazardous substances in this way.

The central corporate EHSA unit coordinates all climate and environmental protection activities throughout the Group, defines uniform standards and reviews progress in cooperation with local EHS managers. As a rule, the sites are also audited by the central corporate EHSA unit every three years, or more often than that if incidents have frequently occurred at any given site. A total of 10 sites were audited in 2021, with some of these audits performed remotely due to the pandemic.

In fiscal year 2021, the central Corporate Sustainability function was additionally created to manage SGL Carbon's initiatives for environmental and climate protection as well as to evaluate and develop sustainable products, making it possible to work closely with the EHSA unit. EHSA reported to the HSE Council three times in fiscal year 2021 and provided information on current developments (additional details on the HSE Council can be found in the "Social" section under Occupational Health and Safety).

As of fiscal year 2022, a new ESG governance structure has been established to reflect the significance of material ESG aspects for SGL Carbon's business model. Three ESG modules (Environmental, Social, Governance), staffed by the respective operational topic experts and a responsible member of the ESG coordination team in each case, are responsible for developing initiatives for achieving the ESG targets set. The development status of the initiatives is also reported on in the modules. The ESG Coordination Team, consisting of the three module leaders, is responsible for monitoring the defined initiatives and embedding them in the overall ESG strategy. The ESG Coordination Team accelerates the development of SGL Carbon's ESG strategy and goals together with the ESG Steering Committee and the ESG Sounding Board, consisting of the heads of the business units and a selection of central function heads. The highest ESG decision-making body is the ESG Steering Committee, which includes the Board of Management of SGL Carbon.

Energy consumption

A large proportion of SGL Carbon products are manufactured at high temperatures in energy-intensive processes. A majority of the Group's energy consumption is used for generating the necessary process heat and for thermal purification. The energy sources used are electricity, steam, oil and gas. Some 90% of SGL Carbon's total energy consumption can be attributed to 8 of 31 sites due to their size or necessary production processes.

SGL Carbon is constantly striving to improve the energy efficiency of its processes, both out of a sense of responsibility for the environment and for economic reasons, as energy costs account for a high proportion of our production costs.

The individual business units and the heads of the production sites are responsible for the development and operational implementation of energy-efficiency measures and projects. Energy managers who report to the site management at least annually are appointed at sites that make a significant contribution to overall energy consumption.

In fiscal year 2021, the HSE Council, which also includes the Board of Management and the heads of the business units, was responsible for managing and monitoring energy management at the primary sites. Additional details on the HSE Council and its tasks can be found in the "Occupational health and safety" section of this CSR report. In the HSE Council in 2021, SGL Carbon's global energy officers reported on the status and progress of local and global target achievement.

SGL Carbon's energy management aims to ensure efficient use of all types of energy. In 2018, we made a commitment to reducing global energy consumption as a percentage of adjusted sales by 1% per year and to reach a 10% reduction compared to the 2017 baseline by 2027. We remain committed to this target. Compared to the base year 2017, energy consumption fell by 3% to 1,268 gigawatt hours. In relation to the economic output for 2021, energy consumption slightly decreased in comparison to the previous year's level. Due to the Covid-19 crisis, there was lower utilization of capacity at our plants and an associated decline in new orders in 2020; this also led to energy consumption that was significantly lower than in previous years.

Energy consumption [1]	2021	2020	Change
in gigawatt hours (GWh)	1,268	1,166	9%
thereof oil and gas	464	421	10%
thereof electricity	561	498	13%
thereof steam	243	247	–2%
Energy consumption in relation to economic output (GWh per €1,000m sales revenue) [2]	1.30	1.33	–2%

[1] Data include 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

SGL Carbon puts its focus on energy-efficient plants and process optimization, a circumstance that is documented in the EHSA Policy on Energy Management and in the Code of Conduct. Likewise, training measures are offered at the ISO 50001-certified sites, and energy management is communicated internally. In this way our employees are encouraged to deal responsibly with the issue of energy. They are to have skill sets that allow them to actively contribute to reducing energy consumption.

The 9 most energy-intensive of SGL's 18 European production sites have had an ISO 50001-certified energy management system since December 2015. By December 2020, 8 certified sites had successfully implemented the elevated requirements of the ISO 50001:2018 standard. Certification of the 9th site is planned for 2022. In 2021, the external audits were carried out in a uniform manner by certification company DQS.

Key figures for measuring specific energy consumption and measures and projects to increase energy efficiency were defined for the sites with the highest energy consumption worldwide.

The central digital platform created in 2020 for the ISO 50001-certified sites with all energy conservation projects was continued in 2021 and also enhanced to include information about CO_2 emissions avoided. This database facilitates effective measure and effect controlling of all current and planned projects, including implemented and expected efficiency improvements.

In fiscal year 2021, the heating system and laboratory exhaust systems at the Meitingen site were optimized for energy efficiency, and a roof was renovated in order to reduce the energy consumption of the site. At the Lavradio and Muir of Ord sites, existing plants were retrofitted or replaced with newer, more energy-efficient plants.

CO_2 emissions

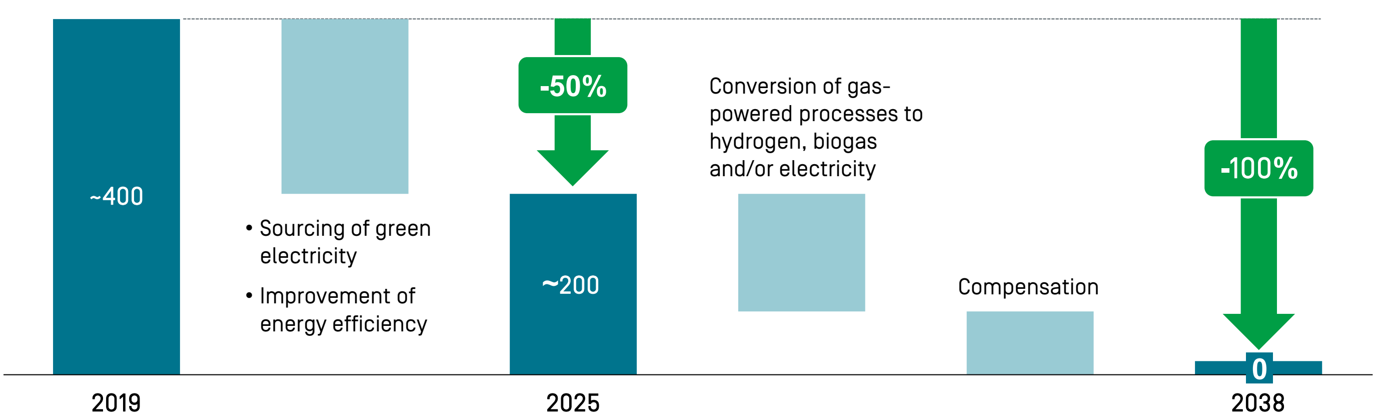
Climate change is one of the key global challenges of this decade. As an energy-intensive company, SGL Carbon bears a special responsibility due to the fact that our energy consumption is associated with the emission of greenhouse gases, primarily CO_2. This is also our largest source of leverage for reducing CO_2 emissions. In addition, we want our products to make a contribution to climate protection. For example, we supply materials and components for electric vehicles as well as wind and solar energy production and are one of the few

European suppliers of graphite anode material for lithium-ion batteries (see also the "Products" chapter in this CSR report).

In 2021, the Board of Management and the business units intensively analyzed and discussed the topic of greenhouse gas emissions and how they can be reduced. SGL Carbon is committed to global climate protection and supports the UN Sustainable Development Goal "Take urgent action to combat climate change and its impacts." SGL Carbon also participates in the program for reporting data relevant to climate protection of international organization CDP and achieved a "C" rating in 2021.

SGL Carbon's CO_2 emissions are Scope 1 emissions resulting from combustion processes and Scope 2 emissions attributable to power and steam consumption. SGL Carbon has set itself the goal of cutting total emissions (Scope 1 and Scope 2) in half by 2025 compared to the emissions of reference year 2019. We want to reduce our emissions by 100% and become climate neutral by 2038.

The following figure shows SGL Carbon's CO_2 reduction targets expressed in kt CO_2e (Scope 1 and Scope 2).



Our CO_2 targets are to be achieved through specific actions. In 2021, power was obtained exclusively from renewable sources at the sites of Wackersdorf, Ort and Ried as well as Muir of Ord. In the 2021 fiscal year, a photovoltaic system was installed and put into service on the roof of the production building in Ort im Innkreis (Austria). This nearly 450 kWp plant prevents the emission of around 30 tons of CO_2 per year. Over 95% of the power produced is also consumed on site.

By 2025, SGL Carbon plans to cover its global power requirements from renewable sources to the greatest possible extent. In addition to installing more systems for supplying power internally on site such as photovoltaic systems, we also rely on the conclusion of long-term power purchase agreements (PPAs), in which the power supplied to the sites is guaranteed to be from renewable energy sources.

To achieve greenhouse gas reductions after 2025, SGL Carbon plans to use electricity to operate high-temperature processes that were previously gas-fired or to switch to the use of hydrogen and biogas. We expect that roughly one-third of emissions will be unavoidable in 2025 and will therefore need to be offset. In addition, increasing energy efficiency remains a key issue (see energy consumption section).

SGL Carbon strives to reduce not only the CO_2 emissions over which it has a direct influence but also the emissions coming from the upstream and downstream value chain. A global reduction target for Scope 3 emissions is therefore also to be adopted before the end of 2022.

In fiscal year 2021, SGL Carbon's CO_2 emissions from Scope 1 and 2 totaled 337 thousand metric tons. Due to higher production capacity utilization than in the previous year, CO_2 emissions increased slightly in the reporting period (previous year: 318 thousand metric tons). In 2020, there was lower capacity utilization at our plants due to the Covid-19 crisis and the associated decline in new orders; this caused energy consumption and thus CO_2 emissions to be significantly lower than in previous years. If CO_2 emissions are compared with economic output, they are to be decreased slightly from 0.36 kt per €1.0 million in sales to 0.35 in 2021.

CO_2-emissions [1] [3]	2021	2020	Change
in thousands of tons (kt)	337	318	6%
thereof direct	86	77	12%
thereof indirect	251	241	4%
CO_2 emission in relation to economic output (kt per €1.0m sales revenue) [2]	0.35	0.36	−3%

[1] Data include 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 CO_2 emissions is based on „UK Government GHG Conversion Factors for Company Reporting“ of the Department for Business, Energy & Industrial Strategy, Gov. UK, for direct emissions (Scope 1) and steam (Scope 2) as well as on „EMISSION FACTORS 2021“ of the International Energy Agency (IEA) for indirect emissions (Scope 2)

Waste and water management

SGL Carbon's business activities generate waste carbon as well as various residual materials. For environmental and economic reasons, the carbon and other residual materials that result from production processes are recycled. Water is used for purposes that include cooling production plants, producing steam and forming isostatic graphite (pressing processes).

At all its sites worldwide, SGL Carbon undertakes to comply with all applicable legal requirements and to maintain effective management processes as well as to continuously improve performance in resource management. The ultimate objective is to make efficient use of resources and prevent environmental pollution as far as possible. Water requirements and waste volume are to be continuously reduced in this way. In the context of waste, the principle to follow is: waste avoidance is preferred over recycling, which in turn is preferred over disposal. If it is not possible to avoid waste, it can often be possible to reuse materials in other products or at other sites. For example, recycled carbon fibers can be used as nonwoven textiles for automotive production.

To conserve water as a resource, SGL Carbon relies on secondary loops and recooling systems where they make economic sense. Water that is not used directly for the production process is not contaminated and can therefore be discharged back into rivers after use in some cases.

SGL Carbon codified its approach to resources in its EHSA training policy. The Supplier Code of Conduct also contains information on the topic of waste. It requires SGL Carbon and its suppliers to obtain necessary permits, recycle and avoid waste and the release of hazardous substances into the environment. Once a month, the central corporate EHSA unit collects data on resource use and waste generation in cooperation with local EHS managers at all sites. The water requirement is specified for each water source. When it comes to waste, a distinction is made between hazardous and non-hazardous types. Hazardous waste management is required by the operating permit for SGL Carbon production sites.

Due to increased production volumes in fiscal year 2021 compared to the previous year, SGL Carbon's water consumption increased by approx. 6% to 6.25 million cubic meters. Just for comparison, Group sales increased by 9.5% in the same period. This means that water consumption decreased in relation to economic output from 6.8 cubic meters per €1,000 of sales to 6.4. In absolute terms, the amount of waste increased disproportionately from 23.7 thousand tons to 23.9 thousand tons based on the increased production volumes. However, in terms of adjusted sales, the waste volume fell to 24.5 metric tons per €1.0 million in sales, which is around 9% less than in 2020.

Water requirements [1]	2021	2020	Change
Total (millions m^3)	6.25	5.92	6%
thereof from Company wells	4.28	4.12	4%
thereof from rivers	0.65	0.67	−3%
thereof from public water supply	1.32	1.13	17%
Water requirement in relation to economic output (m^3 per €1,000 in sales revenue) [2]	6.4	6.8	−6%

Waste volume [1]	2021	2020	Change
in thousands of tons (kt)	23.9	23.7	1%
thereof hazardous waste	3.4	3.7	−8%
Waste volume in relation to economic output (t per €1.0m sales revenue) [2]	24.5	27.0	−9%

[1] Data include 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

Circular economy

In a circular economy, existing materials and products are reused, refurbished, repaired and recycled to extend their life cycle for as long as possible. The goal is to reduce resource use and waste to a minimum. The transition to a circular economy is one of the six environmental goals of the EU taxonomy. This has led to a rise in the interest of our customers and business partners in approaches and solutions developed by SGL Carbon.

The four SGL business units are working on this topic and also sharing ideas, concepts and experiences. Three principal approaches are being pursued in this context: using recycled raw materials, improving material properties and lifecycle optimization and developing new business models.

The Graphite Solutions (GS) business unit is implementing several circular economy-relevant projects that go beyond the already significant use of by-products in the products we manufacture. For example, cutting scrap from "green" production is fed into the original production process. A development project of novel recycling concepts is included in the funding decision received in March 2021 for the development and industrialization of innovative anode materials made of synthetic graphite for use in lithium-ion batteries in the context of the second European IPCEI program (Important Project of Common European Interest)/EUBatIn (European Battery Innovation). The EU-funded ICARUS project is pursuing the closure of material loops in the production of silicon wafers for the solar industry. As part of ICARUS, SGL Carbon is working on ways to reuse recycled graphite from solar silicon processing in synthetic graphite applications while also working on recycling silicon. In addition, the business unit is looking at alternative carbon raw materials from renewable and recycled sources and evaluating their use in carbon materials.

The Carbon Fibers (CF) business unit is involved in the "Green Carbon" project sponsored by the Technical University of Munich, in which "green" acrylonitrile is to be obtained from algae and used to make a carbon fiber precursor. In the project, SGL Carbon is evaluating the properties of biologically based acrylonitrile, the manufactured precursor and the suitability of the precursor in volume production of carbon fibers.

Since carbon fiber materials can serve as valuable raw materials both as residual substances and as recycled materials, the development of recycling processes for this new class of materials is being accelerated by organizations and networks such as Composites United and coordinated with authorities and waste associations. For SGL Carbon, recycling is a cornerstone of its innovation portfolio, and we support association projects with materials expertise and research services.

The Process Technology (PT) business unit already takes into consideration the various life cycle issues and offers its customers appropriate service packages (including installation and commissioning services, inspection services and remote services). The product design is based on reliability, durability and opportunities for repairs and upgrades, including capacity expansions. An end-of-life (EoL) strategy is just as much a part of the product life cycle as customer support during the commissioning and operating phase of our equipment and plants. With end-of-life service, we offer our customers custom solutions tailored to specific requirements in order to improve the recyclability of plants. This can include refurbishment of the plant or further use of individual components.

The Composite Solutions (CS) business unit uses nonwoven materials made from recycled carbon fibers as structural reinforcement and as electromagnetic shielding layers in fiberglass components. Initial projects have manufactured composite components with natural fibers such as flax. Customers like to use these materials because of their natural look and because of the associated reduction in the CO_2 footprints of products. In addition, the CS business unit is looking for and testing commercially available biologically based resin systems with reduced CO_2 footprints in terms of their suitability for future composite components.

Products

Tailor-made materials and products manufactured from special graphite, carbon fibers and composites are the core of the high-quality solutions, components and materials that SGL Carbon supplies to customers and partners. Product quality and the development and supply of sustainable products and innovations are the material foundation of the economic success of SGL Carbon, both now and over the long term.

Product quality

SGL Carbon's goal is to achieve a high level of customer satisfaction through product and service quality that remains high on an ongoing basis, thereby fostering lasting business relationships. The four operational business units are responsible for controlling and monitoring product quality. Local and global key performance indicators for quality are reported to site and business unit management on a monthly basis.

Since only the user is ultimately capable of assessing the quality of a product, SGL Carbon evaluates the quality of its products on the basis of customer feedback. The sales organizations of the business units conduct targeted customer satisfaction surveys on a regular basis.

To obtain an ongoing and direct benchmark for the quality of the products delivered, SGL Carbon keeps track of customer complaints and associated costs and evaluates this information with the support of IT. This software solution makes it possible to record, evaluate and process customer complaints. In addition, the solution also documents findings from and actions taken in the area of complaints processing and the associated dialogue. The ultimate objective is to eliminate the identified deficiencies on a lasting basis by implementing suitable measures and preventing them from occurring in the future. Ideally, complaints can be completely prevented.

Since 2018, SGL Carbon has used the “Complaint Costs/Sales” ratio as a measure of product and service quality and of the associated customer satisfaction. The two variables taken into account in the ratio exclusively relate to external customers. Complaint costs/sales across all Business Areas of SGL Carbon amounted to 0.20% in the fiscal year and thus increased compared to the previous year (0.14%).

To ensure high product quality, relevant measurement and test values are recorded along the entire production process chain, allowing process deviations to be detected and eliminated at a very early stage. Resilient production and business processes, a robust organization and high-performance systems are the basis for high product quality.

In order to continuously improve process and organizational quality, an Operations Management System (OMS) tailored to SGL Carbon began in 2017. This SGL-specific production system pursues standardization of processes, standardization of systems within the organization and development of a common understanding across all production sites.

Our newly created central Operations Improvement team has managed the OMS since 2021. This team reports directly to the CEO and works on efficiency improvement and quality initiatives at the manufacturing sites of all four business units in focused project assignments (“sprints”). In 2021, 20 project assignments were carried out at 10 SGL sites. Lean manufacturing approaches were systematically implemented, resulting in substantial reductions in throughput times and scrap rates as well as increases in productivity and plant availability.

Starting in 2021, we will no longer be reporting the “OMS Maturity Index” as this key figure is defined specifically for SGL and cannot be compared with figures from other companies. The leadership of the central Operations Improvement team is nevertheless continuing the maturity assessments of the SGL sites compared to the conceptual objective of the six OMS elements (“Strategic orientation and objectives”, “Organizational structure”, “Corporate culture”, “Performance management”, “Shopfloor management”, and “Methods and tools”). The sites will also continue to be provided with important indications of potential for improvement.

Nearly all SGL Carbon Group sites are already integrated into the global quality management system and certified according to the ISO 9001 quality management standard, which supports system and organizational quality. Depending on the specific requirements, the sites sometimes also obtain certifications according to ISO 14001 (environmental management), ISO 50001 (energy management), ISO 45001 or OHSAS 18001 (occupational health and safety management), AS 9100 (quality management in aviation) and IATF 16949 (quality management in the automotive industry).

Sustainable products and reporting on the EU taxonomy

Customers and other stakeholders increasingly expect value chains to be aligned with sustainability criteria. SGL Carbon is therefore committed to knowing the environmental and climate impacts of its products while they are being manufactured and during their service lives. The company is also committed to continuously identifying options for optimizing the effects they have on the environment and climate. We strive to grow the company with products and technologies that benefit society and reduce our impact on the environment and climate.

In many target markets, positive environmental and climate impacts are a material decision-making criterion in the use and consumption of products. Many of SGL Carbon's materials and products are already in use in industries that make a crucial contribution to protection of the environment and climate. This includes the use of SGL composites in wind turbines for the generation of renewable energy or the increasing use of battery and fuel cell solutions in future energy and mobility concepts. Many SGL products have the potential to foster the development of low-carbon technologies, such as through increased use in photovoltaics, LED lighting and lightweight construction, or through increasing heating and energy efficiency. In the mobility sector, SGL Carbon's lightweight composite solutions help reduce energy requirements in the automotive and aviation industries, thus contributing to an overall reduction in CO_2 emissions.

SGL Carbon has already been conducting a structured assessment of the environmental impact of its own product portfolio since 2019. In fiscal year 2021, responsibility for the management of these activities was transferred to the newly created Corporate Sustainability function. This cross-business unit function receives the relevant information from the technology and development units of the four operational business units. In the future, the new function will support Group-wide activities to improve the product portfolio in the form of sustainable products and solutions. The defined catalog of assessment criteria, according to which all product groups are analyzed in terms of their environmental impact during production and use or consumption by customers and end-users, was expanded in fiscal year 2021 to include the criteria of the EU taxonomy.

EU taxonomy

In December 2019, the European Commission presented the "European Green Deal" which includes the goal of making the European Union climate neutral by reducing net greenhouse gas emissions in the European Union to zero by 2050. Achieving this goal will require action such as redirecting private and public capital into environmentally sustainable activities. This required the development of the EU Taxonomy Regulation (EU 2020/852 or "EU taxonomy"), a classification system for defining environmentally sustainable economic activities.

For the 2021 fiscal year, companies that publish a non-financial report will for the first time be required to provide information on environmentally sustainable shares of sales, capital expenditure and operational expenditure in accordance with the EU taxonomy. SGL Carbon is subject to this obligation.

As previously described, the established assessment process in regard to the environmental impact of SGL Carbon products was expanded to include the criteria of the EU taxonomy and the management of these activities was transferred to the newly created Corporate Sustainability function.

The evaluations required by the EU taxonomy were performed for each of approximately 70 product categories in the SGL portfolio:

1. Do the products make a material contribution to at least one of the six EU environmental goals: climate change mitigation, adaptation to climate change, sustainable use and protection of water and marine resources, transition to a circular economy, preventing and reducing pollution and protection and restoration of biodiversity and ecosystems?
2. Is significant harm to one or more of the other environmental objectives prevented?
3. Are the products manufactured in compliance with the minimum (social) safeguards?

However, as of the end of 2021, the relevant lawmakers had published the technical screening criteria only for the first two environmental goals: climate change mitigation (ANNEX 1, C (2021) 2800) and climate change adaptation (ANNEX 2, C (2021) 2800). Against this backdrop, the law allows a simplified assessment of the extent to which products and economic activities are eligible for the taxonomy (in relation to the first two environmental goals of climate change mitigation and climate change adaptation). SGL Carbon makes use of this option to simplify the evaluations.

The following table shows the taxonomy-eligible shares of sales, capital expenditure and operating expenditure of SGL Carbon for the fiscal year 2021

Key performance indicator	2021 (in € million)	Thereof taxonomy-eligible share
Sales [1]	1,007.0	40%
Capital expenditure	50.0	44%
Operational expenditure [2]	66.5	46%

[1] Group sales with third parties
[2] According Definition EU Taxonomy (Research-, development- and maintenance cost)

Outlook

The EU Commission announced that it will publish the outstanding technical screening criteria for the other four environmental goals in the course of 2022. For fiscal year 2022, SGL Carbon will report the taxonomy-aligned shares of sales, capital expenditure and operational expenditure for the first time.

According to Article 19(5) of the Taxonomy Regulation, the EU Commission will review technical screening criteria on a regular basis or at least every three years in the case of activities that are considered transitional activities within the meaning of Article 10(2) of the Taxonomy Regulation. SGL Carbon will take any resulting adjustments to the Delegated Regulation into account in the future.

Sustainable product innovations

As of January 1, 2021, the activities of the central research and development department were integrated into the four business units. This further strengthens the proximity of development to the customer and focuses strategic research and development projects with more intensity on near-term market opportunities. In addition to increasing business performance, another important goal of research and development activities is to continuously improve the sustainability of our own products and processes.

The development activities of the respective business unit are derived directly from the strategic objectives of the product groups and business lines. They are also shaped by the respective market development, customer requirements and the market environment.

For all four business units, sustainability is a key issue in the identification of new development projects and in the evaluation and management of the development portfolio. For example, the project portfolio of the GS business unit includes materials and products for material growth areas in the market segments of digitalization, mobility and energy, which in turn are obliged to become more sustainable due to the growing importance of environmental and climate aspects. An example of this would be electromobility, whose success and growth are being accelerated by factors such as decarbonization and climate protection. As a manufacturer of materials and products for electromobility, the GS business unit has launched a variety of different development projects to provide sustainable solutions for this strategically important customer segment.

Proof of SGL Carbon’s innovative strength in the area of sustainable products in the GS business unit is the 2021 receipt of the funding decision for development and industrialization of innovative anode materials made of synthetic graphite for use in lithium-ion batteries. The grant program is part of the second European Important Project of Common European Interest (IPCEI)/European Battery Innovation (EUBatIn) program, which aims to build a competitive European value chain for lithium-ion batteries. SGL Carbon’s contributions to the IPCEI project range from development of anode materials with increased performance and energy-efficient and sustainable manufacturing processes through to new recycling concepts.

In addition to its own core development topics, SGL Carbon also works in partnerships with public research institutions and other industry partners to increase the sustainability of its products beyond the company’s own value creation. One example of this is the “Algae Fiber” project. The aim of this project is to use the industrial production of algae to obtain CO_2-neutral basic chemicals and to subsequently use biochemical processing to obtain additional basic materials. In this way it would be possible to produce acrylonitrile, the primary material for carbon fiber production, on a CO_2-neutral basis in the future.

Social (including employee concerns)

Occupational health and safety

The health and safety of our employees have top priority at SGL Carbon. As a responsible company, protecting the health and safety of employees is both an ethical obligation and a prerequisite for the company’s performance. In this regard, the Code of Conduct and the globally applicable EHSA Guideline set out the requirements that are binding for all employees. SGL Carbon also attaches importance to appropriate standards for business partners and takes occupational health and safety aspects into account in the selection of suppliers. The Supplier Code of Conduct requires them to ensure the health and safety of employees in all workplaces and to establish a management system for continuous improvement.

The central corporate EHSA unit is responsible for drafting Group-wide guidelines and standards for preventing work-related accidents and ill health. The respective business and central corporate units and site management are responsible for implementing the specifications. Within the global EHSA network, the central corporate EHSA unit and local EHS managers also discuss overarching issues. This is to ensure that all legal and SGL-internal regulations are complied with and that corresponding systems are established at each site. In addition, the central EHSA unit, in cooperation with the local EHS managers, conducts audits that also evaluate the implementation of the Group-wide occupational health and safety standards and their advancement over time. EHSA audits also include compliance with energy and environmental standards. As a rule, the sites are inspected by the central corporate EHSA unit every three years, or more often than that if incidents have frequently occurred at any given site. Ten sites were audited in 2021, with some of these audits performed remotely due to the pandemic. EHSA reports to the HSE Council and provides updates three times per year. The HSE Council is composed of the two members of the Board of Management of SGL Carbon, the heads of the business units and central corporate units and the central corporate EHSA team, with the Chairperson of the Board of Management also serving as Chairperson of the HSE Council. This body is responsible for monitoring and controlling occupational health and safety measures.

SGL Carbon's overriding occupational health and safety goal is to systematically prevent work-related injuries and ill health. It is the responsibility of the company's leaders, all management levels and each individual employee to ensure safe working conditions and to comply with all relevant national laws, European regulations and internal guidelines in all production processes. As a short- and medium-term objective, we have set for ourselves the goal of constantly improving the existing safety precautions. The accident frequency target for 2021 was a maximum of 3.4 accidents per million hours worked. This includes the accidents of SGL employees and temporary workers[1] with at least one day of absence after the day of the accident. The target was achieved in 2021 with an actual result of 2.6. For 2022, the target is to fall below a value of 2.5.

To achieve the occupational health and safety targets set, SGL Carbon uses a variety of incentive systems that actively involve employees in accident prevention and that take their ideas for eliminating accident risks into account. For example, a Safety Award is presented annually to sites where there have been no accidents in the last three years. Thirteen sites received this award in 2021. On the local level, the topic of occupational health and safety is included in the annual targets of many sites. But even when we look beyond the local sites, the topic of occupational health and safety is embedded as a target figure of the variable compensation structure for the four management levels below the Board of Management.

Occupational accidents that occur despite all precautions and safety standards are recorded in the Group-wide incident management system. In a systematic process, incidents are investigated, suggestions for improvement are derived and consideration is given to which solutions have already proven effective in preventing accidents. Once a month, the central corporate EHSA unit provides the Board of Management of SGL Carbon, the heads of the business units and the sites and the EHS managers with a safety report and relevant statistics. In addition, weekly reporting is carried out to track the current safety situation with detailed information on new accidents. In this way it is possible to evaluate compliance with the EHSA Guideline and immediately initiate countermeasures if a negative trend can be discerned. Furthermore, regular exchange between the sites takes place so that those involved can learn from each other and avoid risks identified at other sites.

The applicable safety precautions and standards are constantly being developed in order to further reduce the frequency of accidents. A global safety manual with minimum standards was developed in fiscal year 2021. Moreover, the 10 most important rules for protecting occupational health and safety were put on display at all sites in the form of posters to draw even more daily attention to occupational health and safety at the local level. At the Innkreis (Austria) and Chedde (France) sites, specific training sessions were adapted to the sites and held in 2021 to improve the safety culture.

SGL Carbon also conducts employee training courses. Training provided not only by EHSA experts but also by managers, who were required to train and support employees in their areas of responsibility in regard to safety issues. This is intended to increase the workforce's awareness of safety-relevant aspects and to prevent accidents.

Process safety is a significant factor in the prevention of occupational accidents. Events such as accidents, fires, or explosions could cause significant harm to people and the

[1] Employees are all permanent and temporary SGL employees. Temporary employees are external contract employees who are directly supervised by SGL. Contractors working at an SGL site are responsible for the safety of their employees and are excluded from the calculation of accident statistics. The data includes all fully consolidated subsidiaries.

environment as well as lead to prolonged interruptions of production and loss of quality at SGL Carbon. Claims for compensation and damage remediation could arise from this. The goal is therefore both to ensure the safety of production processes as best possible and to achieve continuous improvements in the safety culture.

As part of its corporate duty of due diligence, SGL Carbon drafted a globally applicable Process Safety Policy and has maintained a Process Safety System since 2017. The system includes a variety of different components, such as process safety analysis, accident investigations and countermeasure control. Process safety is also a topic of discussion at HSE Council meetings. In addition, every accident is precisely recorded, analyzed and classified in the Incident Management System for occupational and process safety. This is done in order to determine whether an incident occurred in the area of occupational health and safety or process safety. SGL Carbon uses a uniform Group-wide risk management system to identify and, if necessary, minimize risks in its production processes. This involves analyzing the extent and hazard potential of crisis events and calculating their economic consequences – such as the costs of elimination of environmental harm or lost sales due to production downtime. For each primary risk, one or more risk mitigation measures were identified and will be initiated if necessary.

SGL Carbon conducts annual reviews in cooperation with a property insurance company. This involves subjecting many processes and plants to a safety analysis that primarily focuses on fire control and protection as well as operational interruption. The results are evaluated and documented. Specific measures for improvement are drawn up if necessary. Despite local constraints due to the pandemic, a total of five sites were assessed in 2021. The experience of the insurer was drawn upon during the planning phase of five investment projects to make new projects of importance safer by design. The relevant tests were performed virtually. The insurer also provided high-level training on fire control and protection system design to a group of technicians.

Based on available reports, 120 improvements have been identified since 2019. In the meantime, a total of 60% of the improvements have been completed. In 2021, a total of six accidents were registered at all sites worldwide.

Employee concerns

General information

SGL Carbon employs a total of 4,680 people in 31 locations in Europe, Asia and North America. Their commitment, expertise and performance make a crucial contribution to the company's success as a business. That is why SGL Carbon strives to attract the best talent and to develop and retain employees in a targeted manner. In addition to numerous training and education opportunities, SGL Carbon also relies on a fair and respectful work and management culture that embraces diversity as well as a compensation structure based on performance. The company offers all employees the opportunity to develop their full potential. This understanding of the company's relationship with its employees is defined in policies and guidelines such as the Code of Conduct and the SGL competency model. The reduced number of employees compared with the previous year is explained by the transformation that began in 2020, which also involved a socially responsible reduction in the workforce in the year under review.

At SGL Carbon, the role of HR is understood as that of a strategic partner and advisor to the business units, central corporate functions and managers in accordance with the "HR Business Partner Model." The spectrum of HR tasks ranges from involvement in strategic decisions to operational HR processes. In accordance with the wide assortment of tasks, the HR Business Partners are positioned both centrally for the business units and central functions and on the local level for the individual production sites.

HR management structured in this way is responsible for a wide array of tasks:

- Management of HR processes such as recruitment and supporting personnel, including labor law issues
- Qualification, coaching and continuing education of managers and employees
- Determination of market- and performance-oriented compensation programs for senior management
- Coordination of international assignments of employees
- Personnel-related reporting for senior management
- Contact person for senior management on questions of personnel-related requirements planning and coverage
- Positioning SGL Carbon as an attractive employer in the labor market
- Efficient management of the impact of change processes on human resources

In addition to efficiency, customer proximity and service quality are increasingly becoming key criteria in the design and implementation of HR processes. Against this backdrop, SGL Carbon prepared the rollout of a comprehensive cloud-based IT solution for these processes in 2019 and 2020. The staggered go-live of this IT system began in fiscal year 2021.

The HR unit reports directly to the Board of Management on a regular basis. For example, the Head of Group HR holds regular consultations with the Board of Management, thus giving HR issues a high level of attention from senior management.

SGL Carbon constantly monitors and minimizes potential risks in the area of personnel. Due to the increasing shortage of skilled workers, special attention is paid to the strategic importance of recruiting. The same applies to employee retention efforts, which serve to counteract high turnover and keep expertise within the company. Forward-looking skills management, which identifies and specifically fosters the skills needed by senior management and middle management in the future, plays a crucial role.

Employability and development (including values and culture)

A material objective of the work of HR is to maintain the employability of employees and nurture their professional and personal development. Systematic development of personnel is an integral component of SGL Carbon's corporate philosophy. Such development serves to bolster the competitiveness of the company and to have the company take responsibility for the employees. Another component of personnel development is initiatives that analyze potential, that is, assessment of the potential of employees to serve in management and expert positions.

In 2021, a new concept by the name of the SGL Top Talent Program was developed and implemented for the first time. This program serves to identify and foster talents with medium- to long-term potential for leadership positions in senior management. In addition, a dedicated succession plan was drafted for the senior management levels.

Development of personnel is not the responsibility of the HR department alone but is first and foremost a task for managers and thus within the scope of personnel management. The cornerstone of all personnel management is communication between managers and employees on a regular basis. That is why the "Management Dialogue" was rolled out in 2021 as a discussion format in the job areas not subject to collective bargaining agreements. The Management Dialogue involves managers and employees taking sufficient time to exchange information, provide mutual feedback and solve problems together once per month.

Another element in the creation of a comprehensive feedback culture in the company was the launch of a new 360-degree feedback tool and process in 2021. In the year under review, the pilot was administered with the managers who report directly to the Board of Management as focus persons. In the coming years, the tool and process are to be rolled out to subsequent management levels and then repeated on a regular basis.

Employer attractiveness is a key factor of corporate culture that determines the company's ability to both attract and retain human resources that are critical to success. A wide range of factors plays a role in employer attractiveness, including interesting entry-level and career opportunities, attractive remuneration packages, family-friendly working time models and a management and corporate culture that demonstrates appreciation for employees. For many years, SGL Carbon has been positioning itself in the labor market with its own employer brand that can be clearly discerned on the company's careers page as well as elsewhere. As part of its university marketing program, SGL Carbon offers students a variety of opportunities to integrate academic theory into real-life experience in a business company, including internships, student traineeships and final thesis projects. As a long-standing member of the "Fair Company" employer initiative, SGL Carbon is committed to providing students with high-quality learning opportunities at fair terms and conditions.

In recruiting, the company began to directly approach potential applicants on social networks ("active sourcing") in 2017 and this activity was continued in 2021. In the year under review, this recruitment method was used for 18 specialist and management positions in Europe, with seven vacancies filled in this way.

Number of staff	2021	2020
Number of employees	4,680	4,837
Number of new hires (worldwide) [1]	310	282
– thereof men	78.0%	79.0%
– thereof women	22.0%	21.0%
Fluctuation rate (worldwide) [2]	12.5%	8.3%
– Europe	10.0%	6.4%
– North America	23.2%	18.4%
– Asia	11.6%	4.9%

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

The recruitment process has already been largely standardized in Germany, Austria, the United States and China. The declared medium-term goal is to standardize the process globally to the extent that this is possible and makes sense to do, taking into account the legal and cultural framework in the individual countries. An initial step in this direction was taken in 2021 with the implementation of a cloud-based IT solution in the four countries mentioned above, which together already correspond to more than 70% of SGL's workforce.

As a voluntarily provided fringe benefit that makes a positive contribution to employer attractiveness, SGL Carbon offers employees in Germany a company retirement benefit plan that provides additional financial security during retirement.

Occupational health and safety issues play a prominent role in SGL's culture and this also applies to preventative measures in regard to employee health. In the area of Workplace Health Management (WHM), employees in Germany can take advantage of a variety of different resources on a decentralized basis, that is, on the level of the individual plants. During the year under review, the activities held at the larger sites included vaccinations against Covid-19 and the flu. In 2021, as in 2020, there were significantly fewer BGM offerings than in previous years due to the pandemic-related occupational health and safety measures.

Employee surveys are an established method for analyzing corporate culture and the basis for actively shaping it at the same time. SGL Carbon conducted a Group-wide employee survey for the first time in 2018. In 2020, a survey of senior and middle management on the subject of "organizational health" was administered as part of SGL Carbon's transformation project. The results of the survey led to the implementation of a number of initiatives to reinforce a corporate culture that fosters performance. The survey was repeated as a change measurement in the year under review, which resulted in the observation of a significant improvement in the overall "organizational health" index. The survey also helped identify several areas where action should be taken to improve organizational culture. A new survey of all SGL Carbon employees is planned for 2023 at the latest.

Training and education

Training has traditionally played an important role at SGL Carbon. The company's training program in Germany comprises a total of nine technical apprenticeships and business administration traineeships as well as five cooperative study programs. A total of 27 trainees and apprentices successfully completed their training and apprenticeship programs in the year under review. Of these, one apprentice from the Bonn site was named best in the state in the ceramics testing technology training course. The rate at which trainees and apprentices who graduated from their programs in 2021 were offered permanent employment was 100% in Germany.

SGL Carbon offers employees professional and personal development opportunities throughout their careers, including additional training and continuing education courses, the expansion of tasks and areas of responsibility within a position and the opportunity to change jobs within the organization. In meetings held on a regular basis, the manager discusses with the employee specific individual development activities such as training, coaching, or special tasks.

In view of the ongoing Covid-19 constraints, but also as a result of the budget reduction targets sought by the transformation project, participation in external training was curtailed in 2021, in particular with regard to the development of interdisciplinary and leadership skills. This was compensated for through a number of different internal training measures, all of which were implemented by means of virtual communication applications. On this basis, a total of nearly 500 participants were able to take part in a series of training courses that addressed a wide variety of personnel management skills. A policy that was developed and published in the year under review provides guidance in regard to the training activities process worldwide.

The cloud-based IT system rolled out in the fiscal year to support HR processes also includes a learning management system (LMS). This system facilitates not only the effective administration of training activities by HR and individual departments but also the immediate provision of training sources for end-users as part of a “self-service” functionality, which includes e-learning courses that you can immediately access. The integrated authoring software has made it possible to create e-learning courses internally since 2021. The learning management system is slated to become SGL Carbon’s central learning platform worldwide in the coming years.

Apprenticeships and dual degree programs	2021	2020
Total apprentices	83	97
– Site Meitingen	55	67
– Site Bonn	28	28
– Site Limburg	0	2
– Site Willich	0	0
Number of professions for apprentices	9	9
Number of apprentices	27	24
Number of dual degree programs	5	6

Diversity and equal opportunity

The diversity of the workforce is a strategic advantage for SGL Carbon: A variety of different employee skill sets and perspectives reinforces the company’s capacity to innovate and advance its position as an attractive employer. Such diversity makes it possible for SGL Carbon to compete for qualified specialists, which enables SGL Carbon to also meet the challenges arising from demographic change.

SGL Carbon has set itself the goal of establishing a work and management culture that is free of discrimination. All employees should be able to contribute their personal and professional capabilities and have the same opportunities for professional success and fair pay regardless of age, ancestry, (ethnic) origin, skin color, gender, sexual orientation or identity, religion, ideology, or disability.

The SGL Code of Conduct is an important basis for the company’s commitment to diversity and equal opportunity. SGL Carbon’s guidelines for a diverse and inclusive working environment characterized by trust, openness and respect are embedded in it. In accordance with these guidelines, discrimination on the basis of any of the characteristics listed above will not be tolerated. The SGL competency model, which was revised in the year under review and describes key behavioral requirements that are applicable to middle and senior management throughout the world, also includes “collaboration and diversity” as one of seven skill sets, thus reflecting the importance of diversity.

A higher proportion of women in management positions can have a positive impact on SGL Carbon’s success as a business, making it important for the future global development of SGL Carbon. SGL Carbon has set its sights on increasing the proportion of female members of upper management over the long term and with the specific goal of 20% by 2025. The proportion of women in the overall workforce was 17% as of December 31, 2021 (December 31, 2020: 17%). The proportion of women in senior management was 19% (December 31, 2020: 17%)). This share rises to 31% if only the central functions of the holding company (SGL Carbon SE) are considered.

In terms of remuneration, the local systems of collective bargaining agreements or systems similar to this are applied to ensure that remuneration is free of discrimination. For remuneration of employment that is not subject to collective bargaining agreements, the recognized analytical job evaluation procedure according to the Hay method is in use throughout the world.

To promote international exchange and knowledge transfer within the company, SGL Carbon posts employees to a variety of different locations around the world. Foreign assignments usually last between one and five years. In 2021, two expatriates were working in the USA.

Internationality	2021	2020
Total workforce	4,680	4,837
thereof Germany	2,092	2,249
thereof rest of Europe	1,318	1,328
thereof North America	750	743
thereof Asia	520	517
Number of expatriates	2	4

Percentage of women	2021	2020
Total workforce	17%	17%
thereof Germany	17%	18%
thereof rest of Europe	15%	15%
thereof North America	19%	20%
thereof Asia	15%	16%
Senior management	19%	17%
Middle management	17%	18%

Age structure	2021	2020
< 30 years	15%	16%
30 to 50 years	53%	55%
> 50 years	32%	29%

Help provided to employees in balancing the responsibilities of work and family plays a crucial role in an employer's attractiveness. In 2020, SGL Carbon participated in the Compatibility Progress Index developed by the "Success Factor Family" business program launched by Germany's Federal Ministry for Family Affairs. With the associated seal of participation, SGL Carbon raises awareness among the public that the company embraces a corporate culture that is sensitive to family responsibilities and that is committed to helping employees seek a balance between family and career. The "Alternating Teleworking" general works agreement that was already concluded for Germany in 2017 also serves this purpose. This agreement makes it possible for employees to work from home for up to 40% of their working hours. By the end of 2021, the company had concluded a corresponding written agreement with a total of 81 employees. Regardless of the coronavirus pandemic, employees in the administrative areas generally have the option to perform their work from home after consultation with their respective supervisors and if the respective tasks and activities allow it.

Part-time employment and reconciliation of work and family	2021	2020
Percentage of part-time employees in Germany [1]	5.7%	5.0%
Male part-time employees (Germany) [1]	1.8%	1.6%
Female part-time employees (Germany) [1]	25.1%	20.9%

[1] Based on a balance sheet date of December 31, excluding minor employees, students and temporary workers.

Respect for human rights

SGL Carbon attaches particular importance to demonstrating respect for human rights. For example, the SGL Carbon Code of Conduct commits the organization to upholding the principles of the UN Global Compact and to respecting and protecting human rights. SGL Carbon has also been a UN Global Compact signatory since July 2021. Respect for human rights is further elaborated in the Employees chapter of the Code of Conduct. This section also refers to the Human Rights Policy introduced globally in 2018. This policy is available in a total of nine languages and is included in the hiring documents at all SGL sites. Group Compliance has this confirmed annually by the Local Compliance Representatives (LCRs) at the sites using the implemented LCR reporting. This reporting also includes queries as to whether each of the sites worldwide respects and complies with human rights and the requirements of national labor law.

During the most recent fiscal year, Group Compliance developed and implemented a training concept on human rights compliance together with Group Human Resources. This concept is now being rolled out to SGL Carbon sites throughout the world in stages. The training concept is based on online training as basic training and a workshop with practical examples. The content of the training courses was approved as part of the Regional Compliance Conference held with all compliance representatives on a virtual basis and this target group was also trained. As a first step, online training was rolled out to all employees in management functions in October 2021. The training is currently available in German and English. A total of 97% of the target group completed the training by the end of 2021. This will be followed by virtual workshops for this target group from December 2021 to the end of February 2022, with the workshops dealing with practical examples relating to the topics of discrimination, harassment and bullying. The workshops are conducted worldwide by Group Compliance and Group Human Resources, in some cases with support by the local HR and/or legal department. By the end of the year, 11 of a total of 35 workshops had been held. In preparation for the expansion of the target group, the online training course "Protection of Human Rights" was translated into an additional seven languages. In early 2022, the course will be available in French, Polish, Italian, Spanish, Portuguese, Chinese and Japanese in addition to German and English. This lays the foundation for training all remaining office workers (without management responsibility) throughout the world. In addition, training will also be made mandatory for all new office workers. In 2022, a corresponding training concept will be approved for employees working in production.

Alongside the existing whistleblower system, a dedicated reporting channel was launched in 2018 in order to more effectively and directly enable employees and managers to report possible violations of the rules on respecting human rights. This new channel is described in the Human Rights Policy. Reports received are received centrally by Group HR and Group Compliance on a confidential basis, systematically processed in compliance with data protection regulations, sanctioned appropriately where necessary and reported to the

Board of Management as part of the semi-annual Compliance Report.

Social commitment

SGL Carbon is active in many regions of Europe, Asia and North America. We strive to be a reliable partner both internationally and locally and go beyond our business activities by assuming social responsibility for people where we operate. SGL Carbon is involved in projects in the vicinity of its own sites in particular and primarily supports projects that have a local or subject-matter connection to the company.

The formal basis for SGL Carbon's social commitment is its Sponsoring and Donations Policy. It specifies the Group-wide standard and is binding for all SGL Carbon employees, ensuring that the funding and selection of projects is transparent and follows uniform guidelines. Management of the respective location makes decisions on the funding of specific projects, initiatives, institutions and associations up to a single amount of €5,000. If the amount for sponsorships and donations is above this amount, the Board of Management must approve it. The Capital Markets & Communications department is also to be informed. No violations of the policy were identified in the year under review.

As in previous years, SGL Carbon put its focus on training and education in 2021. We are already active in schools. An example of this is the Meitingen site, where there are school partnerships that give students insight into the corporate world and that are also aimed at promoting a better understanding of technical professions.

Our employees and the regions in which we operate are also a focal point for our commitment to the good of society. SGL Carbon as an employer of people affected by the disaster and many of the company's employees provided extensive financial and personal assistance in response to the recent flood disaster in Germany. For example, a fund was set up by SGL Carbon immediately after the disaster so that financial resources could be provided to the affected employees without any red tape. Donations for the flood victims at the Bonn site were also collected at other SGL sites.

In addition to these current projects, we provide support in particular to sports and youth clubs, charitable initiatives and local projects near our sites that directly benefit the local community.

Governance

Compliance management

As a Group that operates globally, SGL Carbon bears a special responsibility in its dealings with employees, customers, business partners, shareholders and the public throughout the world.

The structure and implementation of SGL Carbon Group's compliance management system (CMS) is therefore in accordance with national and international standards such as IDW PS980 or ISO 19600:2016, now ISO 37301. To review the relevant elements with regard to their implementation status and effectiveness, in 2020 the Board of Management engaged an independent third party to certify the CMS of SGL Carbon in accordance with the requirements of the ISO 19600:2016 guideline. As an independent third party (German Society for the Certification of Management Systems), DQS GmbH conducted the first surveillance audit in October 2021. With the new ISO 37301:2021, this surveillance audit was conducted as a transformation audit. After the audit was complete, DQS certified that SGL Carbon SE implemented and applies a CMS that meets the requirements of the ISO 37301 guideline. In addition, a separate tax compliance management system certified in accordance with IDW PS 980 in 2019 supplements the overarching compliance management system in Germany.

As an integral component of SGL Carbon's management and corporate culture, the Code of Conduct sets standards for responsible and lawful conduct. This includes ensuring that all managers and employees comply with internal and external regulations and that ethical and sustainable principles determine their actions. In addition to the Code of Conduct, SGL Carbon's compliance program includes additional internal requirements, guidelines and training for various target groups and specific topics (for further information, please refer to the Corporate Governance Declaration, Corporate Governance Report and Compliance Report in this Annual Report). A material component of this is the anti-corruption program (see section "Anti-corruption and bribery").

The Chief Compliance Officer reports directly to the Board of Management and is responsible for the compliance strategy as well as for monitoring the structures and processes of the compliance management system (CMS). He/She is supported in his/her work by the Group Compliance department. The organization also includes the Compliance Network, which is made up of regional and local Compliance representatives as well as Compliance representatives from the business units and central functions (for additional information, please refer to the Corporate Governance Declaration, Corporate Governance Report and Compliance Report in this Annual Report).

The CMS is reviewed for effectiveness and efficiency on an ongoing basis, which makes it possible to appropriately respond to new legal requirements and changes in the business environment. In consultation with the Compliance Committee, the Group Compliance department identifies and defines areas in which action needs to be taken each year, along with measurable targets approved by the Board of Management for the following year. The target achievement results and any follow-up activities derived from them, are summarized in an annual review.

Regular risk assessments covering the identified compliance risk areas of SGL Carbon, which are summarized in the "House of Compliance" are a material part of the effective CMS. In the most recent fiscal year of 2021, the focus was on the following compliance categories of the compliance risk landscape: antitrust, anti-corruption, protection of trade secrets and human rights. The risk assessments were conducted within the framework of interviews with all four business units. The interviewed parties were all members of the Management Committees of the business units as well as other selected functions. A total of 27 interviews were conducted between August and October 2021. The objective of the interviews was to identify potential risks arising from the new business strategy of the four units as well as possible risks due to changes in the market environment. The participants also considered aspects of the coronavirus pandemic. The compliance risk assessments with the heads of the corporate functions, who are also the Compliance representatives for their units, will follow in January 2022.

The CMS further stipulates that compliance issues are to be regularly documented by the Local Compliance Representatives (LCRs) and the responsible Compliance representatives of the business units as part of the relevant reporting process. Group Compliance has the implementation of the Compliance program confirmed at the local sites using a semi-annual LCR Compliance questionnaire. The results from the evaluation of the questionnaires are discussed in detail with the Board of Management and the Audit Committee. The results also serve as the basis for repositioning Compliance activities if necessary. All LCRs submitted semiannual LCR reports for the corresponding reporting period. The Compliance questionnaires, which reflect the annual reporting by the Compliance representatives of the business units, were suspended in 2021 due to the risk assessments that were performed in the same year. The plan is to resume the administration of the questionnaires in 2022.

Against the backdrop of legal framework conditions that are subject to constant change, SGL Carbon continuously optimizes training content and identifies the corresponding training needs. The Code of Conduct e-learning program serves as the corresponding baseline training on compliance issues for all new office workers. In fiscal year 2021, online training was migrated to our new internal learning platform (LMS). This new channel for training has been in use at all sites worldwide since July 2021, with courses available in German, English, Chinese, French and Polish. An automated verification process is used to continuously add new employees of the target group to the group of participants in the e-learning training.

A Compliance survey was again administered in November 2021 in order to ensure that the Compliance program continues to be aligned and developed in a targeted manner and in line with the company's requirements in the future. This survey was addressed to all office workers and, with a participation rate of 58%, is in line with the good results of 2016 and 2018. Certain survey parameters can be compared with previous surveys. The results will first be presented to the Compliance Committee in early 2022 and subsequently discussed with the LCRs. The findings will then be used to determine measures to further develop the Compliance program in 2022.

Anti-corruption and bribery

Good relationships with customers and suppliers are essential for ensuring the positive economic development of SGL Carbon. SGL Carbon fosters and requires transparent and lawful execution of all company business. On this basis, SGL Carbon seeks to create a sense of trust and to secure lasting business relationships.

SGL Carbon's anti-bribery and anti-corruption principles are defined in the Group-wide Code of Conduct, the anti-corruption training concept and the Gifts and Entertainment (G&E) Policy. The G&E Policy specifies matters such as how tangible and intangible benefits are to be handled. These must be in accordance with the policy and likewise comply with the rules of the business partners. It is also true here that the overarching Compliance objective applies, which stipulates that every employee must be informed about and comply with all important guidelines. The anti-corruption risk category was part of this year's risk assessment. The results from the interviews with the business units will be incorporated into a revision of the Gifts and Entertainment Policy, which is scheduled for the first half of 2022. Anti-corruption training courses have been integrated into the Compliance training catalog for many years. Based on the key figures defined in the training plan, all new office workers must complete the online anti-corruption training. This training was also migrated to the internal learning platform (LMS) in 2021. The target group also regularly takes refresher training courses, which are currently being conducted virtually due to the pandemic.

SGL Carbon has a Group-wide "Business Partner Compliance" (BPC) process to monitor risks and manage all processes that relate to dealing with sales agents. The target group for the BPC process is currently sales agents and distributors. The process requires that new business partners in the target group be subjected to a multi-stage review before any contracts are signed. This process is also part of an internal control mechanism within the framework of the Internal Control System (ICS). In addition to new sales agents, existing sales agents are also regularly reviewed, depending on their risk rating. The nominated business sponsors from the business units are responsible for starting this process.

Moreover, the Code of Conduct provides rules for handling donations to political parties and references to the Sponsoring and Donations Policy. This policy defines the Group-wide standard that ensures a transparent approach to sponsorship and donations and prohibits actions such as providing financial support to political parties and candidates for political office and other elected positions. The rules apply to all employees of SGL Carbon, including members of the Board of Management.

Corporate governance and business ethics

For SGL Carbon, good corporate governance is not only compliance with legal requirements and applicable guidelines but also responsible action aimed at sustainable value creation. Our commitment to responsible corporate governance is derived from the SGL Carbon Code of Conduct as well as from regulations, external initiatives and international guidelines that we have pledged to adhere to. We also take these requirements into account in our ESG strategy and Group-wide policies. Examples include the SGL Human Rights Policy, which is based on the UN Guiding Principles on Business and Human Rights, the principles of the UN Global Compact and the UN Declaration on Human Rights. Our Group-wide occupational health and safety guidelines take inspiration from other guidelines such as the labor standards of the International Labor Organization (ILO).

The Corporate Governance Declaration and further information can be found in the Corporate Governance and Compliance Report (unaudited) in this Annual Report.

Responsibility in the supply chain

As a globally active company with a diversified industrial customer structure, SGL Carbon maintains a wide variety of business relationships. During the period of collaboration, SGL Carbon expects all business partners to commit to lawful, ethical and sustainable conduct to the same extent as SGL Carbon. To ensure that this is the case, a Supplier Code of Conduct was rolled out for suppliers and their subcontractors. In addition to rules of conduct to be observed with regard to integrity, supplier-side anti-corruption and social and environmental standards, it also includes requirements for dealing with what are known as conflict materials and a binding commitment to the principles of the UN Global Compact. SGL Carbon has had its own Conflict Minerals Policy since 2015 and is committed to avoiding the use of conflict minerals in its products and production processes. The review is carried out during a due diligence process that is implemented on a regular basis. The policy was distributed to the target audience again after being subjected to a comprehensive update in 2021. In addition, employees from Global Purchasing were trained on conflict minerals.

Global Purchasing is responsible for implementing and applying the Supplier Code of Conduct for suppliers and their subcontractors. The Supplier Code of Conduct was rolled out in 2015 and has been updated on a regular basis since then. It is also incorporated into SGL Carbon's General Purchasing Terms and Conditions. In the course of its successive rollout, the Supplier Code of Conduct was issued to the primary risk-relevant suppliers. The criteria defined were a minimum sales revenue and a minimum number of orders from suppliers classified into critical countries according to the CP (Corruption Perception) Index with a score between 0 and 53. 99% of primary existing suppliers committed themselves to compliance with the Supplier Code of Conduct. In addition, new suppliers that Purchasing records in SGL Carbon's system are also required to sign the Supplier Code of Conduct or show that they have equivalent compliance standards. 99% of new suppliers signed the Supplier Code of Conduct in 2021. For raw materials, new suppliers are asked about the basics of the Supplier Code of Conduct and the answers are incorporated into the final selection of suppliers.

In addition to the awarding of points for delivery performance and quality, since 2018 an assessment of the supplier in terms of legal, ethical and sustainable behavior has also been carried out in the context of the annual supplier assessment. The result of the evaluation is directly incorporated into the supplier risk management. The need for supplier development measures and supplier audits are derived based on the risk assessment. Supplier audits also take into account issues relating to compliance with environmental and social standards.

In 2021, a new process was rolled out for the risk management of strategic suppliers. Standards are evaluated with regard to matters such as compliance, safety and environment. In the future, all active suppliers will also undergo an online sustainability assessment, with roll-out to be phased in 2022. The online assessment will include standard sustainability components such as Ethics and Compliance (Environmental Protection; Human Rights; Supply Chain Responsibility; Health & Safety; Anti-Bribery & Corruption and Cyber Security). The results of the online questionnaire, along with information from public sources, are incorporated into the risk assessment of each supplier, with the aim of mitigating or eliminating the risks identified. Group Compliance comprehensively trained the Global Purchasing Team on “Due Diligence in the Supply Chain” in November 2021. SGL Carbon has manufacturing sites in many different countries and supplies products to customers all over the world. It is therefore of considerable importance to avoid risks associated with trading activity and customs regulations. Such risks include restrictions on deliverability, loss of reductions in taxes, customs duties and other fees, payment of fines and penalization of criminal activity. SGL Carbon aims to use appropriate compliance processes to ensure that the goods and technologies are exchanged and services are used in accordance with the respective internal and external requirements. This principle is defined in the Group-wide Global Trade Policy as well as in SGL Carbon’s procedural instructions on preparing, optimizing and executing all trading activities, on control mechanisms and on managing and monitoring risks and responsibilities.

In the companies and units, the export managers and export control officers are responsible for export control and customs. Since 2009, the existing Compliance program for export control and customs has been working with an IT-based compliance module that enables efficient review and processing of export transactions. This module is regularly updated to bring it into line with the latest legal requirements. In 2021, the system was expanded to include screening of all SGL suppliers and customers registered in the SAP ERP system against international sanctions lists published by the United Nations (UN), the EU, the US, the UK, France and Japan. The SAP Global Trade Services (GTS) system performs screening on a centralized basis and constantly checks all customer and supplier master data in the SAP ERP system. Customer and supplier master data that matches entries in the sanctioned party lists is blocked. This means that all sales and purchase orders with blocked customers and suppliers will also be blocked. The centrally organized Global Trade Organization can only lift such blocks if the organization establishes beyond doubt and to the best of its knowledge and belief that the blocked business partner is not the sanctioned party. If this is not possible, SGL Carbon will discontinue the business relationship. All decisions made in this context are documented in the SAP GTS system.

In the area of customs, an authorized economic operator (AEO) generally must be approved for it to be possible to use other customs approvals, special customs procedures or certain simplified procedures. SGL CARBON GmbH, SGL Technologies GmbH, Dr. Schnabel GmbH, SGL epo GmbH, SGL Composites Materials Germany GmbH and Brembo SGL Carbon Ceramic Brakes GmbH in Germany and SGL CARBON S.A.S. in France are certified by customs with the status of AEO.

Export control procedures are also a key component of the compliance risk assessment. On this basis, SGL Carbon aims to ensure that international agreements and national laws are complied with in the context of cross-border transactions and intra-company transfers. Before going on business trips, employees are also encouraged to familiarize themselves with local export control and customs laws and regulations.

SGL Carbon is committed to ensuring that employees are informed about all relevant rules in the area of export control compliance and that export control officers and selected employees receive training on a regular basis.

Information security

An important part of our business success is information and its security, such as when research and development data or sensitive customer information is being handled. SGL Carbon invests in cybersecurity to protect technology, assets and critical information, as well as to safeguard our reputation and prevent damage or financial loss from unauthorized access to our systems and data.

In doing so, we rely on a risk-based approach that is in line with the internationally recognized ISO 27001 standard. As a company certified according to TISAX (Trusted Information Security Assessment Exchange), we use clearly defined processes and organizational responsibilities to meet increased cybersecurity requirements and adequately address risks such as ransomware.

Information Security is part of the IT organization and reports to the Head of Information Technology Excellence (ITX), who reports directly to the Chief Financial Officer (CFO). With the managerial prerogatives right to all employees, except for the Board of Management of SGL Carbon, there is the right to intervene in the event of safety violations or immediate need for action. In a similar manner, IT Risk management and Governance is part of the Cybersecurity team, allowing it to carry out a rigorous staff function as a steering and governance body within IT.

Organizational measures provide a solid foundation for the technical framework and awareness of appropriate conduct of the organization and its users. A total of 17 issued and regularly monitored security guidelines specify the basic conduct expected of the users, define technical requirements and called for verification measures. This also includes exception management for temporary requirements that differ from normal as well as any fundamental principles such as “segregation of duties”, “need-to-know basis” and “least privilege access.” This package of measures is rounded out by cybersecurity insurance and a contractually defined and incident-based forensic support service provided by an external partner.

Technical measures provide a solid basis for ensuring information security with the latest hardware and software as well as adequate information security processes. SGL Carbon relies on both preventive and reactive measures. Keeping SGL Carbon free of security vulnerabilities and potential security risks is essential for the entire company and a constant operational requirement and task.

Preventive measures are designed to reduce the risk of security breaches. We maintain a strong barrier against security violations by rolling out new tools, detection strategies and response plans. We also provide our employees with the tools necessary to identify significant attacks and we implement a rapid reporting and response system through mandatory and optional training and attack simulations (such as phishing). In the fight against cybercrime, industrial espionage and attempted fraud, employee awareness and risk transparency are the key preventive measures for SGL Carbon.

In turn, **reactive measures** are designed to ensure that SGL Carbon’s detection rate and response capability remain at a high level and that resilience remains consistent during a cyberattack. To do this, we rely on comprehensive security and vulnerability scanners and an event and incident management system at the central and regionally utilized endpoints of the IT infrastructure. In addition to automated detection mechanisms, a systematic response to attack attempts is also enabled.

Data protection

SGL Carbon collects and processes personal information in compliance with data protection laws and regulations and only to fulfill the respective purposes. Personal information must be processed in such a way that the rights of each data subject are safeguarded. To ensure the protection of personal information, SGL Carbon has established a Group-wide data protection organization with local data protection officers, delegates and managers.

The data protection officers of the national subsidiaries report directly to their managing directors and to the Head of Global Data Protection, who reports directly to the CEO of SGL Carbon.

To provide employees with guidance on issues relating to the integrity and confidentiality of personal information, SGL Carbon has implemented Group-wide standards in the form of data protection guidelines and organizational directives. Training is also offered in order to raise awareness among the relevant employee groups.

In the year under review, supporting organizational instructions were revised and made available to the relevant employee groups. Reportable data protection violations were identified in 2021 and dealt with in accordance with data protection requirements. After consideration of the circumstances, it was found that there was no obligation to report the incidents to the supervisory authorities or data subjects. Two requests in regard to the rights of data subjects were responded to in a timely manner.

Sustainable financing

SGL Carbon pursues the goal of ensuring the growth and stability of the company with a financing strategy geared toward the long term. In doing so, we rely both on financing from our own resources and on debt financing instruments. In fiscal year 2021, the company also concerned itself with the inclusion of ESG-relevant aspects in the financing structure. We ensure constant solvency through cash flow management as well as sufficient credit lines with written commitments. Financing requirements are determined for the Group as a whole and financing arrangements are generally concluded on a central basis. In individual cases, individual financing could be used for specific projects; this could also be financing that is directly related to the company's ESG efforts. Responsibility for Group-wide financing and cash flow management lies with the Group Treasury department, which reports directly to the CFO of SGL Carbon. For additional information on SGL Carbon's financing structure, please refer to the Economic Report in the Group Management Report as part of this Annual Report.

Transparency and reporting

Transparency, regular financial reporting and informing all stakeholders immediately in regard to material business transactions in accordance with the Market Abuse Regulation are a matter of course for SGL as a listed company, along with strict compliance with all legal requirements. For this reason, SGL Carbon regularly reports on the economic performance of the Group as a whole in the Annual Report, at the Annual General Meeting and in the quarterly releases and reports. SGL Carbon's Annual Report and quarterly reports are prepared in accordance with the standards applicable to companies listed in the Prime Standard of the Frankfurt Stock Exchange. Details on reporting can be found in the Notes to the Consolidated Financial Statements in this Annual Report.

The Group Capital Markets and Communications department is available at all times to respond to questions from investors, private shareholders and interested members of the public. SGL Carbon uses a wide variety of communication channels to reach as many stakeholder groups as possible. These channels include social media, press releases and mandatory announcements, as well as the company's website. In this context, SGL Carbon regularly reports on developments and measures relating to the various ESG aspects. The department reports directly to the company's Board of Management.

SGL Carbon in the Capital Markets

The SGL Carbon share price more than doubled in 2021

2021 was a year with two distinct halves on the stock markets. After a slow start to the year characterized by a tough lockdown in Germany and turbulence in the transfer of political power in the US, the German share index (DAX) rose sharply from March onwards. Overall, the focus in the first half of 2021 was mainly on the worldwide management of the COVID-19 pandemic through the increasing availability of vaccines and the associated normalization of economic life. At the same time, there was strong economic recovery. Compared to the same period last year, which was characterized by the COVID-19 crash, the earnings per share of the Stoxx 600 companies jumped by more than 150% in the second quarter. The continued loose monetary policy of the central banks also caused share prices to rise, which resulted in the DAX rising by 13.2% in the first half of the year.

The DAX lost momentum at the beginning of the second half of 2021. After some rather quiet summer months, volatility picked up again in September. One factor leading to uncertainty was the outcome of the federal elections in Germany. Better-than-expected quarterly results by companies in the fall led to a catch-up trend, which ended on November 18 at an all-time high of 16,290 points for the DAX. The new COVID-19 mutation Omicron, geopolitical conflicts and a foreseeable end to loose monetary policy dampened the buying mood on international stock markets. Added to this were global supply chain issues and higher factor costs, especially for raw materials, energy and logistics, which significantly dampened economic growth in the meantime. This resulted in the DAX only being able to increase by 2.3% in the second half of the year.

Overall, the DAX closed the 2021 stock market year with growth of 15.6% at 15,885 points and was only approximately 2% below its all-time high.

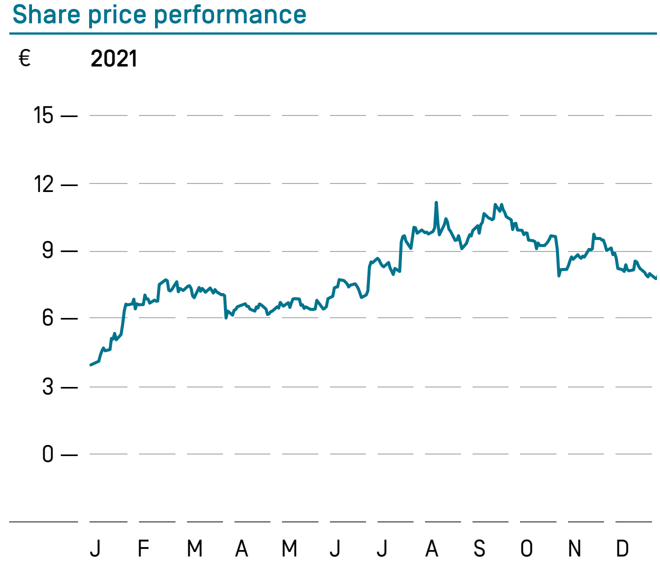
The SDAX — which also tracks the shares of SGL Carbon — also marked a new high in 2021 and was able to increase by 11.2% over the year.

Key figures for SGL Carbon SE shares	2021	2020
Number of shares at year-end	122,341,478	122,341,478
High (€)	10.78	4.94
Low (€)	3.76	2.23
Closing price at year-end (€)	7.69	3.59
Market capitalization at year-end (€m)	940.8	439.2
Average daily turnover in Xetra trading (number of shares)	389,371	240,848
Free float at year end (%)	approx. 46	approx. 46
Dividend per share (€)	-	-

Significant recovery in SGL share price reflects economic stabilization

As early as January 2021, the SGL Carbon share price was able to decouple itself from the leading German indices and developed significantly more positively. The Directors' Dealings reports from both Management Board members and the transformation program initiated by the new Management Board certainly also contributed to this.

Share price performance



The share price also reacted positively to the announcement published on January 21, 2021, regarding the expansion of capacity at the American site in Arkadelphia (CS business unit) for the production of battery housings for electric vehicles. Overall, the SGL Carbon share price has outperformed the leading indices by more than 60% in January 2021.

The announcement of the inclusion in the SDAX and the reporting of the receipt of government funding for the development of new battery anode materials and their recycling (IPCEI) caused the SGL share to continue to rise in February 2021.

The presentation of the annual financial results for 2020 at the end of March 2021 led to a short-term price slump of approx. 15%. After moving sideways, the share price recovered again in the weeks that followed, supported by the positive operational business development and further share purchases by SGL Carbon's Management Board.

The increase in the annual forecast for 2021 declared in an ad hoc announcement on July 13, 2021, further boosted the share price, enabling SGL shares to reach their high for the year of €10.78 on August 4, 2021.

Despite the positive results of the first half of 2021 published on August 12, 2021, shareholders used the good share price development to take profits. The modernization of the American site in Morganton announced shortly thereafter on August 23, 2021, and the commissioning of a soft felt plant at the Meitingen site in Germany on September 7, 2021, led to a slight recovery in the SGL share price.

Increasing uncertainties on the capital markets including the global chip shortage, raw material shortages and price increases as well as significantly higher energy prices in Europe led to a slow decline of the SGL share price in the course of autumn 2021. The report from November 11, 2021, on the financial results for the past nine months was also slightly positively reflected in the share price. SGL shares were affected by the increasing uncertainty on the stock markets caused by the growing economic impacts of the COVID-19 pandemic, persistently volatile and high energy prices and expectations of a looser monetary policy. The SGL share price fell accordingly and closed at a Xetra closing price of €7.69 at the end of 2021.

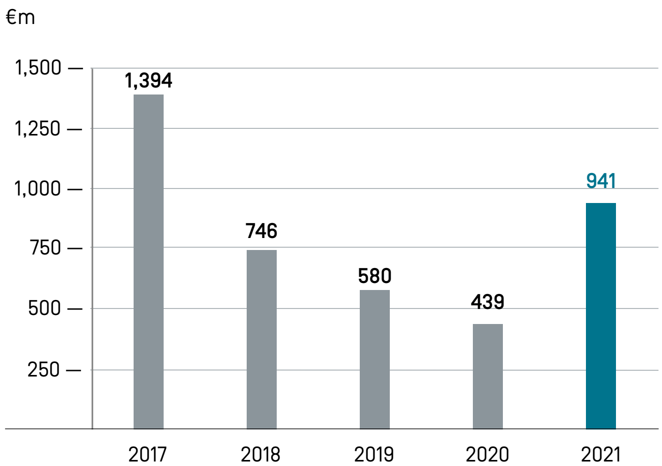
Despite some fluctuations, a pleasing price development was recorded. With an Xetra opening price of €3.63, the SGL Carbon SE share price more than doubled in 2021, while the SDAX only rose 11.2%. This is a development that reflects operational success and the associated improved profitability.

Relative share price performance

Increase in market capitalization and ranking position enable inclusion in the SDAX

The market capitalization of SGL Carbon increased significantly throughout the course of 2021, in line with the development of the share price. A market capitalization of €439.2 million in the previous year rose to €940.8 million at the end of the reporting year. According to the index ranking list calculation by Deutsche Börse AG, SGL Carbon SE ranked 163rd (previous year: 188th) with a free float market capitalization of €433.1 million as of December 30, 2021. The share price development in 2021 met the requirements for SGL Carbon SE shares to be included in the SDAX on March 22. The number of shares outstanding has remained constant over the past year at 122,341,478.

Market capitalization



Stable shareholder base

SKion GmbH, Susanne Klatten's investment company, remains the company's largest shareholder with a shareholding of around 28.5%. In addition, based on the respective notifications of voting rights or other notifications, BMW AG and Volkswagen AG hold the following shareholdings subject to reporting obligations:

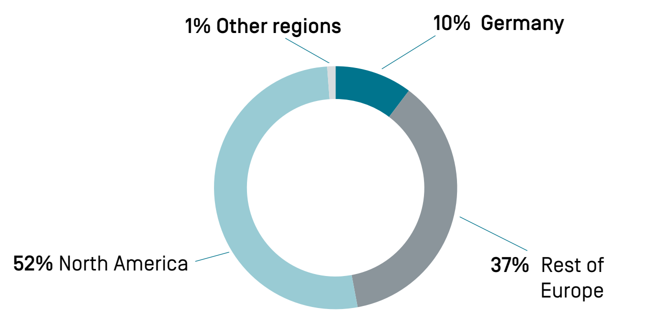
BMW AG	October 15, 2014 [1]	18.44%
Volkswagen AG	February 6, 2018 [2]	7.41%

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

Overall, these anchor investors hold approximately 54% of the share capital and therefore contribute to the stability of SGL Carbon. On the other hand, this leads to a relatively low free float, which often results in high price fluctuations in both directions due to the rather low trading volume. Accordingly, the free float is approximately 46%.

As per the February 2021 shareholder survey, institutional investors were geographically distributed as follows: around 10% of the shares are held by German investors, 37% in the rest of Europe and 52% in North America. Other regions such as Asia, Middle East and South America contribute 1% to the shareholder base.

Geographical distribution of institutional investors



Dividend development

While the positive sales revenue and earnings development of the operating subsidiaries in the 2021 fiscal year will impact the parent company SGL Carbon, it will not be in a position to distribute a dividend in the 2021 fiscal year either. With further growth, our company will work more profitably on a sustainable basis. Only then will it be possible to distribute a dividend.

2021 Annual General Meeting

For public health reasons, the Annual General Meeting of SGL Carbon SE was also held in 2021 as a virtual Annual General Meeting without the physical presence of the shareholders on the basis of the legal regulations to combat the impacts of the pandemic.

The Annual General Meeting was broadcast using a password-protected AGM internet service, which was used by approximately 320 shareholders and guests to view the Annual General Meeting live in 2021. In the run-up to the Annual General Meeting, shareholders and shareholder representatives had the opportunity to put forward questions to the company, which were answered by the Management Board and Supervisory Board at the virtual Annual General Meeting.

The AGM internet service also allowed shareholders to issue or revoke a power of attorney, exercise their voting rights by postal vote or have their voting rights exercised in accordance with the instructions they had given through the voting rights representative appointed by the company and also object to a resolution of the Annual General Meeting.

Of the company's share capital of €313,194,183.68, divided into 122,341,478 shares, a total of 74,188,171 shares were represented at the virtual Annual General Meeting, which corresponds to 60.64% of the registered share capital. All items on the agenda were approved with an overwhelming majority.

The speech given by the chairman of the Management Board, Dr Torsten Derr, was broadcast publicly on the SGL website.

The speech and all resolution results are available to shareholders and interested parties on the SGL website (at www.sglcarbon.com/en/investor-relations/annual-general-meeting/). The next Annual General Meeting of SGL Carbon SE will take place on May 17, 2022.

In-depth capital market communication

At the end of the reporting period, SGL Carbon shares were covered, analyzed and rated as follows by seven German and international financial analysts (previous year: eight): one analyst rated the shares as a Buy, while three analysts rated the shares as Underperform/Reduce or Hold/Neutral (as of December 31, 2021).

A summary of the analysts who regularly cover SGL Carbon is available on SGL Carbon's Investor Relations website under the "Share" menu item.

Analyst coverage (As of December 31, 2021)

Alphavalue
Berenberg
Deutsche Bank
HSBC
Kepler Cheuvreux
Landesbank Baden-Württemberg
Stifel

SGL Carbon provides all capital market participants with transparent, timely and comprehensive information on the company's business situation and future prospects. Due to the ongoing pandemic situation in 2021, many discussions with investors could again only be held virtually. Despite the adverse environment, more than 240 one-on-one meetings were held with analysts and investors in Germany and abroad. These discussions primarily focused on the following topics: the development and success of the SGL transformation program, the new management team and the impacts of the COVID-19 pandemic, which increased again in the second half of the year in particular. The investors were also informed about the status of the company's net debt and financing structure. In the second half of the fiscal year in particular, questions regarding the effects of the increases in raw material, energy and logistics costs became more frequent. An increasingly important topic in discussions with investors was the company's sustainability strategy: ambitions, objectives, measures to improve ESG performance.

As usual, capital market conferences and roadshows were central instruments for intensive exchange with institutional investors. All conferences and roadshows were held virtually in 2021 as a result of the COVID-19 pandemic. In total, SGL Carbon took part in 16 investor conferences in 2021. Quarterly reports and the conference calls held on the same day are further tools for providing capital market participants with comprehensive information in a timely manner. The conference calls will be broadcast live on SGL Carbon's Investor Relations website and are also available as a recording.

The Investor Relations website offers a wide range of information, in particular for private investors and interested third parties. In addition to the financial reports, further documents such as presentations as well as press and ad hoc announcements are made available there. All reports on share transactions by the Management Board and Supervisory Board as well as voting rights reports are also available online. Interested parties also have the option to be included in the mailing list for financial reports or press releases.

We look forward to hearing from you!

Key data of SGL Carbon SE shares

Trading venues	Xetra; Berlin, Düsseldorf, Frankfurt, Hamburg, Hannover, Munich, Stuttgart
German securities identification number (WKN)	723 530
International Securities Identification Number (ISIN)	DE 000 723 5301
Stock index	Entry into the SDAX on March 22, 2021
Market segment	Prime Standard

Balanced debt maturity structure

SGL Carbon has a balanced financing structure with maturities in 2023 and 2024. While the corporate bond with a nominal value of €250.0 million is set to mature in September 2024, the other two material financing components are due for refinancing in 2023. These consist of a convertible bond with a nominal value of €159.3 million and an unused syndicated credit line of €175 million.

An overview of SGL Carbon SE bonds

The prices of the financing instruments of SGL Carbon developed positively in the past year, in line with the share price. The main reason for this was the significant improvement in the balance sheet structure, above all the reduction in net debt and the increase in the equity ratio. Both financial instruments – the secured corporate bond (nominal volume €250 million, interest rate 4.625% p.a., maturity of September 30, 2024) and the convertible bond (nominal volume €159.3 million, interest rate 3.00% p.a., maturity of September 20, 2023) – are now trading close to their nominal value.

Corporate bond

WKN	ISIN	Coupon	Maturity date
A1X3PA	XS1945271952	4.625%	September 30, 2024

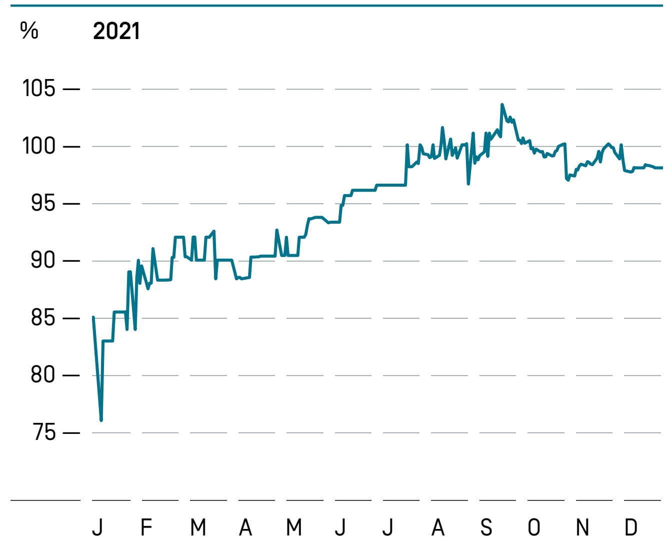
Convertible bond

WKN	ISIN	Coupon	Maturity date
A2G8VX	DE000A2G8VX7	3.0%	September 20, 2023

Viewed over the course of the year, the corporate bond showed materially lower volatility than the convertible bond, which is mainly due to the collateralization of this instrument.

Performance of corporate bond
(matures September 30, 2024)

Performance of convertible bond
(matures September 20, 2023)



Group Management Report

Consolidated sales up by 9.5% to €1,007.0 million. Increase in sales driven in particular by orders from the automotive and semiconductor industries.

Improvement in the order situation and successful transformation led to a significant increase in adjusted EBITDA by 50.9% to €140.0 million. Savings were diminished by increased raw material, energy and transport costs.

Free cash flow increased noticeably to €111.5 million both due to operating performance and one-off impacts. Net debt decreased accordingly to €206.3 million (-28.0% compared to year-end 2020).

In this Group Management Report, we provide detailed information about the business development and its framework conditions in the reporting year and explain in detail the net assets, financial position and results of operations. In addition, we provide an outlook on the probable development with its main opportunities and risks.

Group Fundamentals

Group business model

Business activity and company structure

SGL Carbon is a technology-based company and a global leader in its focus markets in the development and manufacture of carbon-based solutions. Our materials and products made of special graphite, carbon fibers and composites are in demand in many future-oriented industries: automotive, semiconductor technology, LED, solar and wind energy as well as by manufacturers of lithium-ion batteries. We also develop customer-oriented solutions for the chemical industry and numerous industrial applications. We strive to grow with products and technologies that benefit society and reduce the impact on the environment.

SGL Carbon meets regional and industry-specific customer requirements with around 4,680 employees at 31 sites throughout Europe, North America and Asia.

SGL Carbon SE, based in Wiesbaden (Germany), is listed on the Frankfurt Stock Exchange. The shares are listed in the Prime Standard market segment of the German Stock Exchange. Together with its subsidiaries, SGL Carbon SE forms the management holding company SGL Carbon (a detailed overview of the shareholdings of SGL Carbon SE can be found in the Notes to the Consolidated Financial Statements under note 31).

A new organizational structure was implemented on January 1, 2021, in order to be able to respond even more specifically to the needs of our customers and markets. The previous business unit Composites – Fibers & Materials (CFM) was divided into the areas Carbon Fibers (CF) and Composite Solutions (CS). The previous business unit Graphite Materials & Systems (GMS) was separated into Graphite Solutions (GS) and Process Technology (PT). Since then, the operative business of the company has been managed by these four business units with their own responsibility for financial results. Together with the Corporate reporting segment, the four operating business units make up the company's five reporting segments. As part of the restructuring, previously centrally organized areas, such as Central Research, were largely integrated into the structure of the new business units. (In this Annual Report, business activities are presented on the basis of these five reporting segments. The previous year's presentation has been adjusted for comparison purposes.

The Board of Management defines the Group's strategy and decides on financing and resource allocation. The globally active business units are responsible for the development, production and marketing of their products and solutions, while all service and administration activities are bundled in the central functions.

Our business units

Business unit Graphite Solutions (GS)
The Graphite Solutions (GS) business unit includes a wide range of graphite-based solutions and applications. Tailor-made graphite components are manufactured, cleaned and sometimes further refined with special coatings based on the needs of our customers. Sales in the GS business unit are primarily realized with customers from the semiconductor, LED and solar industries, the battery and fuel cell industry, the automotive & transport segment and for various other industrial applications.

The focus here is on refined products with a high added value. For example, they are used in heating elements for the production of single-crystal silicon in the semiconductor industry. Gas diffusion layers are an essential part of a fuel cell. Solutions for the automotive industry and other processing industries are also offered with graphite-based bearing and pump components as well as sealing rings. Expanded graphites based on natural graphite are also used in a large number of industries. Furthermore, GS is one of the few European suppliers of graphite anode material for lithium-ion batteries, which are also required for electric vehicles.

The main raw materials in the GS business unit are petroleum cokes and pitches. SGL Carbon obtains these raw materials primarily from suppliers with which the company has long-standing business relationships based on annual framework agreements. The energy requirements (electricity, natural gas) of the manufacturing processes are covered by long-term contracts with national and local energy supply companies.

sgl carbon

Graphite Solutions	Process Technology	Carbon Fibers	Composite Solutions
• Synthetic fine grain graphite blocks, expanded natural graphite • Graphite specialties • Graphite anode material • Materials for fuel cells	• Process solutions • Equipment for corrosive applications • Components & Assemblies • Parts & Services	• Precursor & acrylic fibers • Carbon fibers • Non-crimp & woven fabrics • Pre-impregnated materials	• Composite parts (large & small series) • Wet friction • Insulation materials

Corporate Functions

Central functions & services

Process Technology (PT) business unit
The Process Technology (PT) business unit focuses on the construction and repair of large systems for industrial applications. In addition to individual components and equipment, PT also offers complete systems and engineering know-how: from hydrochloric acid synthesis to concentration and dilution systems for a wide variety of acids, to absorption and desorption systems. The main focus is on the design and manufacture of graphite heat exchangers, syntheses, columns as well as pumps and systems that are exposed to corrosive media. As a specialist for corrosive applications, the chemical industry is one of the business unit's most important customer groups. After the plants have been commissioned, local experts provide support with the maintenance and repair of the systems and plants.

Carbon Fibers (CF) business unit
The material business based on carbon fibers is bundled in the Carbon Fibers (CF) business unit. It covers the entire integrated value chain from raw materials to carbon fibers to composite materials. Carbon fibers are industrially manufactured fibers that are refined in such a way that they consist almost exclusively of carbon. They are microscopic and about eight times thinner than a human hair. In order to make them usable for various applications, 1,000 to 60,000 filaments are combined into a kind of thread.

Due to their unique properties, such as low weight combined with high strength, carbon fibers are increasingly in demand as a substitute for classic materials such as glass fibers.

The Carbon Fibers business unit controls the entire value chain, starting with the polymerization of the main raw material, acrylonitrile, through the production of carbon fibers to the manufacture of fabrics. The main raw material is acrylonitrile (ACN), which is initially processed into acrylic fibers, a polyacrylonitrile (PAN) precursor, and in further production processes into carbon fibers. The focus of the business unit is on the comparatively large-volume production of carbon fibers and fabrics, especially for the wind and automotive industries.

The value chain is supplemented by the joint venture Brembo SGL (ceramic brake discs), which is recognized using the equity method. The joint venture with the Italian Brembo S.p.A. develops and produces carbon-ceramic brake discs, especially in the automotive segment for luxury vehicles and sports cars.

Industrial applications of composites are still in their infancy, and thus the SGL experts, together with the sister business unit Composite Solutions, are continually developing processes and procedures to support customers in using fibers and materials for composites.

This means that SGL Carbon can offer customers solutions along the entire value chain – from carbon fibers and materials to finished end products – from a single source as well as expertise in series production.

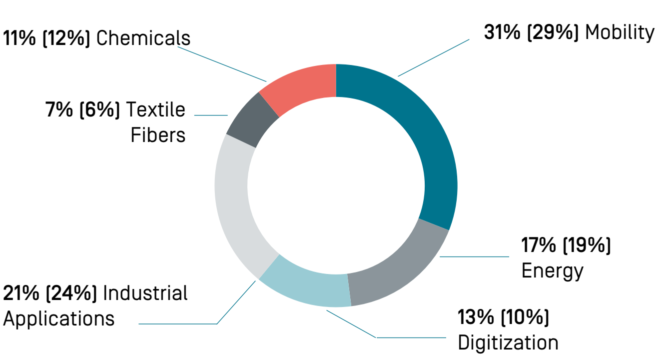
Composite Solutions (CS) business unit
For high-tech applications that require high strength and rigidity at a low weight, the solutions of the reporting segment Composite Solutions (CS) based on carbon and glass fibers are invaluable. They also offer excellent thermal protection without sacrificing strength.

The focus of the business unit is the production of customer-specific components and tailor-made applications made of composite materials based on glass and carbon fibers, especially for the automotive industry.

Due to many years of experience in the design & engineering of customized composite solutions combined with fully automated series production, both small and medium construction volumes can be custom-made, e.g. for medical technology, as well as large-volume automotive applications. The Composite Solutions area focuses in particular on battery housing applications and GRP leaf springs as well as on various types of carbon-based friction materials.

Major sales markets

Sales revenue by market segments 2021 (2020) (Group)



The mobility market segment (automotive & transport, aerospace) continues to represent the Group's largest market segment with a share of 31% (previous year: 29%), followed by industrial applications with 21% (previous year: 24%), whose share in the Group sales revenue fell compared to the previous year. This is mainly due to the increase in other segments such as digitization, to which the semiconductor industry can be attributed. At 17% (previous year: 19%), the energy industry is the third largest customer group, which primarily includes batteries, wind energy and solar. The digitization market segment increased its share of sales revenue from 10% in the previous year to 13% in 2021, which is mainly due to increased sales revenue with customers in the semiconductor industry. This is followed by customers from the segments chemical industry with 11% (previous year: 12%) and textile fibers with 7% and 6% respectively.

The sales revenue shares according to the specific market segments of the four business units are shown in the Segment reporting chapter.

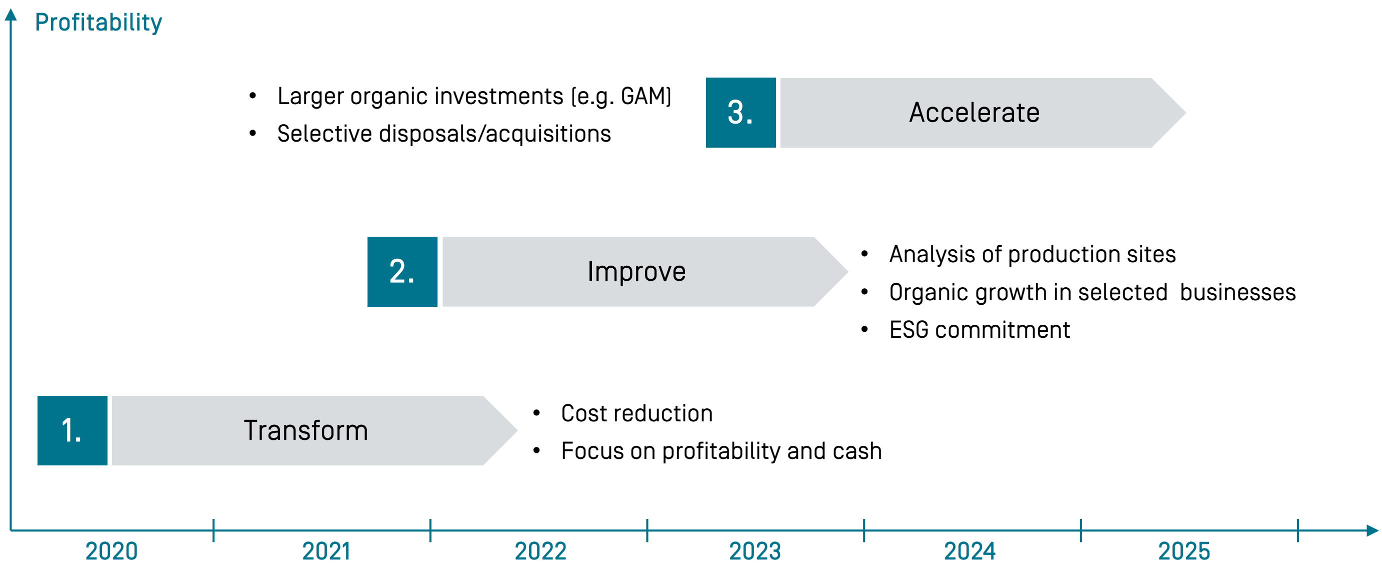
Objectives and strategies

The objective of SGL Carbon is to increase the enterprise value through sustainable, result-oriented growth. Generating the capital costs and sufficient financial capacity are necessary prerequisites for guaranteeing long-term entrepreneurial ability to act. In addition to financial capacity, we make our contribution to environmental and climate protection as well as social development. This includes responsibility for our employees, our supply chains, customer data and information security, as well as unconditional compliance with laws, regulations and standards. The Group strategy of SGL Carbon is aimed at achieving these objectives.

Corporate strategy

Materials and products from SGL Carbon are used in many future markets such as electromobility, renewable energy industries (solar and wind) and the semiconductor industry. With our innovative solutions, we want to advance the megatrends of mobility, digitization and energy transition. These are our most important markets, which we will focus on in the future and in the dynamics of which we want to participate.

SGL Carbon is pursuing a long-term roadmap to secure the economic situation and sustainably increase the enterprise value:



Transformation

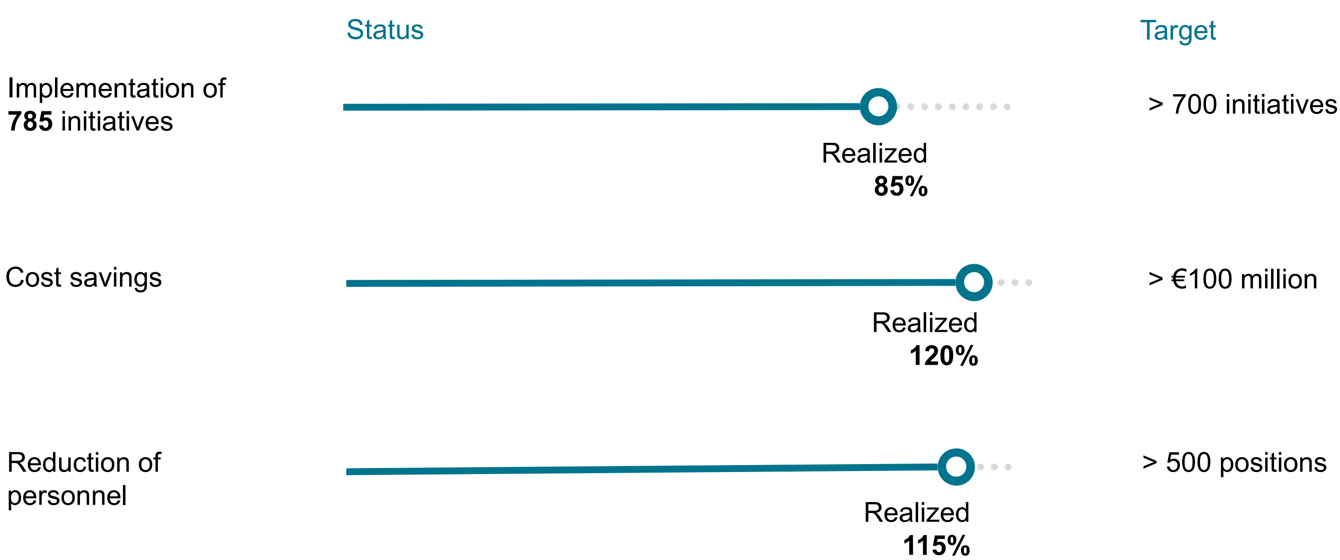
The past fiscal year was characterized by the continuation of the far-reaching transformation initiated at the end of 2020 with a focus on reducing costs and improving liquidity. Subject of the transformation was the implementation of a strict restructuring program, the definition of clear profit responsibility of the business units as well as the introduction of precise guidelines for the organization and its employees: the "Formula Carbon."

Efficiency improvement through restructuring

As early as the end of 2020, the Board of Management of SGL Carbon approved an extensive restructuring program with the objective to improve SGL Carbon's economic performance and create the basis for future growth.

The restructuring program originally included around 700 individual initiatives. In addition to savings measures, there are also a large number of improvement initiatives for production, purchasing, sales and administration. Due to the high level of approval and dynamism of the program, further initiatives were defined and their implementation started throughout the course of the 2021 fiscal year.

Overview of implementation status



Overall, the implementation of the restructuring should result in annual savings of more than €100 million through a reduction in headcount of over 500 positions and extensive savings in material costs by the year 2023 (compared to the base year 2019). We already achieved this objective in 2021 with savings of €120.3 million. The restructuring and associated efficiency improvement of our processes and structures also include a socially responsible reduction of 575 jobs throughout the company and across all hierarchical levels. Costs – in particular severance payments and consulting costs – amounting to €9.9 million were incurred in 2021 for the implementation of the savings measures. The development and initiation of further improvement measures will continue to be a key focus of all SGL Carbon business units in the coming months.

Efficiency improvement through reorganization

In order to meet the dynamic requirements of customers faster, in a more focused manner and more efficiently, the two existing business segments were split into four profit-responsible units effective January 1, 2021.

In the course of the transformation from 20 to nine departments, the central functions were combined in order to reduce costs and interfaces. Furthermore, the central research department was divided into the four business units according to their tasks. This ensures more customer-centric research and development.

Corporate culture as a success factor

Parallel to the restructuring and reorganization, the "Formula Carbon" guideline was introduced in 2021. The aim is to establish a new corporate culture that focuses on efficiency and economic performance.

- **Business first**
  In everything we do, our focus is on running our business safely and profitably.
- **Keep it simple**
  We no longer afford the luxury of doing things that are not absolutely necessary. We reduce complexity wherever possible.
- **Deliver on promises**
  We set ourselves realistic objectives and keep our promises and expect the same from our colleagues.
- **Act quickly, think differently**
  We act quickly and in a solution-oriented manner. And we are always open to new paths.

These basic principles have since determined conduct and approach, as well as the decisions of all senior executives and employees.

Improvement

In order to further improve the profitability of SGL Carbon, work began in the fiscal year of 2021 on subjecting all production sites worldwide to a detailed efficiency and cost review. According to the analysis carried out, site-specific measures were defined in order to improve the performance of the individual sites. Every SGL production site must work and operate profitably in the future.

The analysis of the sites also included a clear focus on profitable and future-oriented solutions in the four business units. In 2021, for example, series production in Innkreis, Austria, was expanded and the development of graphite anode material for lithium-ion batteries was accelerated.

All measures to improve the efficiency and performance of SGL Carbon are always in line with the company's ESG strategy – which was revised in 2021 (also see the current CSR Report as part of the Annual Report). Through binding targets and measures, we are embedding sustainability even more firmly in our corporate strategy, processes, structures and new projects. Sustainable management, the development of products that protect the environment and climate, and ethically impeccable action are key success factors for further improving the economic performance of SGL Carbon.

Acceleration

The third pillar of SGL Carbon's defined corporate strategy is the long-term acceleration of profitability. After the transformation of the company and a significant improvement in performance and stability of its financial strength, larger investments in the existing or new business, as well as possible transactions, should contribute to the further expansion of profitability and therefore the enterprise value.

Corporate governance

Corporate governance pursues the main objective of increasing the economic and sustainable performance and therefore the enterprise value of SGL Carbon.

Management and control

A description of the cooperation between the Management Board and the Supervisory Board can be found in the Corporate Governance and Compliance Report (unaudited). The Management Board determines the Group's strategic orientation. Fundamental business decisions of importance are made at only two levels of management – the Management Board and by the heads of the business units. In addition, central functions support the Management Board and provide services for all business units and Group companies.

The Supervisory Board advises and monitors the Management Board in managing the company.

Internal control system

SGL Carbon's control systems support the overarching corporate objective of a long-term and sustainable increase in company value. This includes regular meetings of the committees used, monthly management reporting – which covers both the actual development and the forecast development – as well as directly linked target/actual comparisons, including any deviation analyses. In addition, the top management levels and commissioned steering groups control and monitor special investment projects, possible transactions and defined task constellations such as personnel issues, occupational safety, compliance and environmental and climate protection.

Financial control indicators

SGL Carbon uses the following key performance indicators to determine and monitor financial success:

In addition to sales, adjusted EBITDA (earnings before interest, taxes, depreciation and amortization, adjusted for one-off impacts and non-recurring items) is the most important key performance indicator. By using it, we depict the sustainable cash-effective earning power of the business units and the company. We are also providing our earnings forecast for 2022 on the basis of adjusted EBITDA.

Free cash flow is used to manage the Group's liquidity and financial strength. Return on capital employed (ROCE) is used to manage the Group's liquidity and financial strength. ROCE (return on capital employed) is the return on capital employed and is defined as adjusted earnings before interest and taxes (adjusted EBIT) divided by average capital employed (sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for using the equity method and working capital).

The variable compensation of senior management (first three levels below the Board of Management) is based, among other things, on adjusted EBITDA (short-term incentive) and return on capital employed (ROCE) (long-term incentive).

We supplement the most important financial key performance indicators with other key performance indicators that provide us with information about the development of profitability and liquidity as well as the Group's debt.

Supplementary financial performance indicators are the debt factor (ratio of net financial debt to adjusted EBITDA) and the equity ratio. In the medium term, we aim to achieve a debt factor of $\leqslant$ 2.5 and an equity ratio of $\geqslant$ 30%.

These financial key performance indicators are regularly reported to the Board of Management and the Supervisory Board.

Non-financial performance indicators

In addition to the financial key figures, the enterprise value of SGL Carbon is largely determined by non-financial performance indicators. The following non-financial performance indicators are playing an increasingly more important role in the further successful development of the company:

- Occupational safety, in particular the frequency of accidents
- Energy consumption and CO_2 emissions
- Number of employees, especially diversity and education and training

The health and safety of employees has top priority at SGL Carbon. As a responsible company, protecting the health and safety of employees is both an ethical obligation and a prerequisite for the company's performance. For this reason, a target for the frequency of accidents (lost time injury frequency rate) was also included in the variable remuneration component of senior management from the 2021 fiscal year.

As an energy-intensive company at various locations worldwide, we strive to reduce our energy consumption and CO_2 emissions out of ecological and economic responsibility. For this reason, medium-term targets for CO_2 reduction were set in the 2021 fiscal year and a long-term roadmap to climate neutrality by 2038 was drawn up.

A motivated and well-trained workforce is the basis for the success of SGL Carbon. At the end of the 2021 fiscal year, the number of employees was 4,680, of which 44.7% worked in Germany and 55.3% abroad. Against the background of the realignment and streamlining of SGL Carbon, the number of employees was reduced compared to the previous year. The number of women in the top three management levels below the Board of Management was 19% as of December 31, 2021. The aim is to achieve a rate of 20% at these management levels. The takeover rate for apprentices in Germany was 100%, demonstrating our commitment to training and further education.

SGL Carbon's ESG strategy was reviewed and updated in the 2021 fiscal year. In addition to the non-financial performance indicators already described, key ESG aspects were defined in dialog with the stakeholder groups at SGL Carbon.

Non-financial Group report

Further information on the topics of sustainability, environmental and climate protection as well as other important ESG aspects can be found in the CSR report as part of the Annual Report. The CSR report also represents the separate non-financial Group report of SGL Carbon SE, which was subjected to a limited assurance engagement by KPMG AG Wirtschaftsprüfungsgesellschaft. This report will be available from March 24, 2022 on the website at www.sglcarbon.com in the "Company/Sustainability" section.

Research and development

Integration of research and development activities into the business units

As of January 1, 2021, the activities of the central research and development department were fully integrated into the four business units. This further strengthens the proximity of development to the customer and focuses strategic research and development projects with more intensity on near-term market opportunities. In the 2021 fiscal year, the protection of expertise at SGL Carbon was increased with new patent applications.

The development activities of each business unit derive directly from the strategic objectives of the product groups or business lines and are shaped by the market trends, customer requirements and market environment in each case.

Highlights from the business units (unaudited)

BU Graphite Solutions – focus on strategic growth topics

GS's product portfolio covers material growth areas in digitization, mobility and energy, from which the innovation and development initiatives result.

Semiconductors: Specialty graphites are used in the production and processing of silicon and silicon carbide-based semiconductor components. In 2021, development projects focused on isostatic graphite enabled the efficient production of silicon for semiconductor chips and silicon carbide for power semiconductors and contributed to the corresponding growth. Milestones have been reached in relation to the purity and homogeneity of soft and hard felts as insulation materials. In addition, graphite components with innovative ceramic coatings for the processing of semiconductor chips were successfully launched on the market.

Lithium-ion batteries are pioneers of electromobility; graphite anode material is one of their essential components. In Graphite Solutions (GS), decisive milestones in the further development of graphite anode materials were reached in 2021, in terms of both product properties and manufacturing processes.

Fuel cells, as an alternative, hydrogen-based concept for generating electrical energy, use so-called gas diffusion layers and bipolar plates as sub-components. The business units GS is successfully running development projects for both material systems, which aim to further develop these products as well as the corresponding manufacturing processes.

The Mechanical Solutions product segment produces, inter alia, electrical contact materials. As an innovation project, GS is pursuing the expansion of the product portfolio to include high-performance contact materials, in particular for the latest wind turbines.

All product groups and business lines have development strands in common for the evaluation and sampling of alternative raw materials and for optimizing the efficiency of the manufacturing processes. These serve to ensure medium to long-term security of supply and resource-friendly production.

GS is running a number of circular economy projects. These go beyond the use of by-products in our manufacturing processes (in battery materials, for example) which already takes place to a considerable extent.

BU Process Technology – technology leader through development and innovation

The aim of all development activities in the business unit Process Technology (PT) is he aim of all development activities of the PT business area is differentiation from the competition through technological advantage. This is achieved through continuous new product developments and improvements, optimizing costs and through strategic partnerships with leading companies from different industries. Key principles here include increasing energy efficiency and reducing emissions and waste streams.

For example, an innovative HCl synthesis plant with integrated steam generation from waste heat generated approx. 17,000 tonnes of steam within the first 12 months of operation, which corresponds to a saving of 3,200 tonnes of CO_2.

BU Carbon Fibers – stronger focus on sustainability aspects

Research activities already started by the former central R&D unit are largely being continued by the business unit Carbon Fibers (CF). These include cooperation with the Chair for Carbon Composites at the Technical University of Munich in connection with the development of sustainable carbon fiber (Green Carbon). An organic-based option for the production of acrylonitrile as the basis for carbon fiber is being developed in association with other renowned cooperation partners.

BU Composite Solutions – focus on close partnership with customers

New functions have been set up within the "Small Series Solutions" and "Large Scale Solutions" business lines in order to ensure the closest possible integration between development and customer needs. These functions are involved early on during the inquiry phase of a project in order to identify customer requirements and set development objectives. The aim is to be a technical leader in key growth areas and to continue to develop innovative solutions for applications and manufacturing processes.

One of the most attractive development projects at the business unit Composite Solutions (CS) is Sustainable Composites. These are fiber composite materials with a reduced carbon footprint and better recyclability. Approaches deployed here include the use of organic-based input materials for both reinforcing fibers and matrix materials.

Sustainability forms the central plank for current and future development. All development activities are checked to see how they contribute to improving the sustainability of our products. The aim is to offer composite components with a significantly lower carbon footprint in accordance with our customers' sustainability objectives.

Industrial cooperation and research networks as the key to success (unaudited)

SGL Carbon continues to be an active member of the executive committees of the international scientific carbon societies.

As a co-founder of the Lithium-Ion Battery Competence Network (Kompetenznetzwerk Lithium-Ionen-Batterien, KLiB), SGL Carbon works together with BASF, Bosch, Daimler, BMW as well as other companies and institutes to develop the research landscape and value chain for lithium-ion batteries in Germany and Europe, and appoints the chairman of the board of this committee.

SGL Carbon is an active member of Composites United e. V. The network of companies and research institutions covers the entire value chain of high-performance fiber composites in Germany, Austria and Switzerland.

In addition, SGL Carbon is a member of the Working Group on Carbon (Arbeitskreis Kohlenstoff, AKK) and is represented on its board. This is an independent interest association both in the German Ceramic Society and in the European Carbon Association with the aim of promoting the research in the field of carbon.

Economic Report

Overall economic and industry-specific underlying conditions

Economic conditions

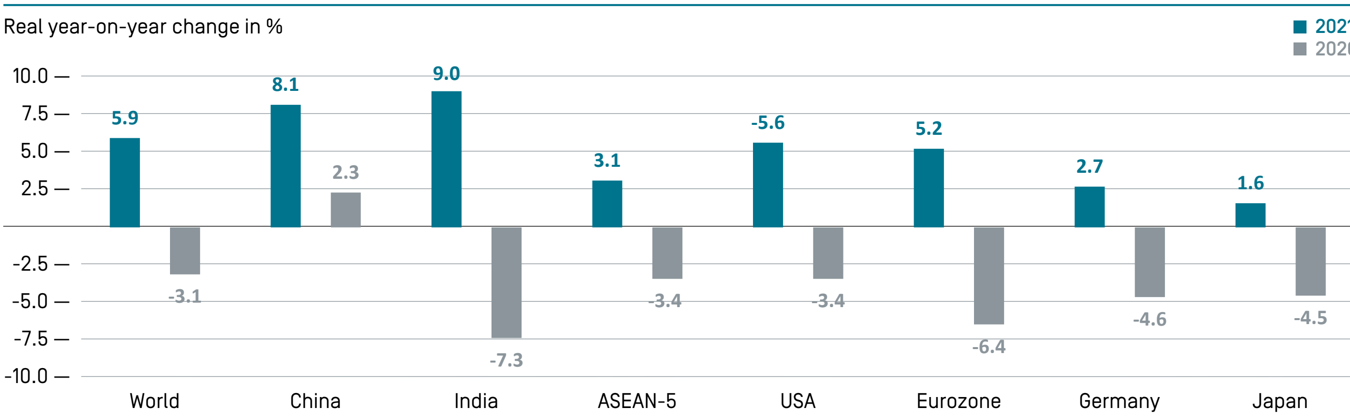
In 2021, the global economy again fell under the influence of the coronavirus pandemic. As vaccination progressed, a strong economic recovery initially set in. However, the upturn stalled in the second half of the year due to the massive upheavals in global value chains and new waves of infections. Supply shortages and significantly higher energy costs drove up inflation. According to estimates by the IMF (International Monetary Fund), the global economy ultimately grew by 5.9% in 2021. Development was slightly better than expected at the beginning of 2021 both in industrialized countries (+5.0%) and in emerging and developing countries (+6.5%). The original outlook from January 2021 assumed global economic growth of 5.5% (industrialized countries +4.3%, emerging and developing countries +6.3%).

Global supply shortages slowed down the powerful upturn in the world economy in 2021

In the US, the economy recovered noticeably in 2021 despite a slow start to the year due to the pandemic (IMF: +5.6%). Exports, private consumption and investments drove the upswing. In view of the high growth momentum and strong inflationary pressure, the US Federal Reserve announced a change in interest rate policy at the beginning of 2022.

The economy in the euro zone initially shrank due to the impacts of the coronavirus pandemic and the associated lockdowns. A dynamic revival arose from the spring with declining infection numbers (IMF: +5.2%). Private consumption recovered as Covid-19-induced measures were increasingly lifted. With higher exports, manufacturing initially picked up, although the supply shortages in the second half of the year had a noticeable negative impact on the trend. Inflation accelerated significantly, but monetary policy remained expansionary. With the infection rate worsening at the end of the year, the upswing slowed, including in Germany.

Gross domestic product in 2021 (2020) at a glance



Source: IMF, World Economic Outlook (Update) January 2022

China's economy suffered from numerous regional lockdowns in 2021 as part of the very strict zero-Covid policy. The energy supply crisis in coal-fired power plants and financial problems in the real estate sector also weighed upon the Chinese economy. After a strong start to the year due to underlying factors, economic growth increasingly lost momentum (IMF: +8.1%). In the final quarter, the growth was only 4.0%. The economies in India and Southeast Asia (ASEAN-5) benefited from the global upswing. In the wake of this and as a result of higher energy and raw material prices, Russia and many emerging countries experienced a strong upswing.

Development of important customer industries

Market segment mobility

Automotive industry: Chip shortages dampen boom at electric vehicles – Lightweight construction is becoming increasingly important

The automotive industry recovered in 2021, despite the difficult conditions caused by the pandemic and the accelerated technological upheaval in favor of electromobility. However, microchip shortages weighed heavily on performance. According to industry experts from LMC Automotive, 81.3 million light vehicles (passenger cars and light trucks) were nevertheless sold worldwide. This is an increase of 4.6%, although regional trends moved in opposing directions. Growth was achieved in China (+4.3%) and the US (+2.8%), whereas the downturn continued in Japan (-3.1%) and South Korea (-8.8%). In Europe, 11.8 million cars were sold (-1.5%), according to the industry association ACEA. Germany experienced a 10.1% slump and passenger car production fell 12% to the 1975 level (VDA). On the other hand, 2021 set a new record for electric vehicles (EVs). EV sales increased worldwide by almost 38% to over 4.7 million (Gartner). Lightweight construction is becoming ever more important in auto manufacturing. Preliminary estimates indicate that the market for lightweight automotive materials grew by 5.3% in 2021. SGL Carbon has firmly established itself in certain niches with carbon fibers for intelligent lightweight construction solutions, battery cases made of composite materials and components for fuel cell drives. Despite production shutdowns at some customers, demand for SGL products increased in 2021.

Aerospace: Aircraft production recovered but remained below pre-crisis levels

Air traffic was again significantly affected by the pandemic in 2021. In civil aviation, international passenger numbers for every month of the year remained at least 10% below the pre-crisis level of 2019 (IATA). In contrast, the cargo business picked up in 2021: Transport volume was up to 10% higher than the 2019 level (IATA). Normal short-term fluctuations in air traffic do not have a direct impact on SGL Carbon's aerospace business. This involves carbon fiber reinforced plastics (CFRP), which are used in the construction of new aircraft as well as in the modernization and conversion of existing models or fleets. However, new aircraft construction was also affected by the crisis in 2021. Although production increased compared to 2020, it did not reach the pre-crisis level. In addition, fewer of the aircraft models that are particularly relevant for CFRP – the Boeing 787 (2021: 14, 2020: 53) and the A350 (2021: 55, 2020: 59) – were built than in 2020. In this difficult environment, SGL Carbon's business in the aerospace industry remained steady in 2021 but at a lower level.

Market segment energy

Lithium-ion batteries: Booming demand for cars and IT

Lithium-ion batteries (Li-Ion) are key components for information technology (IT), as well as for the automotive industry due to the growth of electric vehicles. They are also increasingly important for storing the electricity produced by renewable energy installations. The need for large, powerful batteries for electric vehicles is immense and demand is growing strongly. As a result, the automotive industry has now become the most important driver of this market in terms of both volume and technological advancement. 2021 was a boom year for electric vehicles (EVs). Market researchers from Gartner state that at least 4.7 million electric vehicles were sold worldwide, an increase of 37.7% on the already strong previous year (2020: 3.4 million EVs). This strong momentum and the high volume prove that the breakthrough has been made and that electric vehicles have established themselves on the market. The trend in 2021 was also positive in IT, the second largest Li-Ion market. Lively demand for PCs – which rose by 9.9% according to Gartner – provided important impetus here. Demand for smartphones also increased. The world market for Li-Ion anodes is believed to have grown by around 18% in 2021.

Fuel cells: Attractive niche in the development stage

Fuel cells (FCs) are becoming increasingly important as part of the global energy transition. According to various current sources, the global sales market for fuel cells has a volume of approximately USD 4 billion (2020). Technologically, the so-called PEMFC (polymer electrolyte membrane fuel cell) dominates. Stationary fuel cells for power generation are by far the most important area of application. Mobility niches such as fuel cells for cars, ships and even airplanes are becoming ever more interesting. Various countries are currently pushing initiatives to build a green hydrogen economy. In the long term, this should further boost the popularity of fuel cells. SGL Carbon manufactures high-quality gas diffusion layers for PEMFCs and has many years of know-how and a vast skill set in this area. This makes the Company an important development partner and component supplier for the leading producers of fuel cells.

Wind industry: Installations at a high level
After photovoltaics, wind energy is the second most important pillar of the transition towards renewable power generation. Technical progress has made wind energy increasingly competitive in recent years. Despite a strong expansion trajectory, the global wind industry was impacted in 2021 by pandemic-related disruptions, construction site delays, global supply shortages and cost increases, including for steel. In the record year of 2020, the world market also benefited massively from special effects in the two largest markets, China and the US (global installations +53%). This impulse partially flattened out in 2021. According to GWEC (Global Wind Energy Council), new installations in 2021 nevertheless reached a high level of 91.9 GW (-1.2%). In the onshore market, installations in 2021 fell by 8.9% to 79.2 GW. In contrast, newly installed offshore capacity doubled to an estimated 12.7 GW. In 2021, SGL Carbon used the increasing demand for carbon fiber in the wind industry to absorb additional capacity. The company recognizes the future potential of this sector for the Carbon Fibers business unit.

Solar/polysilicon: Increasing photovoltaic installations and high prices are stimulating investment
Photovoltaics (PV) is by far the most important end market for polysilicon. Almost 60% of the global capacity for renewable electricity generation is based on solar energy. After the global PV market collapsed due to the pandemic in 2020, demand significantly picked up in 2021 despite notably higher costs for modules, and for polysilicon in particular. According to the latest estimate by the IEA (International Energy Agency), global photovoltaic installations increased by 17% to almost 160 GW in 2021. Demand for polysilicon grew significantly in 2021 as a result. While up until mid-2020, the pandemic and low prices had been causing manufacturers outside of China to shut down plants completely – meaning the high demand could no longer be met – available worldwide capacity increased again in 2021. Significantly higher polysilicon prices have given additional impetus to investments. With components made of special graphite, SGL Carbon offers solutions for the highly complex process of crystal growth in the manufacture of solar cells for the photovoltaic industry. However, the Company was unable to participate in last year's upswing in the PV market as the available capacity was used for more profitable growth markets such as LEDs and semiconductors.

Market segment digitization

Semiconductors/polysilicon: Booming semiconductor demand drives investments to record highs
The semiconductor industry is the second major processor of polysilicon, after photovoltaics. Due to the strong recovery in the global economy, demand from the automotive industry again skyrocketed in 2021, in addition to the continuing buoyant demand for microchips in the IT sector. Global demand far exceeded supply, resulting in significant supply shortages which continued beyond the end of the year. According to market researchers at Gartner, demand for PCs (including notebooks) rose by 9.9% in 2021, with the market shifting gradually from the home office back to the office (desktop PCs). Smartphone sales grew 5.3% in 2021 (IDC). According to Gartner, sales in the booming semiconductor market grew by 25.1% in 2021 (2020: 10.4%). In this environment, semiconductor manufacturers invested substantially in capacity expansion. The industry association SEMI estimates that sales of production systems and equipment for the semiconductor industry in 2021 exceeded 2020's record level by 44.7%. SGL Carbon was also able to benefit from the lively demand.

LED: Attractive growth market with great potential
LEDs are durable, economical, ecologically beneficial and flat. They are displacing conventional technologies and giving rise to a large number of innovative applications in lighting and electronics, in automotive engineering and in various industrial processes all the way through to medicine. According to an analysis by TrendForce, the global LED market has recovered from the pandemic-related slump and appears to have grown by 8.1% in 2021. The largest market segments grew significantly in 2021 (lighting by +9.5% and automotive by +31.8%) through continued market penetration despite the shortage of microchips. For industrial LED applications, growth was an estimated 8.6%. In LED production, silicon wafers are coated and cut into semiconductor chips for the diode. Here, the so-called susceptors (rotating wafer carriers) are critical to quality. SGL Carbon has a very strong position in the market for graphite-based susceptors for silicon epitaxy and graphite components and benefited in 2021 from the high demand from LED manufacturers.

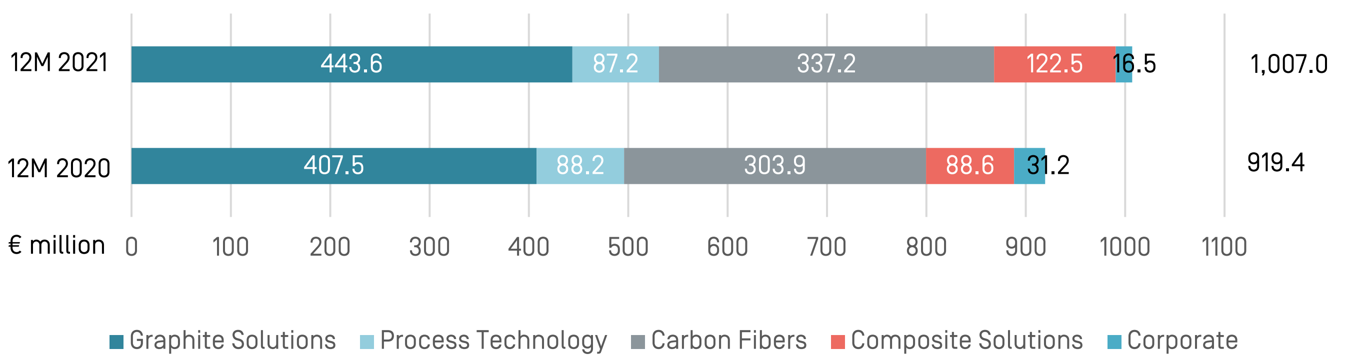
Market segment chemicals

A lively chemical industry with disruptive factors throughout 2021 — reluctance to invest
The chemical and pharmaceutical industry was on the upswing worldwide in 2021, despite mounting headwinds.

Pharmaceutical production increased by double digits in the US and the EU as a result of the Covid-19 vaccine boom. Conversely, chemical production suffered noticeable setbacks from the summer onwards due to supply shortages in key customer industries and higher energy costs. Despite good demand, production had to be partially curtailed or plants shut down. The German Chemical Industry Association (*Verband der Chemischen Industrie, VCI*) estimates that the industry increased production by a total of 9.5% (2020: +1.1%). Even if pharma is excluded, growth was still 6.4% (2020: minus 0.1%) due to a strong first half of the year. Regionally, Asia stood out in 2021. Chemical production boomed in China, India (both +8.0%) and South Korea (+7.5%). However, performance in the US (+2.0%) was more restrained. The industry grew robustly in Japan (+4.0%) and the EU (+5.0%). Germany saw an increase of 4.5% overall, with a 15.0% rise for polymers. SGL Carbon's business, which focuses on capital expenditures at chemical plants (Process Technology business unit) is typically late-cyclical. Due to the changeable environment, demand in 2021 remained cautious.

Group business development

Sales revenue development



Broad-based sales recovery

The sales revenue of SGL Carbon increased in fiscal 2021 by €87.6 million or 9.5% to €1,007.0 million (2020: €919.4 million). Almost all business units contributed to this increase in sales. It should be noted here that 2020 was dominated by weaker demand growth in some of our customer industries (e.g. the automotive industry) as a result of the pandemic.

The increase in sales revenue is mainly due to increased demand and the associated positive volume effect in connection with the economic recovery. Currency effects were slightly negative, mainly due to the appreciation of the US dollar against the euro from the second half of the year onwards. Price increases which resulted inter alia from the passing on of increased factor costs had a slightly positive effect.

The largest increases in sales revenue came in particular from the Graphite Solutions (GS) (+€36.1 million), Composite Solutions (CS) (+€33.9 million) and Carbon Fibers (CF) (+€33.3 million) business units. Increased demand and the start of new projects in the automotive sector led to revenue growth of 38.3% in CS. In CF, the increase in orders from the automotive industry and increased demand in the textile fibers segment led to revenue growth of 11.0%. Driven by strong demand from the semiconductor and LED industries, the GS business unit grew by 8.9%. A detailed presentation of the revenue performance of the individual business units can be found in the segment reporting.

Regional development of consolidated sales revenue: Europe remains the largest sales market

Europe was again the core focus of SGL Carbon's business with sales revenue of €501.3 million, representing 49.8% of the total (2020: 51.2%). Germany continued to be the largest single market with revenue of €308.3 million, or 30.6% of the total (2020: 31.1%). With sales revenue of €299.0 million, Asia was the second largest region, with a constant sales share of 29.7% (2020: 29.6%). Sales in the US amounted to €156.8 million and also remained almost constant with a share of 15.6% (2020: 15.2%).

Sales by destination

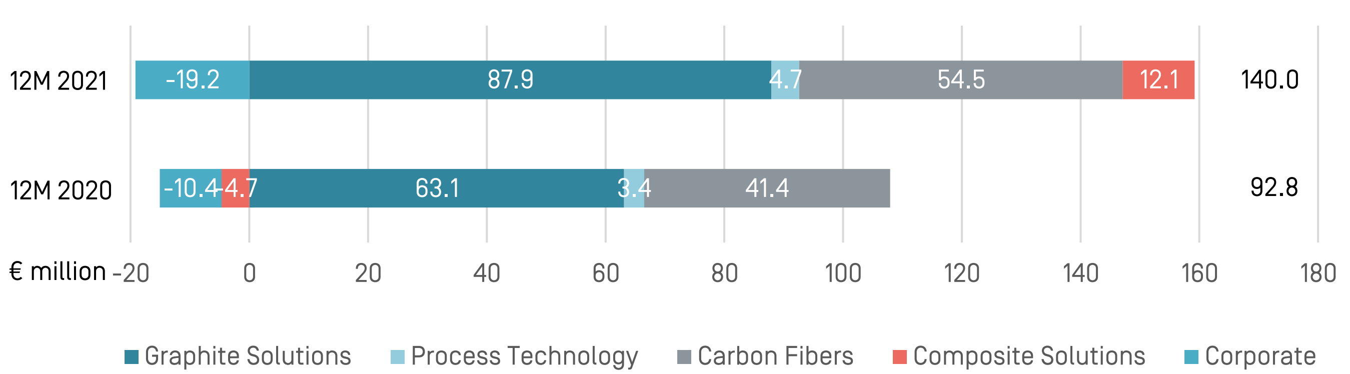
€m	2021	Share	2020	Share	Change
Germany	308.3	30.6%	285.6	31.1%	+ 7.9%
Europe excluding Germany	193.0	19.2%	184.9	20.1%	+ 4.4%
USA	156.8	15.6%	139.5	15.2%	+ 12.4%
China	165.5	16.4%	104.0	11.3%	+ 59.1%
Other Asia	133.5	13.3%	168.2	18.3%	- 20.6%
Rest of world [1]	49.9	4.9%	37.2	4.0%	+ 34.1%
Total	**1,007.0**	**100.0%**	**919.4**	**100.0%**	**+ 9.5%**

[1] Latin America, Africa, Canada, Australia

Financial performance of the Group

On the basis of increased sales revenue and the associated higher capacity utilization, as well as the results of the transformation, the financial performance of SGL Carbon in fiscal 2021 improved significantly compared to 2020. Adjusted EBITDA – the most important indicator – increased by 50.9% in 2021 to €140.0 million (2020: €92.8 million). In addition to positive volume effects, the main reasons for the improvement in financial performance were the cost savings achieved from the transformation. Conversely, the higher purchase prices for raw materials, energy, transport and logistics had a negative effect, which weighed on financial performance in particular in the second half of 2021. In line with the absolute increase, the adjusted EBITDA margin increased from 10.1% to 13.9% in the reporting period.

Earnings development – EBITDA pre



The trends presented are also reflected in the Group's consolidated income statement.

Income Statement

€m	2021	2020	Change
Sales revenue	1,007.0	919.4	9.5%
Cost of sales	−784.1	−749.9	4.6%
Gross profit	**222.9**	**169.5**	**31.5%**
Selling expenses	−95.1	−88.5	7.5%
Research and development costs	−31.0	−33.3	−6.9%
General and administrative expenses	−42.0	−46.5	−9.7%
Other operating income/expense	7.9	6.8	16.2%
Result from investments accounted for At-Equity	17.0	11.5	47.8%
EBIT pre	**79.7**	**19.5**	**>100%**
Non-recurring items and one-off effects	30.7	−113.2	-
EBIT	**110.4**	**−93.7**	-
Financial result	−28.3	−29.4	−3.7%
Result from continuing operations before income taxes	**82.1**	**−123.1**	-
Income tax expense	−6.2	−7.0	−11.4%
Non-controlling interests	−0.5	−2.8	−82.1%
Consolidated net result - continuing operations	**75.4**	**−132.9**	-
Result from discontinued operations, net of income taxes	-	0.7	-
Consolidated net result (attributable to the shareholders of the parent company)	**75.4**	**−132.2**	-
Earnings per share, basic (in €)	0.62	−1.08	-
Earnings per share continuing operations, basic and diluted (in €)	0.62	−1.09	-

Improved gross margin

Cost of sales increased by 4.6%, which was less than the increase in sales (+9.5%). This is due to both lower personnel and non-personnel costs, as a result of the initiatives implemented as part of the transformation program. Accordingly, the gross margin improved significantly year-on-year from 18.4% to 22.1%.

Selling, R&D and administrative expenses

Selling expenses rose by 7.5% to €95.1 million (2020: €88.5 million). This percentage increase was also lower than the percentage increase in sales. The rise in selling expenses was primarily due to increased delivery volumes and higher transport and logistics costs.

By contrast, research and development costs fell by 6.9% to €31.0 million (2020: €33.3 million), which was primarily due to the integration of R&D activities into the business units and the resulting higher effectiveness in this area.

General administrative expenses fell by 9.7% from €46.5 million in 2020 to €42.0 million in 2021. The streamlining of the central functions from 20 to nine and the associated cost savings, together with the non-recurrence of the severance payments incurred in 2020 due to changes in the Board of Management, led to a significant reduction in general administrative expenses. An increase in variable remuneration at management levels due to the positive business development had the opposite effect.

Other operating income and expenses

Other operating income and expenses that cannot be allocated to functional costs amounted to a net amount of €7.9 million in 2021 (2020: net amount of €6.8 million). Foreign currency effects resulted in income of €0.6 million in 2021 (2020: income of €0.2 million). Conversely, income from governmental grants for projects of €6.8 million (2020: €3.8 million) was included in the reporting year.

Result from investments accounted for At-Equity

Due to the positive business development at Brembo SGL, result from investments accounted for At-Equity increased significantly to €17.0 million in 2021, a rise of 47.8% (2020: €11.5 million). Demand for carbon-ceramic brake discs increased in the reporting period, as Covid-related production losses in the automotive industry in 2020 were made up for in 2021 and demand for these high-quality products increased again.

One-off effects and non-recurring items

Since fiscal year 2021, we have been using adjusted EBITDA and adjusted EBIT as key earnings indicators. Result is adjusted for the following effects:

- Effects of impairment (IAS 36), purchase price allocation (IFRS 3) and write-downs of assets held for sale (IFRS 5)
- Restructuring expenses
- Proceeds from the sale of land and buildings
- Proceeds from insurance claims, except where offset by costs incurred in the reporting period
- Other material one-off earnings effects that do not reflect the development of the business.

In fiscal 2021, positive non-recurring items and one-off effects totaled €30.7 million (2020: minus €113.2 million).

To improve liquidity, SGL Carbon launched a program during fiscal 2020 to sell non-operating assets. Under this program, land not required for operations at the Meitingen (Germany) and Gardena (US) sites was sold in 2021 for €4.5 million and €26.1 million, respectively. A total gain of €19.7 million was generated from these two sales.

In addition, fiscal 2021 includes one-off effects such as income of €21.0 million from the restructuring of pension obligations and jubilee benefits as well as €3.0 million in insurance proceeds. A write-down of €2.3 million was recognized as a result of an adjustment to the valuation of spare parts in inventories. Also included are non-recurring items from restructuring of plus €0.2 million and amortization of €10.2 million in relation to the amounts capitalized or recognized as liabilities as part of the purchase price allocation of the SGL Composites companies.

The overview below shows the influence of the one-off effects and non-recurring items on the determination of the key financial indicators.

	2021	2020
EBIT	**110.4**	**–93.7**
+/- Restructuring expenses	–0.2	27.2
+ Impairment and PPA-Effects	10.2	116.7
+/- Non-operating expense / income	–40.7	–30.7
EBIT pre	**79.7**	**19.5**
+ Amortization/depreciation expense on other intangible assets and property, plant and equipment	60.3	73.3
EBITDA pre (= EBIT pre plus depreciation and amortization)	**140.0**	**92.8**

Adjusted EBIT significantly improved

Adjusted EBIT significantly improved in the reporting period to €79.7 million, compared to €19.5 million in 2020. Total EBIT, taking into account the non-recurring items and one-off effects totaling €30.7 million in the reporting period, was €110.4 million (2020: minus €93.7 million).

Financial result stable

€m	2021	2020	Change
Interest income	0.8	0.7	14.3%
Interest expense on financial debt and other interest expenses	–18.4	–18.1	1.7%
Imputed interest convertible bonds	–3.0	–2.7	11.1%
Imputed interest financing lease	–1.6	–2.9	–44.8%
Interest expense on pensions	–2.4	–4.1	–41.5%
Interest expense, net	**–24.6**	**–27.1**	**–9.2%**
Amortization of refinancing costs	–2.9	–2.6	11.5%
Foreign currency valuation of Group loans	–0.7	–0.1	>-100%
Other financial income/expense	–0.1	0.4	-
Other financing result	**–3.7**	**–2.3**	**60.9%**
Financial result	**–28.3**	**–29.4**	**–3.7%**

The financial result in 2021 was minus €28.3 million, an improvement of 3.7% compared to 2020 (minus €29.4 million). This is due in particular to an improvement in the net interest expense from minus €27.1 million to minus €24.6 million.

While interest income was essentially unchanged at €0.8 million (2020: €0.7 million), the interest expense on financial debt rose slightly to €18.4 million (2020: €18.1 million).

Interest expenses include, in particular, interest on the corporate bond issued in April 2019 with an interest rate of 4.625% and the cash interest component (coupon) for the 2018/2023 convertible bond with an interest rate of 3.0%. The average cash interest rate in 2021 was 3.9% p.a. (2020: 4.0% p.a.).

The non-cash imputed interest on the convertible bonds is established by taking the difference between the below-market coupon and the comparable market interest rate at the time the convertible bonds were issued. The imputed interest on a capitalized property lease and non-current provisions and liabilities also resulted in non-cash interest expenses of €1.6 million, which are reported separately in the net financial result (2020: €2.9 million). The decrease compared to the previous year is primarily due to the non-recurrence of imputed interest on the purchase price liability for the acquisition of the shares in SGL Composites, which was paid in December 2020. Due to lower discount rates, the interest expense on pensions in fiscal 2021 was €2.4 million, well below 2020's expense of €4.1 million.

In addition to the non-cash expenses for amortization of refinancing costs, the "other financial result" includes currency effects on intragroup loans as well as other financial income and expenses. Overall, the other financial result was minus €3.7 million in 2021 (2020: minus €2.3 million). The amortization of refinancing costs resulted in expenses of €2.9 million in the year under review (2020: €2.6 million).

Group tax expense reduced

The income tax expense in the reporting period fell by €0.8 million to €6.2 million. The decrease results in particular from the reversal of tax liabilities and the reimbursement of payments made in previous years as a result of tax audits completed during the year. At €11.9 million, the current tax expense was almost at 2020's level. It results from the positive operating earnings of several Group companies (2020: €10.4 million).

For further information, please refer to Note 11 to the Consolidated Financial Statements.

Earnings attributable to non-controlling interests increased

Non-controlling interests in the consolidated net result (minority interests) comprise the share of net result attributable to minority shareholders. Minority interests in the SGL Carbon Group in fiscal 2021 related in particular to SGL Gelter and SGL A&R Immobiliengesellschaft in Lemwerder. At minus €0.5 million, the result attributable to non-controlling interests significantly improved compared to the previous year (2020: minus €2.8 million).

Discontinued operations

Earnings from discontinued operations after income taxes fell to €0.0 million (2020: €0.7 million). Earnings in fiscal 2020 were mainly due to the reversal of remaining provisions for taxes in connection with the sale of the Performance Products business unit, which was completed in 2017.

SGL Carbon generates a positive consolidated net result

Taking into account the non-controlling interests and the result from discontinued operations, SGL Carbon returned to a positive consolidated net result of €75.4 million in fiscal year 2021 (2020: minus €132.2 million). This is a clear sign that the Company's transformation has led to a stabilization of the financial position. Based on an average number of shares of 122.3 million, basic earnings per share for 2021 amounted to €0.62 (2020: minus €1.08). When determining diluted earnings per share, the new shares to be potentially created from the 2018/2023 convertible bond must be taken into account if a positive consolidated net result is achieved. Diluted earnings per share for the year under review amounted to €0.62 as well (2020: minus €1.08).

Net result SGL Carbon SE

SGL Carbon SE, the parent company of the SGL Group, reported net income of €196.5 million for fiscal year 2021 (2020: net loss of €65.6 million) in accordance with the German Commercial Code. The positive result arose primarily from the intra-group sale of an investment with a gain of €100.9 million by SGL Technologies GmbH, which has a profit and loss transfer agreement with SGL Carbon SE. Reversals of impairment losses on long-term financial assets and provisions for onerous contracts also contributed to the result. Despite the net income for the year and taking into account the accumulated loss carried forward from 2020 in the amount of €1,108.5 million, a total accumulated loss of €911.9 million resulted for 2021.

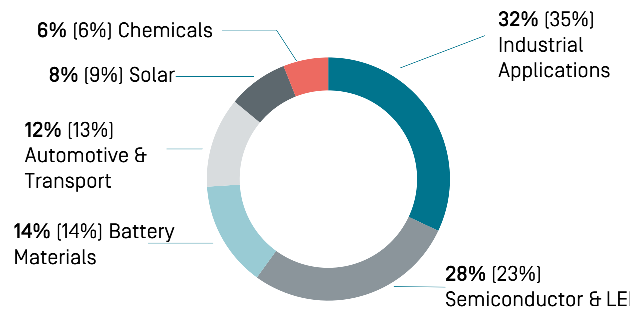
Segment reporting

Reporting segment Graphite Solutions

€m	2021	2020	Change
Sales revenue	443.6	407.5	8.9%
EBITDA pre	87.9	63.1	39.3%
EBIT pre	58.8	30.6	92.2%
EBIT	68.7	35.2	95.2%
EBITDA pre margin	19.8%	15.5%	-
Capital expenditures in intangible assets and property, plant and equipment	31.5	32.5	−3.1%
Headcount (Year end)	2,444	2,481	−1.5%

After a weak 2020 due to Covid-19, the Graphite Solutions (GS) business unit increased its sales revenue in 2021 by 8.9% to €443.6 million (2020: €407.5 million). The increase in revenue is based on the development of the important Semiconductor & LED and Automotive & Transport market segments, which together account for around 40% of the business unit's total revenue. Compared to the previous year, revenue with customers in the semiconductor & LED industry increased by 32.6% and in the automotive & transport sector by 5.0%. Revenue in the Battery Materials market segment also developed positively, increasing by 11.5% to €62.9 million (2020: €56.4 million). Revenue from industrial applications increased in particular in the second half of 2021, meaning total annual sales in this market segment remained almost constant compared to the previous year at €143.0 million (2020: €145.1 million). The sales revenue figures for the business unit GS showed an extremely positive trend in the reporting year, but were not yet able to reach pre-Covid-19 levels in all market segments.

Sales revenue by market segments 2021 (2020) **(GS)**



Incoming orders showed an upward trend, especially in the second half of the year, although the first positive effects on revenue will not be seen until 2022 due to the long production cycles.

Earnings developed very positively in 2021, with adjusted EBITDA rising by 39.3% to €87.9 million (2020: €63.1 million). The adjusted EBITDA margin increased accordingly from 15.5% to 19.8%. There was a positive impact both from volume effects, due to higher sales revenue in the business unit, and from margin effects related to the product and customer mix. Adjusted earnings of the business unit GS were affected by price increases in raw material purchasing and temporary increases in personnel costs to cover peak capacity periods, in particular in the second half of the year.

Adjusted EBITDA does not include positive non-recurring items and one-off effects of €9.9 million (2020: €4.6 million). These include income from the restructuring of pension obligations and release of jubilee provisions (€8.4 million), income from insurance compensation (€3.0 million) and expenses from an adjustment to the valuation of machine spare parts (€1.6 million).

Capital expenditures in the GS business unit totaled €31.5 million in 2021, slightly below the level in the previous year (2020: €32.5 million). Capital expenditures were primarily made in new systems and machines for our focus markets of semiconductors and battery materials, as well as in systems to further reduce emissions, at the Bonn site in particular.

Reporting segment Process Technology

€m	2021	2020	Change
Sales revenue	87.2	88.2	−1.1%
EBITDA pre	4.7	3.4	38.2%
EBIT pre	2.8	1.2	>100%
EBIT	3.1	−1.3	-
EBITDA pre margin	5.4%	3.9%	-
Capital expenditures in intangible assets and property, plant and equipment	0.4	0.4	0.0%
Headcount (Year end)	531	581	−8.6%

In 2021, the Process Technology (PT) business unit generated sales revenue of €87.2 million, slightly below prior year level (2020: €88.2 million), and were thus unable to benefit from the general economic upswing. The PT business unit produces mainly for customers in the chemical industry, which, as late-cyclical companies, again placed relatively few orders for the construction and maintenance of plant and machinery. Increased order intake from Asia did not fully compensate for weaker sales in Europe and North America. There were also delays due to the difficulty in obtaining raw materials, including steel.

Despite the continued weaker capacity utilization and increased commodity prices, the PT business unit improved its adjusted EBITDA to €4.7 million in 2021 (2020: €3.4 million). Cost savings effects from the transformation initiatives compensated for the negative effects. Accordingly, the adjusted EBITDA margin for PT increased from 3.9% to 5.4%.

Adjusted EBITDA does not include positive non-recurring items and one-off effects of €0.3 million (2020: minus €2.5 million). These include income from the restructuring of pension obligations and release of jubilee provisions (€1.7 million) and expenses from the restructuring program, including related consulting services (€1.4 million).

The business unit's capital expenditures amounted to €0.4 million in 2021 and were therefore at the previous year's level.

Reporting segment Carbon Fibers

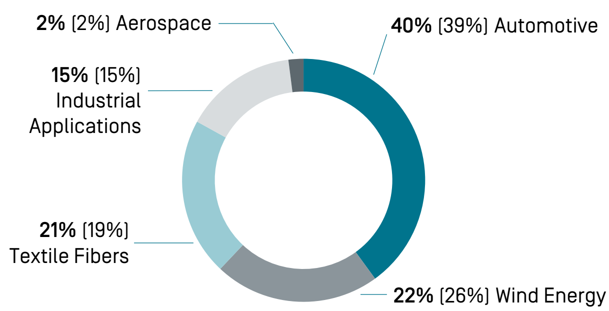
€m	2021	2020	Change
Sales revenue	337.2	303.9	11.0%
EBITDA pre	54.5	41.4	31.6%
EBIT pre	38.9	17.6	>100%
EBIT	30.9	−100.9	-
EBITDA pre margin	16.2%	13.6%	-
Capital expenditures in intangible assets and property, plant and equipment	7.7	8.4	−8.3%
Headcount (Year end)	1,108	1,147	−3.4%

After a difficult 2020 due to Covid-19, the Carbon Fibers (CF) business unit significantly increased its sales revenue in 2021 by 11.0% to €337.2 million (2020: €303.9 million). Almost all of the market segments in the business unit contributed to the increase in CF's sales revenue.

The automotive industry is the most important market for the CF business unit, accounting for approximately 40% of total sales revenue. Compared to the previous year, sales with automotive customers increased by 14.6% to €134.1 million (2020: €117.0 million). Despite temporary production shutdowns in the automotive industry in the second half of 2021 due to the shortage of semiconductors, revenue from this sector was close to the figure for the same period in the previous year. This is mainly because our products are more likely to be required in higher-priced vehicle models, which mostly continued to be produced for the most part even during the downtimes in the automotive industry. Furthermore, incoming orders from one of CF's most important automotive customers remained constant, so the business unit was working at close to maximum capacity for the production of carbon fibers. Due to the high capacity utilization, not all inquiries from the wind industry were able to be accepted, so sales revenue in this market segment fell by 6.1% to €74.6 million in 2021 (2020: €79.5 million).

The Textile Fibers and Industrial Applications market segments contributed €71.3 million (22.3% more than 2020's value of €58.3 million) and €51.4 million (16.6% more than 2020's value of €44.1 million) respectively to CF's revenue growth.

Sales revenue by market segments 2021 [2020] **[CF]**



Adjusted EBITDA in the CF business unit improved significantly year-on-year by 31.6% to €54.5 million (2020: €41.4 million). The pleasing development in earnings is essentially due to the sales-related higher utilization of CF capacities and to product mix effects. The €5.5 million rise in result from investments accounted for At-equity, deriving mainly from the BSCCB joint venture with Brembo for the production of carbon-ceramic brake discs, also contributed to CF's success. Conversely, increases in raw material prices, especially for acrylonitrile, weighed on earnings performance, as these could only be passed on to customers in part or with a delay. The energy-intensive business unit had to contend with additional headwinds due to drastically increased energy prices as well as freight and logistics costs. In the second half of 2021 in particular, earnings performance was hit by higher costs for raw materials, energy and transport, which were not fully offset by savings from the transformation initiatives.

Adjusted EBITDA does not include positive non-recurring items and one-off effects of €1.5 million (2020: minus €2.3 million), which mainly include income from the restructuring of pension obligations and release of jubilee provisions (€1.6 million). EBIT also includes amortization of minus €9.5 million in relation to purchase price allocation (2020: minus €116.3 million, including impairment)

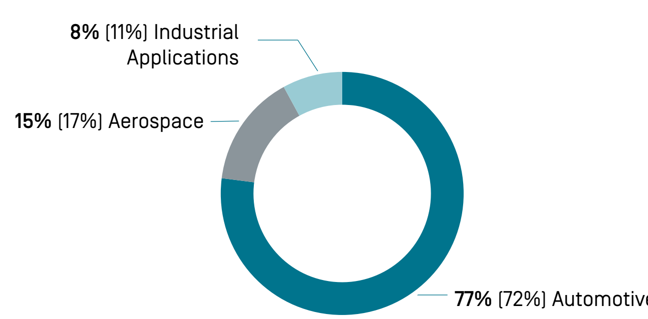
In the year under review, capital expenditures in the CF business unit amounted to €7.7 million and were therefore slightly below the previous year's level. The main focus in 2021 was on maintenance investments.

Reporting segment Composite Solutions

€m	2021	2020	Change
Sales revenue	122.5	88.6	38.3%
EBITDA pre	12.1	–4.7	-
EBIT pre	4.8	–10.9	-
EBIT	4.8	–9.3	-
EBITDA pre margin	9.9%	–5.3%	-
Capital expenditures in intangible assets and property, plant and equipment	8.2	7.2	13.9%
Headcount (Year end)	416	434	–4.1%

The Composite Solutions (CS) business unit continued its upward trend in 2021, with sales revenue increasing by 38.3% to €122.5 million. The most important market segment for this business unit is the automotive industry, which accounts for around three quarters of its sales revenue. Increased orders from the automotive industry, such as for leaf springs for electric vehicles, as well as the start of projects for battery cases, contributed to the increase in sales revenue at CS. Overall, revenue from automotive industry customers increased by 48.6% to €94.6 million in 2021 (2020: €63.7 million). Other important market segments are the aviation industry, which contributed revenue of €17.8 million (20.2% higher than the 2020 figure of €14.8 million) and other industrial applications, which contributed €10.1 million (2020: €10.1 million).

Sales revenue by market segments 2021 [2020] **[CS]**



In line with the extremely positive business development, the CS business unit was able to significantly improve its financial performance. Adjusted EBITDA increased from minus €4.7 million in 2020 to €12.1 million in 2021. The adjusted EBITDA margin was 9.9%. In addition to strong sales growth in all product lines, the rise in earnings in the business unit CS was attributable to increased capacity utilization, combined with the focus on more profitable product lines and cost savings from the transformation program.

The adjusted EBITDA of CS does not include positive non-recurring items and one-off effects of €0.6 million (2020: €2.1 million). These include income from the restructuring of pension obligations and release of jubilee provisions (€1.0 million) and expenses from the restructuring program. including related consulting services (€0.3 million). In addition, EBIT includes effects from the update of the purchase price allocation of minus €0.6 million (2020: minus €0.5 million).

At €8.2 million, capital expenditures in the CS business unit were slightly higher than in the previous year (2020: €7.2 million). Investments were focused in particular on the expansion of the production sites in the Innkreis (Austria) and Arkadelphia (US).

Reporting segment Corporate

€m	2021	2020	Change
Sales revenue	16.5	31.2	–47.1%
EBITDA pre	–19.2	–10.4	84.6%
EBIT pre	–25.6	–19.0	34.7%
EBIT	2.9	–17.4	–116.7%
Headcount (year end)	181	194	–6.7%

As expected, sales revenue in the Corporate reporting segment was significantly lower in 2021 than in 2020. The main reasons for the fall from €31.2 million to €16.5 million were lower rental income, due to the sale of properties not required for operations, and lower income from services for external third parties.

Adjusted EBITDA of the segment for 2021 fell to minus €19.2 million (2020: minus €10.4 million) due to the lower income and the increased variable remuneration expenses incurred as a result of the significant improvement in consolidated earnings during the year. Significant savings from the restructuring program, with the streamlining of the Corporate functions from 20 departments to nine and the integration of the central research department into the operational business units, had a compensating effect.

Adjusted EBITDA does not include positive non-recurring items and one-off effects of €28.5 million (2020: €1.6 million). These include income from the sale of two properties not required for operations (€19.7 million), income from the restructuring of pension obligations and release of jubilee provisions (€8.2 million) and expenses from the restructuring program (€9.3 million).

Financial position

Financial management

SGL Carbon's financial management is conducted centrally in order to manage liquidity, interest rate and exchange rate risk as best as possible, to ensure compliance with financial covenants, to optimize borrowing costs and to take advantage of economies of scale. The activities of financial management essentially include cash and liquidity management, Group financing via bank and capital market products, financing activities and money supply for Group companies, customer credit management and the management of interest rate and currency risks.

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

Liquidity management

Operational liquidity management is coordinated and controlled centrally. Control is carried out in close cooperation with the national and international subsidiaries. To the extent of that which is permitted by legal and economical frameworks, the majority of cash in freely convertible currencies is concentrated in the Group holding company, SGL Carbon SE, using global cash pooling structures and is used for intragroup liquidity balancing between the Group companies. The majority of internal trading and clearing processes are automated via the centrally managed in-house cash center and processed without the need of external bank accounts. Here, the Group holding company acts as a clearing center for participating Group companies. The number of companies participating in the central in-house cash center was 30 at the end of 2021 (2020: 33). Where permitted, the weekly payments of supplier invoices are also processed via the global in-house cash center, meaning the Group's global outflow of liquidity is managed centrally. In the 2021 fiscal year, an average of approximately 99% (2020: 89%) of global supplier payments were processed centrally.

In order to ensure that the standards achieved are maintained over the long term, SGL Carbon works with KPIs (key performance indicators), which are used to regularly measure and continuously optimize the results achieved in terms of the degree of standardization of payment transactions and the associated average costs.

In addition to annual financial planning — which usually extends over a period of five years — liquidity planning is carried out at short-term intervals of one day to one year. The combination of financial and liquidity planning, the free liquidity available, the unutilized credit line and other measures ensure that SGL Carbon has sufficient liquidity reserves at all times. As an additional element of liquidity management, the Company has concluded factoring agreements under which trade receivables are regularly sold to factoring partners. The Company can react flexibly to cash flow fluctuations during the year and meet all payment obligations in good time at all times.

Cash and cash equivalents are invested taking into account the provision of sufficient liquidity for cash flow fluctuations during the fiscal year and the financial stability and systemic importance of SGL Carbon's business partners. In addition, the performance and the success of cooperation with business partners over recent years are taken into account in investing funds.

Market price risks

When necessary, SGL Carbon uses both primary and derivative financial instruments to limit financial market price risks, in particular exchange rate and interest rate risks. Derivative financial instruments are only used to minimize and control financial risks. In terms of currency management, SGL Carbon concentrates on hedging the transaction risk from expected future operating cash flows. Here, the following key risk positions are considered:

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

Foreign currency forwards and, in some cases, standardized (so-called “plain vanilla”) option transactions are regularly used as hedging instruments to hedge against currency risks. Various currency hedging transactions were concluded in 2021 to hedge the FX rates risk for that fiscal year and the following year. Due to the use of exclusively fixed-interest financing instruments, there is currently no need for interest rate hedging. Therefore, no interest rate hedges were carried out in 2021. In individual cases, energy or raw material price derivatives are also concluded to hedge against price risks. This is also done by associated companies. Details on this and the impacts of hedging transactions can be found in the Notes to the Consolidated Financial Statements Note 27.

Debt financing analysis

Group financing is based on the strategic business plans of the business units and central Group planning. The financing of SGL Carbon consists primarily of the outstanding amount of the 2018/2023 convertible bond of €151.3 million (coupon: 3.0%, maturing in September 2023) and the corporate bond 2019/2024 of €250.0 million (coupon: 4.625%, maturing in 09/2024) and various bilateral loans totaling €25.9 million, some of which have remaining terms until 2029. An unutilized credit line of €175.0 million was also available as of the reporting date. The term of the credit line was extended by one year until 01/2024 by exercising an extension option. The amount of the credit line and the other conditions remain unchanged.

At the end of the 2021 fiscal year, the Company had available credit lines for working capital and capital expenditure totaling €175.0 million (2020: €175.0 million). Cash and cash equivalents totaled €220.9 million as of December 31, 2021 (2020: €141.8 million).

Selected real estate, IT equipment and vehicles have been partially financed through operating leases in recent years. Details can be found in Note 24 in the Notes to the Consolidated Financial Statements.

SGL Carbon commissions the rating agencies Moody's and Standard & Poor's to create an issuer rating to support investors in their credit assessment.

The commissioned rating agencies have assigned the following Group ratings to SGL Carbon:

Rating agency	Rating	Date of rating
Moody's	Caa1 (Outlook: positive)	August 2021
Standard & Poor's	CCC+ (Outlook: stable)	May 2021

These credit rating from the rating agencies enable access to the capital market for potential issuances of capital market instruments.

Significantly improved free cash flow from continuing operations

The Cash Flow Statement shows the change in SGL Carbon's cash and cash equivalents in the reporting period. The cash inflows and outflows are then classified according to operating activities, investing activities and financing activities. Free cash flow is defined as the cash flow from operating activities less cash flow from investing activities. To provide a more meaningful presentation of the cash flow from operating activities, the option under IAS 7.33 was exercised and interest paid are shown as a component of the cash flow from financing activities starting from 2021. The previous year's presentation was adjusted accordingly, as a result of which the cash flow from operating activities improved by €20.2 million and the cash flow from financing activities deteriorated accordingly. The cash and cash equivalents reported on the Cash Flow Statement comprises the Balance Sheet item cash and cash equivalents. In 2020, the Cash Flow Statement was adjusted for the discontinued operations of Performance Products (PP), which are reported separately in total.

The free cash flow from continuing operations improved significantly to €111.5 million compared to 2020's figure of €93.9 million or €92.0 million including the free cash flow from discontinued operations. Details are included in the Consolidated Cash Flow Statement in the Consolidated Financial Statements.

Liquidity and capital resources

€m	2021	2020	Change
Cash flow from operating activities			
EBIT	110.4	−93.7	-
Non-recurring items and one-off effects	−30.7	113.2	-
Depreciation/amortization expense	60.3	73.3	−17.7%
Changes in working capital	18.3	35.9	−49.0%
Income taxes paid	−12.2	−5.6	>100%
Miscellaneous items	−31.7	1.1	-
Cash flow from operating activities - continuing operations	**114.4**	**124.2**	**−7.9%**
Cash flow from investing activities			
Payments to purchase intangible assets and property, plant and equipment	−50.0	−55.8	−10.4%
Dividend payments and capital repayments from investments accounted for At-Equity	15.8	11.3	39.8%
Proceeds from the sale of intangible assets and property, plant & equipment	31.3	14.2	>100%
Cash flow from investing activities - continuing operations	**−2.9**	**−30.3**	**−90.4%**
Free cash flow	**111.5**	**93.9**	**18.7%**
Changes in time deposits	0.0	4.0	-
Cash flow from financing activities - continuing operations	−33.9	−86.5	−60.8%
Free cash flow from discontinued operations	0.0	−1.9	-
Effect of foreign exchange rate changes and other changes	1.5	−0.8	-
Cash and cash equivalents at beginning of year	141.8	133.1	6.5%
Cash and cash equivalents at end of year - continuing and discontinued operations	**220.9**	**141.8**	**55.8%**
Net change in total liquidity - continuing and discontinued operations	**79.1**	**4.7**	**>100%**

Cash flow from continuing operating activities of €114 million

In the 2021 fiscal year, a cash flow from operating activities of continuing operations of €114.4 million was achieved (2020: €124.2 million). This results from the improved operational performance. The decrease in cash flows compared to 2020 is mainly due to changes in net working capital, which fell by €18.3 million and therefore not to the same extent as in 2020 (€35.9 million). In addition, the taxes paid increased to €12.2 million due to the improved financial performance (2020: €5.6 million).

Cash flow from continuing investing activities

At €50.0 million, capital expenditures in the 2021 fiscal year were below 2020's level (€55.8 million) due to a cautious investment policy. Further disclosures on capital expenditure are given in the "Capital expenditure, depreciation and amortization" section.

The dividend payments received from investments accounted for using the equity method of €15.8 million (2020: €11.3 million) increased significantly compared to the previous year due to the good financial performance of the BSCCB joint venture.

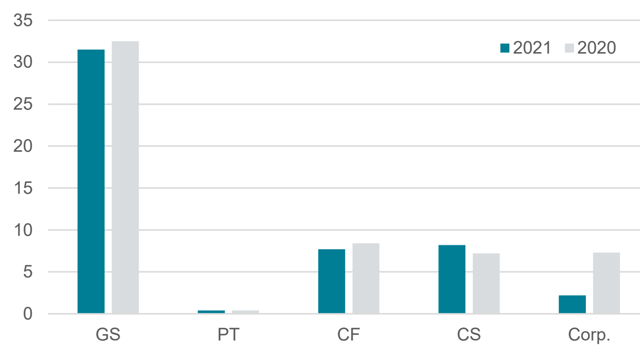
Proceeds from the disposal of intangible assets and property, plant and equipment in the 2021 fiscal year included, in particular, the net cash proceeds from the sale of two properties not required for operations of €30.6 million. The cash flow in 2020 included the net proceeds from the sale of land and buildings at the Lemwerder site no longer used by SGL Carbon.

Due to the reluctance to invest and the cash proceeds from the sale of land and buildings, the cash flow from investing activities improved significantly from minus €30.3 million in 2020 to minus €2.9 million in the reporting year.

Capital expenditure, depreciation and amortization

€m	2021	2020
Capital expenditures in intangible assets and property, plant and equipment	–50.0	–55.8
Depreciation/amortization expense	60.3	73.3

Capital expenditures by business unit in € million



The payments for capital expenditures in the 2021 fiscal year mainly related to the following projects:

- Expansion of production capacities for composite battery enclosures in Innkreis (Austria) and Arkadelphia (US)
- Measures to improve environmental protection in Bonn
- Extension of vertical integration in the manufacture of graphite anode material in Nowy Sacz (Poland)
- Increase in production capacities for fuel cells components in Meitingen (Germany)
- Capacity expansion of machining equipment in Shanghai (China)
- Capacity increase for SiC-coated isostatic graphite in St. Marys (US).

Details on the capital expenditures of the reporting segments can be found in the disclosures of the respective reporting segments.

Cash flow from continuing financing activities

In the reporting year, the net cash used in continuing financing activities amounted to €33.9 million (2020: €86.5 million). In the 2021 fiscal year, net cash used to repay financial debt amounted to €1.1 million (2020: cash provided of €2.7 million), which comprised of the proceeds for a new bank loan of €13.0 million (2020: €6.7 million) as well as the repayment of existing bank loans in the amount of €6.1 million (2020: €4.0 million) and the early repurchase of convertible bonds with a total nominal value of €8.0 million. Interest payments of €19.5 million decreased compared to the previous year (2020: €20.2 million), as did the repayment of lease liabilities of €9.5 million (2020: €16.0 million).

In 2020, cash used for the acquisition of the 49% stake in SGL Composites US (formerly SGL ACF) from BMW Group amounted to €51.4 million.

The other financing activities included in particular dividend payments to non-controlling interests of fully consolidated subsidiaries in the amount of €3.1 million (2020: €0.8 million).

Free cash flow from discontinued operations

Free cash flow from discontinued operations comprises the cash used in investing activities, which also includes proceeds and payments in connection with the sale of the former PP and AS business units. There were no payments related to discontinued operations in fiscal year 2021. The prior-year period cash used in investing activities for discontinued operations in the amount of €1.9 million related to payments for taxes in connection with the sold PP activities.

Cash and cash equivalents increased significantly

The available cash and cash equivalents increased mainly due to the positive free cash flow to €220.9 million at the end of the 2021 fiscal year (2020: €141.8 million).

Contractual payment obligations

The most important contractual payment obligations comprise the repayment of debt, purchase obligations and lease obligations. At the end of 2021, the obligations from financial debt totaled a nominal €427.2 million (2020: €428.3 million). These essentially consist of the corporate bond issued in April 2019 in the amount of €250.0 million (maturity 09/2024) and the outstanding amount to third parties of the convertible bond issued in 2018 with a nominal value of €151.3 million. The outstanding amount is either to be repaid in September 2023 unless the bondholders exercise their conversion rights, creating of up to 11.6 million new bearer shares.

Financial obligations from trade payables, derivative financial instruments, lease liabilities and other financial liabilities amounted to €160.9 million as of December 31, 2021 (2020: €120.1 million), of which €32.0 million (2020: €29.8 million) had a remaining term of more than one year. Income tax liabilities and other liabilities amounted to an additional €38.4 million at the end of 2021 (2020: €42.5 million). Further details can be found in the Notes to the Consolidated Financial Statements under Note 24.

As of the reporting date, commitments from purchase orders in connection with capital expenditure projects totaled €9.2 million (2020: €4.3 million).

Net assets

The following table shows selected key figures for the Group's net assets:

Overview of net assets

€m	Dec. 31, 21	Dec. 31, 20
Total assets	1,376.3	1,258.8
Equity attributable to the shareholders of the parent company	371.5	220.7
Equity ratio	27.0%	17.5%
Working capital	341.2	351.8
Capital Employed	996.6	999.7
Return on capital employed (ROCE $_{EBIT\ pre}$)	8.0%	1.8%
Net financial debt	206.3	286.5
Leverage Ratio	1.5	3.1
Gearing	0.56	1.30

Balance sheet structure

€m	Dec. 31, 21	Dec. 31, 20	Change
ASSETS			
Non-current assets	666.6	658.7	1.2%
Current assets	709.7	600.1	18.3%
Total assets	**1,376.3**	**1,258.8**	**9.3%**
EQUITY AND LIABILITIES			
Equity attributable to the shareholders of the parent company	371.5	220.7	68.3%
Non-controlling interests	9.3	12.2	–23.8%
Non-current liabilities	742.3	823.9	–9.9%
Current liabilities	253.2	202.0	25.3%
Total equity and liabilities	**1,376.3**	**1,258.8**	**9.3%**

Development of total assets

Non-current assets increased marginally in the reporting year to €666.6 million (2020: €658.7 million). Significant increases result from exchange rate differences of €22.3 million and from the reversal of an impairment loss of a property leasing contract of €11.9 million.

The capital expenditure volume of €50.0 million in the 2021 fiscal year was well below the level of depreciation on fixed assets (including amortization from the purchase price allocation) of €70.8 million and therefore led to a decrease in fixed assets of €20.8 million (2020: decrease of €28.3 million). In the 2020 fiscal year, an impairment had reduced intangible assets by €19.6 million and property, plant and equipment by €86.9 million. On the other hand, foreign currency translation, particularly due to the strong US dollar, increased non-current assets by €22.3 million (2020: decrease by €28.9 million). The investments accounted for At-Equity decreased by €1.7 million, as the cash flow hedge valuation of commodity price derivatives as of the reporting date for an investment accounted for At-Equity led to a reduction in other comprehensive income of equity (2020: reduction of €0.5 million).

Current assets increased by €109.6 million to €709.7 million (2020: €600.1 million). Adjusted for currency translation effects, current assets increased by €92.2 million. The significant increase was primarily due to the increase in cash and cash equivalents by €79.1 million or 55.8% to €220.9 million and in inventories, which increased by 10.7% or by €15.1 million after adjusting for currency effects. In addition, trade receivables and contract assets increased slightly by €0.5 million or 0.7% due to billing. Adjusted for currency effects, the operating decline was €1.0 million.

Working capital

€m	Dec. 31, 21	Dec. 31, 20	Change
Inventories	273.8	247.3	10.7%
Trade receivables and contract assets	182.6	182.1	0.3%
Trade payables and contract liabilities	−115.2	−77.6	48.5%
Working capital	**341.2**	**351.8**	**−3.0%**

The reported net working capital decreased as of December 31, 2021 by 3.0% or €10.6 million to €341.2 million (2020: €351.8 million) due to the significant reduction in factoring of €11.3m. Due to the rising production volume, inventories increased significantly by €26.5 million and trade payables increased by €37.6 million, which contributed overall to the reduction in net working capital. Conversely, foreign currency effects and the accounting related to IFRS 15 led to an increase in net working capital. Adjusted for these non-cash impacts, the operational reduction in net working capital amounted to €18.3 million (2020: reduction of €35.9 million).

As a consequence of the impacts described above, total assets as of December 31, 2021 increased by €117.5 million or 9.3% to €1,376.3 million (2020: €1,258.8 million).

Equity and liabilities

Equity attributable to shareholders improved significantly by €150.8 million or 68.3% to €371.5 million as of December 31, 2021 (2020: €220.7 million). This increase is essentially based on the positive net result of €75.4 million. Other effects that increased equity related to the adjustment of pension provisions in Germany and the US of €53.0 million after tax effects (2020: minus €29.6 million) and positive currency effects of €26.2 million (2020: decrease of €36.1 million), mainly due to the stronger US dollar and the Chinese renminbi.

Overall, these effects significantly improved the equity ratio (excluding non-controlling interests) to 27.0% at the end of the reporting year (2020: 17.5%).

	Equity attributable to the shareholders of the parent company	Non-controlling interests	Total equity
December 31, 2020	**220.7**	**12.2**	**232.9**
Dividends	**0.0**	**−3.1**	**−3.1**
Net result for the year	75.4	0.5	75.9
Other comprehensive income	75.5	0.3	75.8
Comprehensive income	**150.9**	**0.8**	**151.7**
Other equity changes	−0.1	−0.6	−0.7
December 31, 2021	**371.5**	**9.3**	**380.8**

Non-current liabilities decreased by €81.6 million to €742.3 million (2020: €823.9 million). The pension provisions included in non-current liabilities decreased significantly from €340.1 million at the end of 2020 by €93.0 million to €247.1 million as of December 31, 2021. The reduction resulted in particular from several actively initiated measures in Germany, the US and France in order to reduce the pension benefit obligations on the balance sheet or to remove them completely. On the one hand, the introduction of a capital option for active and former beneficiaries of a pension plan in Germany led to a reduction in pension provisions of €17.2 million. The adjustment of the projected pension increase in Germany had an additional effect of €8.6 million. On the other hand, the funding of pension plans through the allocation of plan assets in the US and France, the plan settlement of current pension entitlements of pensioners in the US as well as the plan curtailment for active employees in the US decreased pension provisions by a further €28.1 million. In addition, pension provisions decreased by €33.0 million due to the adjustment of the actuarial discount rates to the increased long-term interest rate environment in Germany by 0.5 percentage points to 1.1% and by 0.3 percentage points to 2.9% in the US.

Current liabilities increased significantly by €51.2 million to €253.2 million at the end of the 2021 fiscal year (2020: €202.0 million), in particular due to the €37.6 million increase in trade payables. Also, current provisions increased by €15.7 million due to the addition to provisions for variable management remuneration, which increased by €19.4 million. On the other hand, the usage of restructuring provisions reduced other current provisions by €6.6 million.

The trade payables included in current liabilities increased significantly by €37.6 million to €115.2 million (2020: €77.6 million), which is due to the expansion of business. Adjusted for currency effects of €3.3 million, trade payables increased by €34.3 million.

Net financial debt

€m	Dec. 31, 21	Dec. 31, 20	Change
Carrying amount of current and non-current financial liabilities	418.4	414.6	0.9%
Remaining imputed interest for the convertible bond	4.8	8.0	−40.0%
Accrued refinancing cost	4.0	5.7	−29.8%
Total financial debt (nominal amount)	**427.2**	**428.3**	**−0.3%**
Total liquidity	**220.9**	**141.8**	**55.8%**
Net financial debt	**206.3**	**286.5**	**−28.0%**

At the end of 2021, total borrowings of €427.2 million were broken down as follows:

- Corporate bond 2019/2024 of €250.0 million
- Convertible bond 2018/2023 of €151.3 million
- Liabilities to banks of €25.9 million.

For the reconciliation to the carrying amount of €418.4 million recognized on the balance sheet, the balance of the remaining imputed interest for the outstanding convertible bond of minus €4.8 million and the refinancing costs totaling minus €4.0 million are still to be recognized in the financial debt mentioned above. Financial debt are broken down by maturity in the Consolidated Balance Sheet and reported accordingly under the items "Interest-bearing loans" and "Current portion of interest-bearing loans". Changes in financial debt are explained in the section Net cash used financing activities.

Liquidity consists of the items "Cash and cash equivalents" and increased to €220.9 million as of December 31, 2021 (2020: €141.8 million), mainly due to the positive free cash flow of €111.5 million. The balance of cash and cash equivalents and total financial debt resulted in net financial debt for SGL Carbon of €206.3 million at the end of 2021 (2020: €286.5 million). This was €80.2 million lower than on December 31, 2020.

The leverage ratio as the ratio of net financial debt to adjusted EBITDA was 1.5 as of December 31, 2021 (2020: 3.1) and has more than halved due to the improved earnings situation as well as lower net financial debt.

The gearing as the ratio of net financial debt to equity of the shareholders of the parent company was 0.56 as of December 31, 2021 (2020: 1.30) and therefore also decreased significantly.

Return on capital employed (ROCE)

€m	2021	2020
Capital Employed		
Intangible Assets incl. Goodwill	42.6	53.4
Property, plant and equipment	558.3	538.3
Investments accounted for At-Equity	54.5	56.2
Inventories	273.8	247.3
Trade receivables and contract assets	182.6	182.1
Trade liabilities and contract liabilities	−115.2	−77.6
Capital employed as of 31.12. of the financial year	**996.6**	**999.7**
Capital employed as of 31.12. of the prior year	**999.7**	**1,219.8**
Average capital employed	**998.2**	**1,109.8**
ROCE $_{\text{EBIT pre}}$	8.0%	1.8%

The return on capital employed (ROCE $_{\text{EBIT pre}}$) increased significantly to 8.0% (2020: 1.8%). This results from the improved financial performance in connection with a lower average capital employed.

Assets not recognized and off-balance sheet financing instruments

Various assets of SGL Carbon are not included on the Balance Sheet. As a result of recognition pursuant to IFRS 16, the major leased, pledged or rented assets have been included on the Balance Sheet since the 2019 fiscal year. Since the adoption of IFRS 16, the off-balance sheet financed assets have been leases for IT equipment, motor vehicles, photovoltaic systems and other property, plant and equipment of low value or those that are only used for a short period of time.

The volume of these non-recognized assets or off-balance-sheet financing instruments has no significant impact on the presentation of the net assets, financial position and results of operations. Further details can be found in this regard in the Notes to the Consolidated Financial Statements under Note 25.

The unrecognized intangible assets also include the Company's brand name and the band name of SGL Carbon's products. In addition, SGL Carbon's long-standing supplier and customer relationships are of considerable value. On the one hand, they stabilize the course of business and make the Company less dependent on short-term market fluctuations. And on the other hand, this intensive cooperation enables joint research and development projects in which the expertise and development capacities of the companies involved are bundled.

Funding status of pension obligations

As of December 31, 2021, the Group's pension benefit obligations amounted to €392.9 million compared to €469.8 million at the end of 2020. The funding status of the pension obligation as the difference between the present value of the pension benefit obligations and the fair value of plan assets was minus €244.3 million as of December 31, 2021 compared to minus €336.6 million as of December 31, 2020. The change is mainly due to the increase in pension interest rates in Germany and the US, the introduction of a capital option for certain pension schemes in Germany, as well as the funding and settlement of a US pension plan and the partial funding of French plans. The actuarial losses from defined benefit plans recognized in other comprehensive income within equity decreased by €53.0 million after taxes. The plan assets used to finance pension benefit obligations increased slightly due to company payments from €133.2 million at the end of the previous year to €148.7 million as of December 31, 2021, also due to the stronger US dollar exchange rate.

Further information on the impact on the Balance Sheet and the Statement of Profit or Loss and Other Comprehensive Income as well as on pensions and similar obligations can be found in Note 22 of the Notes to the Consolidated Financial Statements.

Overall assessment of fiscal year 2021 by the Board of Management

A good start to the reorientation

The strategic and financial reorientation of SGL Carbon shaped the 2021 fiscal year. Not only were important milestones achieved in the implementation of the transformation, but our net assets, financial position and results of operations also significantly improved.

By the end of the year, more than 700 initiatives to transform SGL Carbon into a performance-oriented and sustainable Group had already been implemented, with annual cost savings of around €120 million. The targets originally set were therefore achieved a year earlier than planned. In the course of the transformation, four business units responsible for results were also defined and leaner structures and processes were introduced. Clear strategies and objectives have been developed for all four new business units. Further information on the transformation can be found in the "Objectives and Strategies" chapter and in the Economic Report.

On the basis of the successful transformation and the improvement in the economic environment, in particular in our focus markets – the automotive industry, renewable energies such as wind power, LEDs and solar, as well as the semiconductor industry – SGL Carbon not only significantly improved its sales revenue, but also saw an even stronger rise in its earnings performance. With consolidated sales revenue increasing by 9.5% to €1,007.0 million, adjusted EBITDA – which serves as an indicator of the Group's operating performance –

increased by 50.9% to €140.0 million. It should be noted that 2020 was burdened by the impacts of the coronavirus pandemic.

The significant improvement in revenue and profit also reflects the resilience of our business model in 2021. In the second half of 2021, the sometimes volatile availability of raw materials and dynamic price increases for raw materials, energy, as well as transport and logistics services weighed on the operating performance of the business units. Increased factor costs were partially passed on to our customers and/or compensated by the cost savings generated in the course of the transformation.

Consolidated net result was clearly positive at €75.4 million, compared to minus €132.2 million in the previous year. Beside the improved operating earnings situation, one-off effects and non-recurring items of in total €30.7 million (2020: minus € 113.2 million) played a major role in this development. In addition to income from the sale of properties not required for operations at the sites in Meitingen (Germany) and Gardena (USA), this mainly includes positive one-off effects from the restructuring of pension obligations in the Group.

Our liquidity position and net financial debt also improved in fiscal 2021. Parallel to the implementation of the transformation program, the company's focus was on securing liquidity. In addition to restraint in capital expenditure and a slight reduction in net working capital, the inflow of €30.6 million in liquidity from the sale of land made a major contribution to the € 17.6 million increase in free cash flow to €111.5 million. Consequently, net financial debt improved from €286.5 million to €206.3 million.

Against the background of positive revenue and earnings performance in the first half, on July 13, 2021 we made an upward revision to the outlook we had given at the start of the year. The outlook for Group sales revenue was raised from €920-970 million to approximately €1,000 million. In addition, the outlook for adjusted EBITDA was increased from €100–120 million to €130–140 million.

Original objectives for the fiscal year exceeded

Amid an economic and social environment that continued to be shaped by the coronavirus pandemic and increasing challenges on the raw material and energy markets in the second half of 2021, we achieved our objectives for the 2021 fiscal year.

In addition to our transformation and cost savings targets, we achieved our forecast, in particular for SGL Carbon's key performance indicators. The table below provides an overview of the forecast and actual figures.

	Actual data 2020	Outlook for 2021 as published in the 2020 Annual Report	Updated outlook for 2021	Actual data for fiiscal year 2021
Sales revenue	€919.4 million	€920-970 million	Approx. €1,000 million	€1,007.0 million
EBITDA pre	€92.8 million	€100-120 million	€130-140 million	€140.0 million
ROCE (EBIT pre)	1.8%	Slight improvement before non-reccuring items	significant improvement	8.0%
Net result	minus €132.2 million	Between minus €20 million and €0 million	slightly positive	€75.4 million
Free cash flow	€93.9 million	Approx. €20 million	> €20 million	€111.5 million
Capital expenditures	€55.8 million	At the level of depreciation and amortization	At the level of depreciation and amortization	€50.0 million (depreciation and amortization: €60.3 million)

ESG aspects and key figures moved further into focus

In the past fiscal year, we updated our ESG strategy and set ourselves ambitious targets, in particular to reduce our carbon footprint, improve occupational safety and achieve greater responsibility within the supply chain.

As a manufacturing Company with locations in different parts of the world, we want to make the best possible use of the options available to us to contribute toward environmental and climate protection and toward a responsible economy. The development and manufacture of sustainable products, compliance with laws and standards and the fair and responsible treatment of employees and stakeholders benefit the society in which we operate, but also SGL Carbon itself. We are convinced that good sustainability performance reduces risks for our business model in the long term and opens up new business opportunities for us. Against this background, we updated our ESG strategy in 2021 and linked it even more closely to our operational business activities.

The ESG aspects that are material for our business as well as detailed information about our sustainability strategy and progress can be found in the CSR Report that forms part of this Annual Report.

The financial development of SGL Carbon in 2021 and the success and acceptance of the transformation program have shown that our reorientation has us on the right track. For the current fiscal year of 2022, it is important to stabilize financial performance, even in the face of emerging challenges, and to lay a solid foundation for future growth. We are focusing on the existing business and are improving our performance in this regard. We are pursuing growth options in sustainable future markets such as electromobility, renewable energy and the semiconductor industry in a targeted manner, taking sustainable aspects into account.

Opportunities and Risks Report

Risk strategy

SGL Carbon's risk strategy is aimed at ensuring the company's long-term continued existence as a going concern and attaining the planned financial targets and outlooks. In addition to the early identification of risks, opportunities for profitable growth should also be systematically recognized and used. Our aim is to avoid or limit risks through suitable control measures. Where possible and economically viable, risks should be transferred to third parties, for example by taking out insurance policies. Only viable risks are taken that are proportionate to the expected opportunities. One of the most important priorities is that the company has sufficient liquidity reserves available at all times.

Risk management system

The principles of risk management are anchored in a Group-wide guideline and ensure the uniform implementation of the risk strategy. Therefore, the requirements for the early risk detection system in accordance with the German Stock Corporation Act [*Aktiengesetz*] have also been complied with. The management of non-financial risks has also been integrated into the risk management system.

At Group level, the Chief Financial Officer [CFO] is responsible for the effectiveness and adequacy of the risk management system. Organizationally, the Management Board is supported by Group Controlling, which coordinates the risk management process at Group level. Group Controlling defines principles, processes, reporting channels and responsibilities, ensures that the Group-wide risk management guidelines are up-to-date and continuously develops the risk management system. The primary responsibility for opportunities and risks lies with the heads of the business units and central functions as well as other organizational units.

The risk officers carry out a comprehensive risk assessment once a year as part of the five-year plan. Here, individual risks exceeding defined value limits are systematically recognized and measured and then uniformly aggregated. The risk inventory covers the entire planning horizon of five years. Opportunities, on the other hand, are only recognized for the current year. Measures to counteract identified risks are also specified. The risk assessment is then updated on a quarterly basis. Material new risks or risks that threaten the company as a going concern are immediately reported to the Board of Management or Group Controlling via ad hoc reporting, regardless of the defined reporting intervals.

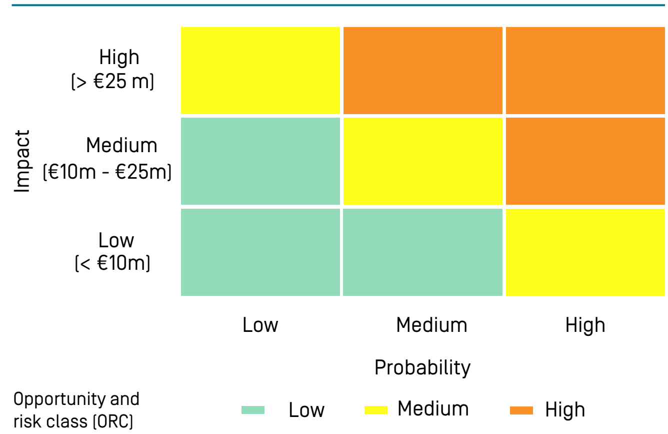
Group Controlling reports the aggregated risks to the entire Board of Management on a quarterly basis. The Supervisory Board is also regularly informed at meetings about the material risks within the Group and the business units.

The risk management system is monitored by the Supervisory Board via the Audit Committee. In addition, the auditor assesses the early risk detection system as part of the audit of the consolidated and annual financial statements. The regulatory changes of IDW PS 340 n.F. valid for the fiscal year 2021 are taken into account.

Opportunity and risk assessment

Opportunities and risks are measured uniformly according to the specifications of the Group's risk management. We consider risks to be any negative deviation from the budgeted results and opportunities to be positive deviations beyond the budgeted results.

Classification chart



The identified opportunities and risks are assessed based on the dimensions of impact and probability of occurrence. In addition to cash flow, EBIT is also targeted. The measurement always follows a net analysis after taking countermeasures into account. The classification is based on three opportunity and risk classes [ORC]: high [over €25 million], medium [€10–25 million] and low [under €10 million].

Internal control system

The internal control system (ICS) includes the principles, processes and measures to ensure the effectiveness and profitability of business activities and the correctness of accounting in compliance with the relevant legal regulations. This also includes the protection of assets by preventing and uncovering damage to assets.

The establishment, maintenance and further development of the ICS is carried out by the central ICS department on behalf of the Chief Financial Officer. The control design is determined on the basis of a risk assessment carried out at least once a year. Responsibility for the implementation and documentation of the control lies with the respective process owner. Risk and control documentation is based on uniform Group standards. Local ICS controllers have been nominated in all of the main companies to act as local contacts for all ICS-related issues and support those responsible for processes and controls in their ICS tasks. The central IT department acts as a point of contact for all IT issues and designs the IT controls.

The effectiveness of the ICS is monitored as part of a continuous control self-assessment by the central ICS department. In addition, Internal Audit includes the ICS in its audits and provides suggestions for improvement. Furthermore, the Audit Committee is regularly informed about the status of the ICS as part of its monitoring tasks.

In addition to the assessment of the accounting-related ICS by the auditor as part of the audit of the annual and consolidated financial statements, a voluntary audit of the ICS pursuant to IDW PS 982 was commissioned in 2019 and its adequacy and effectiveness confirmed. We plan to have our Group-wide ICS externally reviewed again in 2022 and have its effectiveness certified.

Accounting processes

The accounting processes and the preparation of the consolidated financial statements are the responsibility of the Group Accounting & Tax department, which reports directly to the Chief Financial Officer.

The consolidated financial statements are based on the IFRS Manual of Accounting which regulates the Group-wide uniform application of the accounting and measurement principles in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU. Changes in accounting regulations are continuously monitored, their impact assessed and relevant changes in the financial organization communicated.

The consolidated financial statements are prepared using SAP-based consolidation software based on a uniform chart of accounts. Operational accounting is mainly carried out in three regional shared service centers. The responsibility for the completeness and correctness of the separate financial statements lies with the local financial officers in the respective countries or companies. The separate financial statement data is automatically loaded into the consolidation system via an interface. The data is validated by rules established in the system. In addition, Group Accounting checks the data for plausibility and correctness of content. Statements of completeness are obtained from the main companies on a quarterly basis in order to ensure the complete recognition of items subject to accounting and disclosure requirements. The principles of segregation of duties are consistently implemented in the accounting-relevant processes.

A Significant Contracts Policy ensures that significant contracts are always recognized via Group Accounting with regard to their impact on the balance sheet. In the case of special issues, external specialists are also consulted.

Limitations of risk management and internal control system

The risk management system and internal control system have their limitations, regardless of how carefully the systems are designed. In particular, subjective judgments, faulty controls or other circumstances can limit the effectiveness and reliability of the ICS, so even the Group-wide application of the systems used can only provide sufficient certainty with regard to the correct, complete and timely recognition of items in the Group accounting.

Opportunity and risk areas

Risk factors that impact SGL Carbon's Group business activities are reflected in the opportunities and risk areas presented below. If these areas also contain opportunities, they are explicitly stated. The risks stated here can occur individually or cumulatively. Additional risks that are not yet known, or risks that are currently classified as not material could also impair SGL Carbon's business activities. Unless explicitly stated, the risks described below relate to all of the Group's business units.

The opportunities and risks are divided into the following categories:

- Opportunities and risks from external framework conditions
- Financial opportunities and risks
- Legal and non-financial opportunities and risks
- Opportunities and risks from operational activities.

The table shows the classification of SGL Carbon's risks into the defined opportunity and risk classes and therefore reflects the possible impact on the development of the Group's net assets, financial position and results of operations, should they occur. The statements relate to the outlook period, i.e. the 2022 fiscal year.

Opportunity and risk classes of risks in 2022 (Quantification according to the classification chart, page 73)

Categorie / Risk	Opportunity and risk class (ORC)
Opportunities and risks from external framework conditions	
Opportunities and risks of price and volume development	Medium
Opportunities and risks from growth projects	Low
Opportunities and risks of future macroeconomic development and trade	Medium
Financial opportunities and risks	
Impairment risks	Medium
Risks from pension plans	Medium
Financial position risks	Low
Opportunities and risks from exchange rate fluctuations	Low
Legal and non-financial opportunities and risks	
Non-financial opportunities and risks	Medium
Tax risks	Low
Legal risks and risks from disposals	Low
Opportunities and risks from operational activities	
Opportunities and risks of the raw material and energy markets	High
Opportunities and risks in production	Medium
Opportunities and risks from the implementation of the restructuring program	Low
Opportunities and risks from human resources	Low

Opportunities and risks from external framework conditions

Opportunities and risks of price and volume development (ORC: medium)
The economic impact of the coronavirus pandemic has diminished in recent months and the global economy recovered significantly in the year under review.

Further recovery in demand is expected in 2022 for most of SGL Carbon's market segments. Risks are primarily expected in the event that the planned production volumes at our customers cannot be realized due to material bottlenecks, for example, due to the lack of semiconductors. In addition, the military conflict between Russia and Ukraine may adversely affect sales development if our customers experience temporary production stoppages due to the unavailability of certain raw materials or intermediates, resulting in a decline in demand for our products.

Price risks can arise in the CF business unit in particular if the planned price initiatives for carbon fibers cannot be realized as expected. In addition, the development of margins in the acrylic fibers business and the high competitive pressure in the wind industry must be viewed critically.

Opportunities and risks from growth projects (ORC: low)
With its strategy, SGL Carbon deliberately targets markets and products that exhibit dynamic growth rates and high profitability. This harbors opportunities as well as risks, depending on the extent to which these markets are actually developed in relation to the budgeted assumptions.

SGL Carbon aims for the GS business unit to grow in the medium term, especially in the market segments of battery materials and fuel cell components. Depending on the realization of customer projects, it is possible that this targeted growth is not achieved in full and could therefore have a negative impact on future net assets, financial position and results of operations. On the other hand, opportunities also exist here in additional customer orders.

In the CF business unit, SGL Carbon primarily expects medium-term growth in wind energy. The selective realization of projects in the aerospace industry also offers growth opportunities. There is a risk here that the high barriers to entry in aerospace that currently exist cannot be overcome completely or are overcome later than expected.

In addition, SGL Carbon expects significant project-based growth in the Automotive & Transport market segment in the CS business unit in the medium term, driven in particular by increased demand for components made of composite materials, such as battery boxes and leaf springs. If these projects are delayed or not implemented as expected, they could have a negative impact on the economic development of SGL Carbon.

Opportunities and risks of future macroeconomic development and trade (ORC: medium)
For SGL Carbon as a Group with global operations, global economic developments have a significant impact in the future on net assets, financial position and results of operations. The global economy is expected to continue its recovery over the course of 2022 once the pandemic is overcome.

However, there is currently a high degree of uncertainty for this recovery due to the restrictive COVID-19 measures that have again been put into effect, high inflation rates, existing supply chain problems and the possible burdens of a US interest rate hike. The Russian invasion of Ukraine increases this uncertainty and may lead to a significant impact on economic development through sanctions measures, especially in the European Union, which is massively dependent on Russian energy imports. Detailed estimates by SGL Carbon on the overall economic and industry development can be found in the Outlook Report in this Group Management Report.

Intensive market and economic observations enable short-term countermeasures and can – at least temporarily – minimize any risks for SGL Carbon's business. In addition, the broad diversification of the product range, the global presence and the large number of customer industries supplied by SGL Carbon enable sales risks to be partially offset. However, should the markets develop significantly differently from current expectations (see the Outlook section), this would harbor corresponding opportunities and risks for the company's business development.

Regulatory risks also arise from possible changes in the legal environment of countries in which SGL Carbon does business or has customer relationships, for example, new or tightened import and export restrictions, price or currency restrictions, customs regulations and protectionist trade restrictions. In addition to revenue and profitability risks, the Company could also be subject to fines, sanctions and reputational damage. Precautions are taken by means of established export control procedures and obtaining the appropriate export permits.

Financial opportunities and risks

Impairment risks (ORC: medium)
If the business units do not develop as planned and/or the interest rate used for the impairment test increases, there is a risk that assets may have to be written down.

Risks from pension plans (ORC: medium)
Retirement benefit obligations are subject to a large number of measurement parameters. Changes in interest rates, longevity trends, salary increases and inflation rates in particular affect the amount of pension provisions. In addition to fluctuations in equity, this can lead to changes in pension plan expenses. Financial risks, as well as opportunities, also arise in the management of pension plan assets. If future rates of return are lower than expected, budget deficits may arise and additional payments into pension plans may be required.

In 2021, a lump-sum option was introduced for members of a German pension plan. This allows the beneficiaries to choose before the benefits start being paid out whether they prefer a payment as a one-time lump sum or in installments over ten years instead of a lifelong pension. The future probability of accepting the capital option was estimated as part of the measurement of the provision using empirical values from external databases. If the actual utilization of the capital option differs significantly from previous estimates, this may have an impact on the Group's financial position, as the disbursements will develop differently than budgeted in terms of timing and amount.

We counteract these risks through active central management and monitoring of all pension plans, including their financing.

Financial position risks (ORC: low)
As of December 31, 2021, SGL Carbon had liquidity of €220.9 million within the Group. In addition, the company has access to an undrawn syndicated credit line of €175 million with a term until January 2024. There are no material borrowings due until September 2023. Should risks materialize that deviate from the budget, further measures to secure liquidity may be taken, such as an expansion of the factoring program or additional financing measures.

The financing agreements contain contractually defined requirements that regulate compliance with financial covenants during their term. Compliance with the terms of the financing agreements is monitored and controlled centrally along with the other financial risks. If some of the business risks described materialize during the term of the financing agreements, there is a possibility that SGL Carbon may not be able to comply with the relevant financial ratios.

A stringent liquidity policy and rolling liquidity and financial budgeting – which is based on the current net result and cash flow forecasts of the operating units and is available to the management on a monthly basis – ensure that any peaks in demand are covered at all times.

The global economic development in customer industries also regularly influences the creditworthiness of SGL Carbon's customers. This harbors default risks, which are counteracted through effective accounts receivable management. Here, the creditworthiness and payment history of customers are continuously monitored and corresponding credit limits are set in accordance with the Group-wide Credit Management Guideline. Bank guarantees and credit insurance also limit any default risks. SGL Carbon allocates investments in cash and cash equivalents primarily to core banking institutions. In particular, a balanced distribution of funds to avoid cluster risks as well as the systemic importance and the rating of the individual institutes are decisive when making the decisions.

Opportunities and risks from exchange rate fluctuations (ORC: low)

The key financial figures are influenced by exchange rate fluctuations from SGL Carbon's global business activities. Attempts are made to use the global presence to reduce the potential impact of changes in foreign exchange rates through natural hedging within the Group. The transaction-related foreign currency risk is reduced by optimizing operational cash inflows and outflows in a foreign currency. The resulting net foreign currency exposure is hedged using derivative financial instruments if the risks exceed certain materiality limits. Risk minimization is the overriding principle for all activities in connection with currency derivatives. In addition to the functional separation of trade, control and processing, regular risk analyses are also carried out in this area.

In addition to transaction risks, there are also translation risks arising from the translation of financial statement items denominated in local currency into the Group currency, the euro. Translation risks are not hedged.

Legal and non-financial opportunities and risks

Non-financial opportunities and risks (ORC: medium)

The risk management system at SGL Carbon also takes into account the risks from non-financial matters in accordance with the CSR Directive Implementation Act. The main risks resulting from the aspects of environmental, social, and corporate governance (ESG) were identified by the responsible persons in a structured process. These were then classified into risk classes based on an assessment of the financial impact and probability of occurrence, and risk management measures were developed. The results were finally coordinated with the Board of Management as the highest decision-making body.

As an energy-intensive industrial company, we need natural resources and create emissions in the manufacturing of our materials and products. We counter the risk of rising energy prices primarily by concluding long-term energy contracts. By including most SGL locations in the energy management system, around 90% of SGL's energy requirements are managed and controlled by the Energy Management department, which is part of the Environment, Health & Safety (EHSA) department.

Even if the SGL sites are not covered by the emissions trading system (ETS), price increases in the greenhouse gas (GHG) trade can affect energy costs, such as gas prices, and therefore have a negative impact on SGL Carbon's financial performance. To reduce our own CO_2 emissions, we have set ourselves clear objectives and are increasingly relying on the use of renewable energies. In the 2021 fiscal year, for example, a photovoltaic system was installed on the roof of the production hall in our plant in Ort (Innkreis), Austria. If the prices for renewable energies or CO_2 certificates increase, we could be forced for economic reasons to make significantly higher investments in systems and machines in order to achieve the desired decarbonization objectives.

Protection of the environment and the climate is firmly anchored in the corporate strategy of SGL Carbon. In addition to reducing their own carbon footprint, all SGL Carbon locations strictly comply with local laws and emissions regulations. A tightening of emission limit values could make it necessary to retrofit plants, which would entail increased costs and investments. We counteract this risk by staying in close contact with the local authorities, following national and international regulatory developments, and ensuring our facilities and cleaning systems are state of the art.

Environmental protection also includes minimizing the risk from the use of chemical substances. SGL Carbon therefore meets the national requirements for the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) worldwide. Adjustments in the classification of individual materials by the EU can result in significant costs for the registration, use and storage of such materials. A possible ban on hazardous substances used in production could result in SGL Carbon no longer being able to operate production processes as before in the medium term.

SGL Carbon's compliance management system aims to reduce the risk of legal violations. After the first external certification of SGL Carbon SE's compliance management system pursuant to the requirements of the ISO 19600:2016 guideline in 2020, the first surveillance audit took place in 2021. This was also carried out as a transformation audit pursuant to ISO 37301:2021. The compliance management system was certified as having a high degree of maturity and integrity. Detailed information on the SGL compliance management system can be found in the corporate governance declaration, Corporate Governance and Compliance Report and in the separate non-financial Group Management Report (see CSR Report).

In order to take adequate account of the growing IT risks – ransomware in particular – SGL Carbon operates a risk-oriented information security management system (ISMS) based on the globally recognized ISO 27001:2017 standard and a dedicated IT risk management system pursuant to ISO 31000:2018 as part of a Group-wide initiative. In 2021, SGL Carbon successfully continued the certification of individual parts of the company pursuant to the automotive safety standard TISAX and plans to expand this as per customer requirements. In addition, in 2021 the awareness-raising measures were supplemented by simulating phishing attacks and the insurance for cybersecurity was renewed as part of an external review.

In order to avoid risks associated with fraud in payment transactions, SGL Carbon relies on a consistent dual control principle. The employees involved in the process are regularly trained on the basis of examples such as "CFO fraud," as a potential occurrence of fraud could cause major damage to the company.

Detailed information on the content of non-financial risks can also be found in the separate non-financial Group Management Report (CSR Report).

Tax risks (ORC: low)
SGL Carbon operates worldwide and is therefore subject to a wide range of national tax laws and regulations. Changes in tax law or in the taxation practices of individual countries in which SGL Carbon does business can lead to higher tax expenses and higher tax payments. We counter this potential issue with ongoing analysis and evaluation of the tax environment. Although we assume that tax matters are always presented in accordance with the law, it cannot be ruled out that the tax authorities will come to different conclusions in individual cases. If corresponding risks are foreseeable, current tax liabilities for uncertain tax positions are formed on the basis of estimates. If the actual results deviate from the original estimate, this can impact the tax expense in the period in which the matter is finally decided.

Legal risks and risks from disposals (ORC: low)
In the event of legal disputes, SGL Carbon forms provisions based on the probability of occurrence and external legal opinions. Actual utilization may deviate from our own estimates and impact the consolidated net result.

Due to the international orientation of the Group's business, SGL Carbon is also confronted with a wide variety of legal uncertainties. These include difficulties in enforcing contracts and outstanding claims in foreign legal systems, compliance with foreign trade law, international export and import restrictions and technology transfer law in various countries, as well as difficulties in global enforcement of patent protection for the Group's own products.

In the case of divested businesses, it is common for the seller to be liable for transactions that took place before the date of disposal. This harbors the risk of possible burdens on the net result for businesses that have already been disposed of.

Opportunities and risks from operational activities

Opportunities and risks of the raw material and energy markets (ORC: high)
We counteract the ongoing volatility on the energy markets and the price fluctuations for the company's main raw materials with structured procurement concepts and the conclusion of medium- and long-term framework agreements. Appropriate strategic concepts are developed with the main suppliers on the basis of long-standing business relationships. A further increase in raw material, energy and transport costs compared to the budget can have a negative impact on the future net assets, financial position and results of operations if not all cost increases can be passed on to customers. A lack of availability of individual raw materials can also have a negative impact on the economic development of SGL Carbon. As a result of the war in Ukraine, the risks of further increases in energy prices up to and including an energy shortage as well as supply bottlenecks for raw materials and intermediate products due to temporary interruptions in supply chains have increased significantly.

In the GS business unit in particular, there is a risk that materials or supplies/services can no longer be obtained from existing suppliers and that new suppliers will have to be qualified. Furthermore, the planned raw material prices have so far only been partially contractually fixed.

In the CF business unit, the Textile Fibers market segment is characterized by price fluctuations for the raw material acrylonitrile. This results in opportunities and risks. SGL Carbon strives to reduce these risks by maintaining safety stocks. However, political developments in important procurement regions in particular can have a negative impact on the security of supply of individual raw materials that are difficult to substitute. There are also ongoing complications in the logistics sector connected to higher transport costs compared to the previous year. If alternative logistics routes or means of transport have to be chosen, this may lead to higher costs. This can temporarily have a negative impact on financial performance.

Opportunities and risks in production (ORC: medium)
In order to be able to realize the targeted return-oriented growth of SGL Carbon, higher maintenance expenses than planned could arise due to the temporary high plant utilization close to the capacity limit, in order to ensure the availability of plants and avoid business interruptions.

Furthermore, delays in ramping up production or in customer qualification can lead to a delay in the realization of revenues.

In the CF business unit, a project at the Lavradio site in Portugal is the industrialization for our own precursor – the feedstock for carbon fibers. If this does not materialize in full, this can have a negative impact on the expected increase in profitability.

A production standstill at one or more locations could lead to delivery problems in terms of quantity and quality, which may also result in compensation payments to customers. In addition, supply bottlenecks in SGL Carbons supply chains can mean that avoiding production standstills could only be achieved with higher transport costs compared to the budget assumptions.

SGL Carbon also strives to further optimize current assets relative to revenues. Should this not succeed as planned, this could have a negative impact on the planned free cash flow in particular.

Opportunities and risks from the implementation of the restructuring program (ORC: low)
The restructuring program agreed by the Board of Management, was intended to achieve savings of more than €100 million by 2023 (compared to the base year 2019). The original target was already achieved in fiscal 2021. The continuous continuation of the transformation may result in additional opportunities for a further improvement in earnings.

Opportunities and risks from human resources (ORC: low)
Employees are a key pillar of the business success of SGL Carbon. The competition for highly qualified specialists and managers is intense and continues to grow, especially against the background of the demographic development in many countries relevant to SGL Carbon. To ensure our attractiveness as an employer, we rely on regular employee surveys, flexible working time models and performance-related compensation, among other things. A talent program was initiated for the targeted promotion of highly qualified young talent. In addition, important key positions were identified and targeted measures to retain critical knowledge carriers were defined. In order to continuously cover the need for qualified experts, we also use a large number of recruiting tools such as active sourcing and target group-specific job platforms.

Overall assessment of the risks and opportunities of SGL Carbon

Based on the upturn in operating business in almost all business units combined with the successes already achieved from the transformation, the sales and earnings situation of SGL Carbon has developed positively in fiscal year 2021. We expect the economy to further recover in 2022. Risks exist in particular in the event of a further increase in the cost of raw materials, energy and transport compared to the budget. This, as well as a possible lack of availability of raw materials, can have a negative impact on the future net assets, financial position and results of operations of SGL Carbon, especially if the costs can only be passed on to customers with a delay. The ramp-up of new projects, especially in the energy and automotive segments, also harbors opportunities and risks. Should the business situation deteriorate, this could have a negative impact on the carrying amounts that are recognized.

Based on the information currently available, we believe that no significant individual risks exist – neither now nor in the foreseeable future – that could jeopardize the company 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

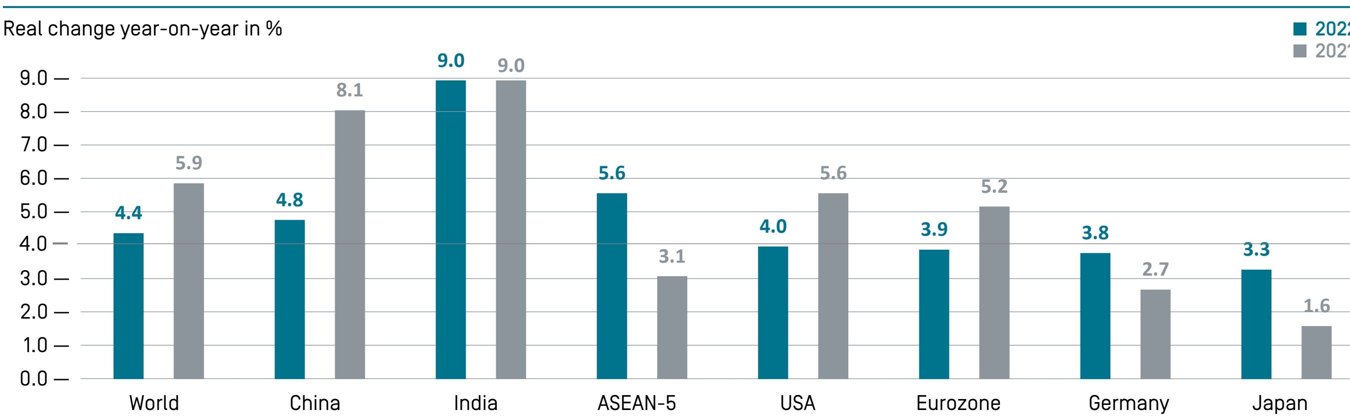
Before the start of the war in Ukraine, the IMF (International Monetary Fund) expected that the global economy continue its recovery in 2022 as the population became increasingly immunized against the Corona virus. However, uncertainties caused by the rapid spread of the Omicron variant and the reimposition of Covid-19 restrictions are initially weighing on the global economic situation. High inflation rates, along with supply chain problems that will probably persist well into the year, are also dampening the outlook.

While fiscal policy is likely to remain expansive despite already strained government budgets, a reversal in monetary policy is being signaled. The US, for example, will face its first interest rate hikes in a long time in 2022. This increases the pressure on emerging countries to support their own currencies with higher interest rates. Thus far, only the central banks in the eurozone and Japan intend to continue their monetary policy unchanged.

Global economic risks are currently high. Major turbulence on the foreign exchange and capital markets cannot be ruled out due to the risks posed by the pandemic, very high inflation and the potential impact of the US interest rate hike on the economy.

In its January forecast, the IMF assumed global economic growth of 4.4% for 2022. The upswing in established industrialized countries is continuing with economic growth expected to reach 3.9%. The IMF expects an expansion rate of 4.8% for the group of emerging and developing countries. The possible impact of the conflict between Russia and Ukraine has not yet been taken into account in the IMF's forecast.

Gross domestic product 2022 (2021) at a glance



Source: IMF, World Economic Outlook (Update) January 2022.

The global economy will continue its upswing in 2022 as the pandemic is overcome

Despite high inflation, the burdens of the pandemic and global supply shortages, the US is showing signs of robust economic growth for 2022, which will be supported by extensive government spending programs. If, as announced, the US Federal Reserve stops buying bonds sooner than previously planned and raises key interest rates, this could have a dampening impact. The IMF expects economic growth of 4.0% for 2022 in the US.

The economy in the eurozone is being burdened by new pandemic restrictions and material shortages at the beginning of 2022. Over the course of the year, an economic recovery should prevail, supported by a broad revival in private consumption, capital investments and exports.
However, persistently high inflation could have a negative impact, especially if the trend towards enduring high energy costs continues. The IMF expects growth of 3.9% in the eurozone for 2022. According to the Deutsche Bundesbank, the overall outlook for the German economy is one of a strong upswing with only a temporary interruption. Although the

supply shortages are not expected to be fully resolved until the end of 2022 and the core inflation rate is expected to remain high, financing conditions remain favorable overall. The upturn is being propelled by private consumption, exports and corporate investments. According to estimates by the IMF, economic output in Germany will increase by 3.8% in 2022.

China has recently cut interest rates and is making efforts to support the economy despite the very strict zero-Covid policy and the real estate crisis. The energy supply problems with coal seem to have been overcome. The IMF expects the Chinese economy to grow by just 4.8% in 2022. In addition, growth in India remains high and the ASEAN-5 countries will grow at an accelerated rate. Economic expectations for 2022 are moderate in emerging markets such as Russia and Brazil.

While this forecast report was being prepared, the armed conflict between Russia and Ukraine began. The impact of this war on the economic situation in Europe and the rest of the world can hardly be predicted at present. As a result, the IMF's so far assessments of the economic development of individual regions and countries and/or the global economy in 2022 may change significantly.

Overall assessment of the Group’s anticipated performance by Company management

For the Group forecast and the forecast for the business units, we originally assumed the expectations for economic development described above. This also included stable social and geopolitical developments. Changes of a material nature could adversely impact our economic expectations. In addition to the continuing impact of the measures to combat the Corona pandemic, the effects of the war in Ukraine, which are difficult to predict at present, are also leading to a high degree of uncertainty in the global economy in fiscal 2022, which may also dampen the expected recovery of our business and the demand for our products. The anticipated performance of some parts of the business units also depends on major projects from our customers. Any development that deviates from the plan could have positive or negative impacts. Distortions in the prices of key raw materials and persistently high or rising energy costs, depending on the further development of the Russia-Ukraine conflict, could also impact the sales and earnings forecast. Further explanations can be found in the Opportunities and Risks Report.

The focus in 2021 was on the transformation of SGL Carbon and the recovery of economic and financial stability. Success is evidenced by the fact that the revenue and earnings forecast given at the beginning of 2021 was exceeded and by the results of the transformation, as presented in the Group Management Report.

We see 2022 as a “year of stabilization”. We want to stabilize and further improve the economic and financial success of SGL Carbon. In 2022, ongoing transformation will also be an important task for the management and the workforce of SGL Carbon. Furthermore, we are concentrating on the further development and optimization of the existing business and investing in business units and products in which we see the greatest growth potential. Accordingly, planned capital expenditure for 2022 will be at the level of depreciation and amortization.

Group performance

SGL Carbon's key performance indicators are sales revenue and adjusted EBITDA. In order to focus our corporate management even more strongly on liquidity in the persistently challenging overall environment, we have defined free cash flow as a further key performance indicator, which is also a key factor influencing the development of net financial debt. Return on capital employed (ROCE) is another key figure that we consider as a long-term performance indicator. The following overview shows the outlook for 2022 for the Group’s key performance indicators:

Group financial targets

€m	Actual 2021	Outlook 2022[1]
Sales revenue	1,007.0	At prior year level
EBITDA pre	140.0	110 - 130
Return on capital employed (ROCE $_{EBIT}$)	8.0%	5% -7%
Free cash flow	111.5	Significant below prior year

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

In 2021, our business and the associated key performance indicators developed better than we had expected at the start of the year. This was due not only to the upturn in our operational business, but also due to the successes achieved from the transformation. Against this background, we raised our 2021 sales and earnings forecast on July 13, 2021.

The sales and earnings figures for the fiscal year 2021 confirm our forecast, which was updated in mid-2021. We achieved an increase in sales revenue and net profit in 2021 that we had not originally expected to see until 2022. The revenue and earnings forecast for 2022 therefore flattens out accordingly. We also face ongoing challenges from persistently high raw material and energy prices. For 2022, we expect energy prices to remain volatile and generally above the 2021 level. We have consequently secured a large part of our expected gas and electricity needs through price hedging transactions. Due to the impact of the war in Ukraine on our business, which is difficult to calculate, we have adjusted our risk and forecast assessment at short notice to reflect the price developments on the energy and raw material markets valid at the time this forecast report was prepared (see also the Opportunities and Risk Report in this Annual Report). Not included in our forecast are currently unpredictable interruptions in deliveries or production by our customers and a possible and sustained downturn in the global economy.

Our outlook implies that factor cost increases can be passed on at least partially to customers through pricing initiatives. The outlook also includes the revenue and earnings impacts of the expiration of a supply contract with a major automobile manufacturer at the end of June 2022. The production capacities previously used for this contract are to be used in particular for orders from the wind power industry. However, we assume that these orders will be less profitable than the expiring contract, which will also impact our earnings forecast for fiscal 2022.

Based on the developments outlined in the previous paragraphs, we expect consolidated sales revenue for fiscal 2022 at the same level as for 2021, and an adjusted EBITDA of between €110 and €130 million. After depreciation and amortization, we forecast an adjusted EBIT of between €50 and €70 million. We also assume that full-year free cash flow will be significantly lower in 2022 than in 2021 With regard to return on capital employed (ROCE), we anticipate a ROCE between 5% and 7%.

Business trend in the reporting segments

Segment	KPI	Actual 2021	Outlook 2022[1]
GS	Sales revenue	443.6	slight improvement
	EBITDA pre	87.9	significant improvement
PT	Sales revenue	87.2	significant improvement
	EBITDA pre	4.7	significant improvement
CF	Sales revenue	337.2	constant
	EBITDA pre	54.5	significant decline
CS	Sales revenue	122.5	slight improvement
	EBITDA pre	12.1	constant
Corporate	EBITDA pre	–19.2	significant decline

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

Our business units supply a wide range of customers in different market segments. Therefore, the sales revenue and earnings development of the individual business units may vary. For the Graphite Solutions (GS) business unit, we expect a further recovery in demand in 2022, particularly from the semiconductor industry. Accordingly, we expect a slight increase in sales revenue for GS for 2022. We expect a significant improvement in adjusted EBITDA for GS compared to 2021, based on higher capacity utilization combined with the successes of the transformation.

In the Process Technology (PT) business unit, we expect a significant increase in both sales revenue and adjusted EBITDA, based on a continuing increase in demand from the chemical industry.

Although sales revenue will decline due to the expiry of a contract with a major automotive customer at the end of June 2022, we expect this decline to be almost completely offset by revenue from other market segments. Accordingly, we are forecasting constant sales revenue for the Carbon Fibers (CF) business unit in fiscal year 2022. The production capacities freed up as a result of the loss of the automotive contract will be used to fulfill orders from the wind power industry, most of which have already been acquired. However, we expect that these orders will be less profitable. Given this, we assume that the cost savings from the transformation will not be able to fully compensate for this earnings reductions. CF's profitability may also be weighed down by persistently high or even rising energy prices, in particular for natural gas. Moreover, we expect the price of acrylonitrile – the most important raw material for the production of carbon fibers – to remain highly volatile. For CF, we therefore expect a significant decrease in adjusted EBITDA for 2022.

In fiscal year 2021 the Composite Solutions (CS) business unit reached break even for the first time. Based on the continuation of major orders with automotive customers, we assume constant adjusted EBITDA for 2022 for CS with a slight increase in sales revenue.

The significant deterioration in sales revenue in the non-operating Corporate business unit is primarily based on significantly lower rental income, following the sale of properties that was not required for operations. We expect that the lower revenues in the Corporate business unit will not be fully offset by cost reductions from the streamlining of Corporate functions. We are therefore forecasting a further significant reduction in adjusted EBITDA for this business unit in 2022.

Investments approximately in line with depreciation and amortization, positive free cash flow

In 2022, SGL Carbon's capital expenditure will again be determined by the amount of depreciation and amortization. One focus of investments in 2022 will be the expansion of existing growth segments from the GS and CS business units.

The strategy of the operating business units determine the Group's financing needs. These are reviewed and adjusted annually based on the new plans. With a consistent cash management, we aim to achieve positive cash flow again in fiscal 2022 despite an expected slight increase in working capital. We continue to adhere to the strategy of selling non-essential assets such as land and properties, which could also have a positive impact on the company's cash flow position.

Dividend development

While the positive sales revenue and earnings development of the operating subsidiaries will impact the parent company SGL Carbon, it will again be unable to distribute a dividend for the 2021 fiscal year. With further growth, our company will work more profitably on a sustainable basis. Only then it will be possible to distribute a dividend.

Remuneration Report

Board of Management remuneration in the 2021 fiscal year

This report describes the remuneration system and the remuneration for the members of the Board of Management and the Supervisory Board of SGL CARBON SE for the 2021 fiscal year. It also contains detailed and individualized information on the structure and amount of the individual components of the remuneration of the Board of Management and the Supervisory Board. The report contains the disclosures in accordance with the content requirements of the Act Implementing the Second Shareholders' Rights Directive (ARUG II) of December 12, 2019, and is subject to both a formal audit in accordance with section 162 of the German Stock Corporation Act (AktG) and a substantive audit due to an extension of the engagement.

The system of remuneration for members of the Board of Management is determined by the Supervisory Board. The Personnel Committee of the Supervisory Board develops appropriate recommendations for this purpose and prepares a remuneration resolution for the complete Supervisory Board. The Supervisory Board may call/consult external consultants if necessary. The remuneration system adopted by the Supervisory Board will be submitted to the Annual General Meeting for approval.

The 2020 remuneration system consists in general of the components of basic salary (plus fringe benefits), short-term variable remuneration, long-term variable remuneration, contributions to retirement plans and a shareholding requirement. To ensure sustainable and long-term development of the company as required by Section 87a of the German Stock Corporation Act (AktG), the Supervisory Board selects at least one of the objectives from the topic areas of Environment, Social/Employees or Governance/Compliance. The financial and individual targets set in the performance-related compensation components are in line with the business strategy and the sustainable long-term development of the Company. Thus, as part of the short-term variable compensation, incentives are set for the sustainable development of the Company via individual targets for the members of the Board of Management. The Supervisory Board also focuses on the long-term development of the Company and has therefore given a correspondingly high weighting to the proportion of multi-year performance-related compensation components. The Supervisory Board has additionally defined the components of the individual remuneration of the total target remuneration and introduced rules on retaining or reclaiming variable remuneration in the event of serious breaches of duty or compliance obligations and/or incorrect determination of the amount of the remuneration (referred to as clawback).

The Annual General Meeting of SGL Carbon SE approved the Board of Management remuneration system 2020 on June 16, 2020, with a majority of 98.93% of the votes cast. The 2020 Board of Management remuneration system will be applied to the new contracts of the two active Board of Management members, but not to old contracts, and can also be viewed on the company's homepage.

Board of Management in 2021

The Articles of Association of SGL Carbon provide that the Board of Management should generally consist of at least two members.

In the 2021 fiscal year, Dr. Torsten Derr and Mr. Thomas Dippold were members of the Board of Management of SGL Carbon SE, each appointed by the Supervisory Board for a term of five years effective June 1, 2020, and October 15, 2020, respectively.

Structure of Board of Management remuneration

The remuneration of the members of the Board of Management includes both non-performance-related salary and non-cash fringe benefits and retirement plan entitlements as well as performance-related (variable) components.

The non-performance-related components include a fixed annual salary (basic remuneration), fringe benefits and an annual retirement plan contribution. The basic remuneration (€650,000 p.a. for Dr. Derr and €450,000 p.a. for Mr. Dippold) is paid in twelve equal installments at the end of each month. The fringe benefits mainly include the use of a company car, including use of a shared driver and for the Chairman of the Executive Board a housing allowance. In addition, D&O insurance with a deductible is granted in accordance with the German Stock Corporation Act (AktG).

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

The appropriateness of the Board of Management remuneration is reviewed on a horizontal and vertical level at regular intervals by an independent external appraiser and is subject to approval by the Supervisory Board. Comparable companies listed in Germany (SDAX companies) are used as a horizontal baseline. The vertical intra-company remuneration comparison relates to the ratio of the remuneration of the Board of Management to the remuneration of the non-executive staff employed in Germany and to the remuneration of the senior management of the SGL Carbon Group.

SGL Carbon Bonus plan (STI plan)

The one-year variable remuneration (Short-Term Incentive plan or STI plan) of the members of the Board of Management is measured on the basis of a target bonus set individually for each member of the Board of Management (Dr. Derr €450,000, Mr. Dippold €310,000 per year).

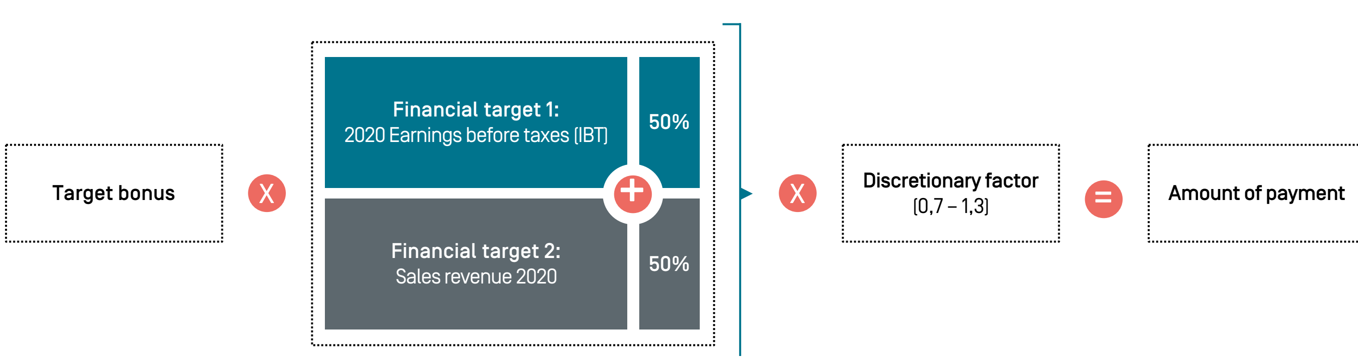
In determining the one-year variable remuneration, the Supervisory Board generally sets two financial performance targets, which may change from year to year. These are weighted equally at 50%. For each performance target, the Supervisory Board sets a lower and an upper limit. For each performance target achievement can range from 0%, if the lower limit is reached, up to 200%, if the upper limit is reached.

To determine the one-year variable remuneration, the figure resulting from the financial performance targets is multiplied by a discretionary performance factor ranging from 0.7 to 1.3 (see chart). The payout amount is capped at 200% of the target bonus.

With respect to the discretionary performance factor, the Supervisory Board sets at least three targets in advance for each member of the Board of Management. These targets play a role in determining the level of the discretionary performance factor after the one-year performance period has ended and should also include material sustainability targets (Environment, Social/Employees, Governance/Compliance) in particular. In determining the discretionary performance factor after the end of the performance period, the Supervisory Board will take into account the level of achievement in relation to these objectives in the overall context. The Supervisory Board is otherwise free to determine the discretionary performance factor at its own discretion within this framework.

STI plan payout in 2021

The short-term variable remuneration for members of the Board of Management paid in the 2021 fiscal year was based on the target achievement of the relevant SGL Carbon Bonus plans for the 2020 fiscal year. For the 2020 financial year, the targets for 100% achievement of earnings before tax (IBT) were €12 million and Group sales €1,056 million. The lower limits of the target achievement corridors for the two financial performance targets of the STI plan (earnings before taxes (IBT) of €0 million and consolidated sales of €1,003 million for the 2020 financial year) were not achieved in each case, meaning that the target achievement was already 0% in mathematical terms. The achievement of the Board of management members' personal targets was therefore no longer an issue under the STI Plan system. Accordingly, in the case of Dr. Majerus and Dr. Bühler, the remuneration due for the one-year variable remuneration amounted to €0. It was agreed in respect to Dr. Derr and Mr. Dippold, who were both appointed to the Board of Management during the course of 2020, that at least €450,000 in the case of Dr. Derr and at least €25,834 in the case of Mr. Dippold will be paid out for the 2020 fiscal year to compensate for disadvantages associated with commencement of duties.



SGL Carbon Long-Term Incentive plan

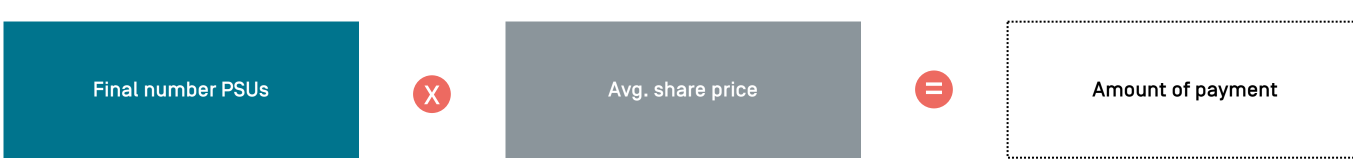
Members of the Board of Management are entitled to multi-year variable remuneration in the form of the long-term incentive (LTI) plan. The purpose of the LTI plan is to reward sustainable and long-term corporate development. This is reflected by the multi-year development of return on capital employed – $ROCE_{EBIT}$ (performance target) and the share price. One tranche of the plan is granted each year. The Supervisory Board sets the target $ROCE_{EBIT}$ – including a lower and upper threshold relevant for remuneration – for a term of four years.

With the granting of a tranche, an annual allocation amount in euros is fixed for each member of the Board of Management (Dr. Derr €700,000 and Mr. Dippold €490,000 per tranche). A preliminary number of virtual shares (performance share units, PSUs) is calculated for each tranche. The number of preliminary PSUs is determined at the beginning of the relevant performance period by dividing the allocation amounts by the average share price prior to the start of the performance period. The four-year performance period of an LTI plan starts at the beginning of January of the first year (grant date) and runs until the end of December of the fourth year (vesting date), that is, from January 1, 2021, to December 31, 2024, for the 2021-2024 LTI plan.

After four years, the extent to which the specified ROCE target has been achieved is determined. It is only paid out if at least the minimum ROCE threshold is achieved. The final number of PSUs is limited and can range from 0% to 150% of the preliminary number of PSUs. A potential payout amount is calculated by multiplying the final number of PSUs by the average share price at the end of the performance period. The total amount to be paid is capped at 200% of the allocation value on the grant date. Payouts are made in cash.

LTI plan payout in 2021

The multi-year variable remuneration granted to the members of the (former) Board of Management in the 2021 fiscal year under the LTI plan resulted from target achievement for the 2017-2020 performance period. The payout amount is based on the multi-year development of the return on capital employed – $ROCE_{EBIT}$ performance target and the development of the share price over the performance period. The two (former) members of the Board of Management with entitlements under the 2017–2020 LTI plan, Dr. Köhler and Dr. Majerus, had the same performance target here. For the 2017-2020 LTI Plan, Dr. Köhler was granted an allocation amount of €700,000 or 82,450 PSUs and Dr. Majerus was granted an allocation amount of €545,000 or 64,194 PSUs. After the close of the 2020 fiscal year, the Supervisory Board calculated that there was a relevant $ROCE_{EBIT}$ performance target achievement of around 26.8%. Together with the share price development (relevant share price before the start of the performance period: €8.49; relevant share price at the end of the performance period: €3.78), the calculated overall target achievement derived from this was roughly 11.9%. This resulted in payout amounts of €62,644 for Dr. Köhler and €63,676 for Dr. Majerus, taking into account the pro-rata membership of the Board of Management during the performance period of the 2017–2020 LTI plan. No other SGL Carbon long-term incentive plan were due for payout in the 2021 fiscal year, so no further payments were made to members of the Board of Management in this respect.



Shareholding requirements

The members of the Board of Management are generally required to permanently hold a fixed number of shares in SGL Carbon SE during their term on the Board of Management. For the Chairperson of the Board of Management, the number of shares to be held is based on their 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 salary. The number of shares to be held is determined by dividing the fixed annual salary (or 85% of the annual salary) by the arithmetic mean of the Xetra closing price of SGL shares over the last 60 trading days prior to the start of the term of the Board of Management employment contract and is to be built up successively within four years if the Board of Management member does not yet fulfill the shareholding requirement.

The Supervisory Board is entitled to redefine the number of shares to be held upon reappointment of the Board of Management in accordance with the procedure described.

Maximum total remuneration / clawback

The remuneration system also places a cap on the amount of annual gross remuneration that could theoretically be paid to the members of the Board of Management (including expenses for the company retirement plan), factoring in all remuneration components. The maximum permissible annual total remuneration for members of the Board of Management, taking into account all remuneration components (including contributions to company retirement plans and fringe benefits), is capped at €3,600,000 for Dr. Derr and €2,280,000 for Mr. Dippold, as well as at €3,600,000 for Dr. Köhler and €3,100,000 each for Dr. Majerus and Dr. Bühler. Within this absolute limit, the one-year variable remuneration is capped at a maximum of 200% of the target bonus (that is, the annual value agreed in the STI if 100% of the target is achieved), while that of the multi-year variable remuneration is capped at 200% of the allocation value (that is, the annual allocated value for the LTI plan).

Under the currently valid 2020 Board of Management remuneration system, members of the Board of Management may be required to return all or part of their variable remuneration for a fiscal year or – in the event of a violation of the Compliance Clawback Provision – also have it withheld during a current performance period: (i) if the member of the Board of Management in question has seriously violated their statutory duties or internal codes of conduct in the relevant assessment period (Compliance Clawback) or (ii) if variable remuneration components were wrongly paid out on the basis of incorrect data (in the amount of the difference between the correct amount and the actual payout). This was not the case in the 2021 fiscal year.

Benefits after leaving the Board of Management

If a member's appointment to the Board of Management ends prematurely, whether by mutual agreement, revocation, resignation or termination as a result of procedures under corporate law in accordance with the German Transformation Act (UmwG), the member of the Board of Management will receive a maximum severance payment equal to two years' annual remuneration. This does not apply if the Board of Management member is at fault for their removal from the Board of Management or if they resign without good cause. If the remaining term of the Board of Management member's employment contract is less than two years, the severance amount is reduced on a pro-rata basis. The amount of the annual remuneration to be used as a basis is determined from the total amount of the fixed salary and the variable remuneration components based on 100% target achievement, excluding non-cash benefits and other fringe benefits for the last full fiscal year prior to the end of the Board of Management member's employment contract. There is no commitment to pay benefits if a Board of Management member's appointment to the Board of Management is terminated prematurely due to a change of control.

As a rule, the members of the Board of Management are subject to a non-competition clause for one year after the end of their contract. As compensation, the company pays the members of the Board of Management a non-compete bonus equal to 50% of their annual remuneration for the duration of the non-compete period. The amount of the annual remuneration to be used as a basis is determined from the total amount of the fixed salary and the short-term variable remuneration components based on 100% target achievement, excluding non-cash benefits and other fringe benefits for the last full fiscal year prior to the end of the Board of Management member's employment contract. Any other income received by the Board of Management member is offset against the non-compete bonus. In addition, any severance payments will be offset against the non-compete bonus. The non-compete bonus paid for the subsequent non-competition clause for departing members of the Board of Management and any remuneration for unused vacation are reported as extraordinary remuneration

Total remuneration for the Board of Management 2021 (according to ARUG II)

Total remuneration granted and owed to the Board of Management in accordance with Section 162 of the German Stock Corporation Act (AktG) is defined if it was actually paid to the member of the governing body and thus becomes part of his or her assets. For fiscal year 2021 the compensation amounted to €2,123,491 (2020: €3,060,582). Of this total remuneration, €1,575,834 (2020: €1,299,319) was attributable to fixed remuneration, €55,127 to fringe benefits (2020: €49,280), €0 to one-year variable remuneration (2020: €369,886), €126,320 to multi-year variable remuneration (2020: €310,522) and €366,210 (2020: €1.031.575) to extraordinary remuneration for Dr. Majerus. The share of fixed remuneration including fringe benefits of the total remuneration in the 2021 fiscal year was 100% for both active Board of Management members, as no variable remuneration components were due for payment due to the start of the activities of both members of the Board of Management in the 2020 financial year. For Dr. Majerus, the share of fixed remuneration of total remuneration was 85% in fiscal year 2021. The maximum remuneration for both Board of Management members was not reached in the past fiscal year. No use was made of the option to reclaim variable remuneration components from the Board of Management members. There were no deviations from the remuneration system of the Board of Management in the reporting year.

According to the alternative interpretation of the IDW (Alternative 2), for which the compensation is based on the activity performed in full in fiscal year 2021, the total remuneration for the active members of the Board of Management amount to €2,675,127, consisting of €1,590,031 for Dr. Derr and €1,085,096 for Mr. Dippold. For Dr. Derr, this comprises a basic remuneration of €650,000, fringe benefits of €40,031 and an STI bonus of €900,000, and for Mr. Dippold a basic remuneration of €450,000, fringe benefits of €15,096 and an STI bonus of €620,000. At the time of preparation, the Supervisory Board had not yet passed a final resolution on the annual performance-related payout amounts for 2021.

Members of the Board of Management were granted PSUs from the LTI plan as their multi-year variable remuneration. The LTI tranches granted in the 2021 fiscal year were granted to the members of the Board of Management on the basis of a four-year performance period in each case.

In the previous fiscal year, Dr. Majerus left his position by mutually agreed termination of his employment relationship on November 30, 2020. In accordance with his employment contract, he was granted a severance payment totaling €933,333, which was paid out in full in the 2020 fiscal year. The variable remuneration granted on a pro-rata basis up to the termination date (STI and LTI benefits) will be paid out for the outstanding tranches at maturity. To compensate for the non-competition clause, Dr. Majerus received a monthly non-compete bonus of €73,242 in the period from December 2020 to the end of May 2021. In addition, he received remuneration of €25,000 in December 2020 for vacation not taken, which, together with the non-compete bonus and the severance payment, is reported as extraordinary remuneration in the remuneration table. As part of his termination agreement, a lump-sum contribution of €175,000 was agreed for the 2020 fiscal year instead of the contractually agreed retirement plan component of €140,000. This increased commitment for 2020 covers the pro-rata retirement plan component up to the original contract end date of June 30, 2021. The retirement plan provisions for Dr. Majerus were also fully allocated with regard to his retirement benefits as of December 31, 2020.

The following remuneration was granted to the members of the Board of Management active in the 2021 reporting year (individualized presentation; payment consideration):

Active Board of Management: Compensation granted and owed	Dr. Torsten Derr Chief Executive Officer (since June 1, 2020)		Thomas Dippold Chief Financial Officer (since October 15, 2020)	
	2020	2021	2020	2021
Fixed remuneration	379,167	650,000	95,455	450,000
Fringe benefits	23,240	40,031	1,258	15,096
Compensation for disadvantages/minimum bonus	0	450,000	0	25,834
Total fixed remuneration	**402,407**	**1,140,031**	**96,713**	**490,930**
One-year variable remuneration 2)	0	0	0	0
Multi-year variable remuneration 1)	0	0	0	0
LTI 2017-2020		0		0
LTI 2016-2019	0		0	
Total variable remuneration	**0**	**0**	**0**	**0**
Total remuneration	**402,407**	**1,140,031**	**96,713**	**490,930**

For former Board of Management members, the amounts granted and owed for 2020 and 2021 are as follows:

Former Member of Board of Management: Compensation granted and owed	Dr. Michael Majerus Spokesman of the Board of Management (till November 30, 2020)		Dr. Stephan Bühler Legal and Compliance (till October 14, 2020)		Dr. Jürgen Köhler (former CEO)	
	2020	2021	2020	2021	2020	2021
Fixed remuneration	458,333	0	366,364	0	0	0
Fringe benefits	17,159	0	7,623	0	0	0
Total	**475,492**	**0**	**373,987**	**0**	**0**	**0**
One-year variable remuneration [2]	177,588	0	36,908	0	155,390	0
Multi-year variable remuneration [1]	147,811	63,676	20,323	0	142,388	62,644
LTI 2017-2020	0	63,676	0	0	0	62,644
LTI 2016-2019	147,811	0	20,323	0	142,388	0
Total variable remuneration	**325,399**	**63,676**	**57,231**	**0**	**297,778**	**62,644**
Extraordinary remuneration	**1,031,575**	**366,210**				
Total remuneration	**1,832,466**	**429,886**	**431,218**	**0**	**297,778**	**62,644**

[1] The amounts for fiscal year 2021 and 2020 for multi-year remuneration represent the amounts paid of the respective LTI tranches.
[2] The amounts of the one-year variable remuneration paid in 2021 represent the payout amounts for the target achievement of the 2020 financial year, and the amounts of the one-year variable remuneration paid in 2020 represent the payout amounts for the target achievement of the 2019 financial year, respectively.

Additional disclosures regarding share-based and similar remuneration instruments in the 2021 fiscal year

The following table shows the SAR (Stock Appreciation Rights) plans which were granted in the years up to 2014 and which are in the process of being phased out, having been replaced by the LTI plan:

SAR	Balance as of Dec. 31, 2020		Forfeited	As of Dec., 31 2021	
	Number	Weighted base price		Number	Weighted base price
Dr. Jürgen Köhler	46,000	30.77	16,000	30,000	33.84
Jürgen Muth	60,000	31.76	30,000	30,000	37.77
Dr. Gerd Wingefeld	112,000	29.59	52,000	60,000	33.84
Dr. Stephan Bühler	15,000	27.84	0	15,000	27.84

The SARs in existence as of December 31, 2021, could not be exercised. This is because SGL share prices were significantly below the base prices in the 2021 fiscal year (for details, see Notes to the Consolidated Financial Statements, no. 29).

In previous years, the following performance share units (PSUs) were granted from the LTI plan. Based on SGL Carbon's results and ROCE performance, the LTI plans granted for the 2018 to 2021 tranche are expected to achieve their targets at the end of the four-year performance period. The average ROCE targets to be achieved are 8.7% (minimum 6.2%) for the 2019–2022 LTI plan, 7.0% (minimum 4.0%) for the 2020–2023 LTI plan and 7.8% (minimum 5.0%) for the 2021–2024 LTI plan. To ensure comparability, the final LTI target achievement is adjusted by the Supervisory Board for extraordinary events such as impairment losses and can therefore not be derived directly from the published ROCE figures.

If the average ROCE over the four-year performance period is below the minimum values, no payout is made. The LTI plans outstanding at the end of 2021 relate not only to the two active members of the Board of Management but also to the former Board of Management members Dr. Köhler, Dr. Majerus and Dr. Bühler. Dr. Bühler received a full annual tranche of the LTI 2020-2023 for his one-year term on the Executive Board, which was limited from the start, from October 2019 to October 2020. The LTI plans that have been granted in the fiscal year and that are still in progress for the fiscal year are shown in the following table:

LTI active & former Board of Management	Tranche	Allocation value €	Price €[1]	PSU Grant	Performance 0% - 150%[2]	Fair value €[3]
Dr. Torsten Derr	LTI 2020-2023	416,111	4.62	90,067	108.5%	333,780
Dr. Torsten Derr	LTI 2021-2024	700,000	3.78	185,185	150.0%	350,000
Thomas Dippold	LTI 2020-2023	104,712	4.62	22,665	108.5%	71,593
Thomas Dippold	LTI 2021-2024	490,000	3.78	129,630	150.0%	245,000
Dr. Michael Majerus	LTI 2018-2021	700,000	11.34	61,728	7.6%	26,442
Dr. Michael Majerus	LTI 2019-2022	700,000	7.17	97,629	0.0%	0
Dr. Michael Majerus	LTI 2020-2023	700,000	4.62	151,515	108.5%	291,217
Dr. Stephan Bühler	LTI 2020-2023	545,000	4.62	117,965	108.5%	546,219
Dr. Jürgen Köhler	LTI 2018-2021	700,000	11.34	61,728	7.6%	18,132
Dr. Jürgen Köhler	LTI 2019-2022	700,000	7.17	97,629	0.0%	0
Total		**5,755,823**		**1,015,741**		**1,882,384**

1) Fair value on grant date before dilution
2) Estimated attainment
3) Number of PSU weighted with the pro rata performance and the average share price of €7.73 over the last 20 days in fiscal year 2021, cap at 200% for the LTI 2021-2024

Company retirement benefit plans

Members of the Board of Management receive company retirement benefits in the form of a defined contribution direct commitment. This covers retirement benefits upon reaching the statutory retirement age, disability and death. There is an entitlement to early payout beginning at the age of 62.

For each member of the Board of Management, SGL Carbon SE pays a contribution into a benefits account for each past year of service during the term of employment. The benefits account bears interest until retirement benefits begin. Any extra interest generated due to a rate of interest higher than the statutory guaranteed interest rate for the life insurance industry applicable at the time is additionally credited to the benefits account when benefits begin (surplus share). In the event of disability or death prior to retirement benefits coming due based on age, contributions are added to the benefits account up to the age of 60, with the top-up benefit being limited to a maximum of ten contributions. Payout in the event of retirement is made as a lump-sum payment or, upon request, in ten annual installments.

The new retirement benefits system was applied to Dr. Derr and Mr. Dippold. The present values of the defined benefit obligations shown in the following table are covered by a reinsurance policy in the amount of €110,320 (for Dr. Derr) and €29,721 (for Mr. Dippold).

As of Dec. 31, 2021 active members of Board of Management	Present value of defined benefit obligation		Service costs	
€ thousand	2021	2020	2021	2020
Dr. Torsten Derr	337	147	227	133
Thomas Dippold	184	44	167	35
Total	**521**	**191**	**394**	**168**

The total remuneration of the former Board of Management, executive management and their surviving dependents amounted to €2.5 million in the 2021 fiscal year (2020: €2.6 million). At the end of 2021, there were retirement benefit plan obligations to former members of the Board of Management and their surviving dependents totaling €62.8 million (2020: €70.9 million), of which €29.2 million (2020: €29.5 million) is covered by reinsurance policies.

The retirement benefit income of the members of the Board of Management of SGL Carbon SE for the last ten years amount to :

Former Members of Board of Management	Pension benefit payments	
€ thousand	2021	2020
Dr. Michael Majerus	0	0
Dr. Jürgen Köhler	0	0
Dr. Gerd Wingefeld	331	330
Armin Bruch	320	319
Jürgen Muth	232	231
Theodore H. Breyer	483	494
Gesamt	**1,366**	**1,374**

Remuneration of the Supervisory Board

The Annual General Meeting of SGL Carbon SE approved the remuneration system for the Supervisory Board as set out in Section 12 of the Articles of Association on June 16, 2020 with a majority of 99.63% of the votes. In addition to reimbursement of out-of-pocket expenses, each member of the Supervisory Board receives fixed remuneration of €50,000 per year, payable at the end of the fiscal year. Assumption of a position on the Supervisory Board involving additional responsibility and workload, such as Chairpersonship and Vice-Chairpersonship and/or participation in or Chairpersonship of a Supervisory Board committee, is compensated at a higher fixed remuneration. The Chairperson of the Supervisory Board receives two and a half times the standard remuneration, the Vice-Chairperson one and a half times the standard remuneration. Each member of the Personnel and Nominating Committees receives €2,000 per committee meeting upon attendance, and each member of the Audit Committee receives €3,000 per committee meeting upon attendance. The Chairperson of the Personnel Committee and the Nomination Committee receive €3,000; the Chairperson of the Audit Committee receives €6,000 per meeting. The company also grants the members of the Supervisory Board an attendance allowance of €400 for their participation in a Supervisory Board meeting.

In the present system of Supervisory Board remuneration, the fixed component accounts for 100% of the remuneration, while the variable component accounts for 0%. Not least due to the consideration that the workload and the risk profile of the Supervisory Board's activities increase in difficult business situations, in such situations misguided incentives arising from decreasing remuneration are avoided and the Supervisory Board is able to act independently in the fulfillment of its monitoring task. This might not be the case if the performance-related remuneration structures for the Board of Management and Supervisory Board were identical, and this arrangement is also intended to foster the long-term development of the company.

Annual remuneration is due and paid at the end of each fiscal year, and attendance and committee participation fees are due and paid following the respective events. In the event of resignation from the Supervisory Board during the year, the pro-rata annual remuneration for this period together with the remuneration and attendance fees for Supervisory Board and committee meetings are due and payable upon resignation. There are no further severance or remuneration arrangements subsequent to the term of office.

The full Supervisory Board and the Board of Management review the remuneration system for the Supervisory Board regularly as required, but at least every four years. This review includes a comparison of the current remuneration with the development of Supervisory Board remuneration at comparable companies, such as the development of remuneration at SDAX companies.

The company includes the members of the Supervisory Board in the coverage of a pecuniary loss liability insurance policy taken out by the company. This insurance provides for a deductible for the Supervisory Board of Management member of 10% of the loss up to at least the amount of one and a half times the fixed annual remuneration.

				Remuneration		
€ thousand	Board member since	Age at the time of publication of annual report 2021	Period of service (appointed up to)	Basic remuneration	Additional remuneration	Total
Susanne Klatten (Chairwoman) [1]	2009	59	2025	125.0	14.0	139.0
Georg Denoke (Deputy Chairman) [2]	2015	57	2025	75.0	20.0	95.0
Helmut Jodl (Deputy Chairman)	2008	60	2023	75.0	10.0	85.0
Ana Cristina Ferreira Cruz	2013	58	2023	50.0	2.0	52.0
Edwin Eichler	2010	63	2025	50.0	2.0	52.0
Ingeborg Neumann	2018	64	2023	50.0	19.0	69.0
Markus Stettberger	2013	50	2023	50.0	11.0	61.0
Dieter Züllighofen	2016	55	2023	50.0	11.0	61.0
Total				**525.0**	**89.0**	**614.0**

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

Comparative information on Board of Management remuneration

The "Annual Development of Board of Management Remuneration" table contains a comparative presentation of the annual change in remuneration with the development of sales and earnings performance of the SGL Group as well as the remuneration development of the entire SGL Carbon SE workforce and of the German subsidiaries. The annual development of board compensation is only comparable to a limited extent for new board members and for board members leaving the Company. In the case of Dr. Derr and Mr. Dippold, disproportionate percentages in the 2021/2020 year-on-year comparison arise from the fact that they began their service on the Board of Management in June 2020 and October 2020 respectively.

Annual Development of Remuneration	2021 zu 2020	2020 zu 2019	2019 zu 2018	2018 zu 2017	2017 zu 2016
Remuneration of Board Members					
Dr. Torsten Derr, CEO	183%	N/A	N/A	N/A	N/A
Thomas Dippold, CFO	408%	N/A	N/A	N/A	N/A
Dr. Michael Majerus, former CFO	–48%	–34%	1%	–17%	41%
Dr. Stephan Bühler, former Board Member for Legal and Compliance	–100%	325%	N/A	N/A	N/A
Dr. Jürgen Köhler, former CEO	–79%	–78%	–12%	–14%	31%
Susanne Klatten (Chairwoman)	–13%	14%	5%	–6%	2%
Georg Denoke (Deputy Chairman)	–2%	2%	13%	21%	–3%
Helmut Jodl (Deputy Chairman)	–14%	16%	6%	–5%	0%
Ana Cristina Ferreira Cruz	–4%	3%	2%	–1%	–4%
Edwin Eichler	–4%	3%	–4%	–1%	2%
Ingeborg Neumann	–17%	20%	78%	N/A	N/A
Markus Stettberger	–3%	3%	–2%	–1%	0%
Dieter Züllighofen	–3%	3%	3%	6%	33%
Development of financial performance of the Group / SGL Carbon SE					
Sales development	10%	–15%	4%	22%	12%
Net result	157%	47%	–318%	–70%	224%
Net result of SGL Carbon SE	400%	–41%	157%	–126%	155%
Development of remuneration of employees					
Remuneration of employees of SGL Carbon in Germany	21%	–5%	–9%	10%	6%
Remuneration of employees of SGL Carbon Group	15%	–6%	–3%	3%	4%

Disclosures pursuant to Sections 289a and 315a HGB

The reporting required under Sections 289a and 315a HGB is covered in the following overview:

Composition of issued capital

As of December 31, 2021, the company had a share capital of €313,194,183.68, divided into 122,341,478 no-par-value bearer shares, with a pro rata amount of €2.56 per share of the share capital (see Notes note 21).

Restrictions affecting voting rights or the transfer of shares

The members of the Company's Board of Management are obligated to hold a fixed number of shares in SGL Carbon SE for the duration of their tenure on the Board; the Chairman of the Board of Management in the amount of his fixed annual salary, the other members of the Board of Management in the amount of 85% of their fixed annual salary. There are no other restrictions on voting rights or the transfer of shares. However, mandatory legal requirements, in particular under Section 71b AktG, which excludes voting rights for the company's own shares, as well as the exclusion of voting rights in cases of conflicts of interest pursuant to Section 136 (1) AktG, are unaffected by this.

Direct or indirect participation in the capital

The Company has been notified of a direct or indirect interest in the capital that exceeds 10% of the voting rights as follows: (i) by SKion GmbH, Bad Homburg, Germany, through notifications of voting rights or notifications of managers´ transactions with a participation of approximately 28.55% at the end of 2021, and (ii) by Bayerische Motoren Werke Aktiengesellschaft (BMW AG), Munich, most recently by notification in connection with the capital increase in 2016 with a participation of approximately 18.26% at that time. The holding of voting rights of SKion GmbH is attributable to Ms. Susanne Klatten, Germany, who thereby indirectly holds approximately 28.55% of the voting rights in SGL Carbon SE as of the end of 2021.

Holders of shares with special rights

No shares with special rights that grant controlling authority have been issued.

Type of voting rights control in the case of employee shareholdings

There are no voting rights controls for employees who hold shares in the company's share capital.

Statutory provisions and provisions of the Articles of Incorporation relating to the appointment and removal of members of the Management Board and amendments to the Articles of Incorporation

The statutory provisions in Article 39 SE Regulation, Section 16 German SE Implementation Act (*SEoAusführungsgesetz*) and Sections 84, 85 AktG and Section 6 of the company's Articles of Incorporation apply to the appointment and dismissal of members of the Board of Management. In accordance with this, the members of the Board of Management are appointed and dismissed by the Supervisory Board. The members of the Board of Management are appointed for a maximum period of five years. Reappointments are permitted. The Supervisory Board may dismiss a member of the Board of Management if there is good cause for their dismissal. Good cause is, in particular, a gross violation of the duties of the Board of Management or a vote of no confidence by the Annual General Meeting. The Supervisory Board decides on appointments and dismissals at its own due discretion.

The Annual General Meeting makes decisions on changes to the Articles of Incorporation. Pursuant to Section 17 (4) Articles of Incorporation, such resolutions require a simple majority of the votes cast for the resolution, provided that at least half of the share capital is represented; this does not apply if a higher majority, including a higher capital majority, is required by law.

Authority of the Board of Management to issue and buy back shares

The Board of Management is authorized, with the approval of the Supervisory Board, to issue new shares from authorized or conditional capital (see Article 3 Articles of Incorporation and also the Notes note 21).

Material agreements that are conditional on a change of control as a result of a takeover bid

As of December 31, 2021, the Company had issued a convertible bond that will mature in 2023. The convertible bond entitles the bondholders in the event of a change of control to demand repayment of any outstanding bonds at par value (plus interest accrued up to that point), provided the bondholders declare such intention on or before a date to be determined by the Company which shall be no less than 40 and no more than 60 calendar days after the change of control. In addition, it is also possible to convert the bonds into shares, in which case an improved conversion ratio for the bondholder is applied which is staggered in relation to the remaining term of the relevant convertible bond. Control is deemed to have changed for the purposes of the convertible bonds maturing in 2023 if one or more persons acquire control of the company, whereby control means direct or indirect ownership of more than 30% of the voting shares. In addition, in the case of the convertible bond maturing in 2023, the improved conversion ratio will already apply in the case of a public takeover bid if the acceptance rate of the takeover bid at the end of the acceptance period exceeds the control threshold of 30% of the shares with voting rights, any additional minimum acceptance threshold of the bid has been reached at this point in time, and no further offer conditions remain unfulfilled (with the exception of conditions that may legally also occur after the acceptance period has expired).

The €250 million corporate bond issued by the Ccompany in 2019 maturing 2024 entitles investors to demand early redemption of their bonds against payment of 101% of the nominal amount (including any tax deduction from such early redemption amount) and interest accrued up to the redemption date if (a) a person (with the exception of Ms. Klatten, BMW AG and persons attributable to it) directly or indirectly obtains more than 35% of the voting shares in SGL Carbon SE, (b) all or almost all of the assets of SGL Carbon SE and its group companies are transferred to one person (with the exception of Ms. Klatten, BMW AG and persons attributable to it), or (c) the shares in SGL Carbon SE are no longer listed on the Frankfurt Stock Exchange or any other European regulated market.

Compensation agreements with the Board of Management and employees in the event of a takeover bid

No compensation agreements have been concluded with the Board of Management and employees for the event of a takeover bid.

Corporate Governance Declaration, Corporate Governance and Compliance Report (unaudited)

Declaration of conformity with the German Corporate Governance Code

The Board of Management and the Supervisory Board of a listed European corporation (Societas Europaea) with its registered office in Germany are required by Art. 9 (1) (c) (ii) SE Regulation in conjunction with Section 161 German Stock Corporation Act to declare at least once a year whether the German Corporate Governance Code (GCGC) has been and is being complied with. In addition, reasons must be specified as to which recommendations of the code have not been or are not being applied. Since 2002, the Board of Management and Supervisory Board of SGL Carbon SE have regularly issued and published declarations of conformity. Each declaration of conformity will be made available to the public on the company's website (www.sglcarbon.com, under "Company/Corporate Governance") for a period of five years. The most recent declaration of conformity was issued and published in November 2021:

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

SGL Carbon SE has been and will continue to be in full compliance with the recommendations of the "Government Commission on the German Corporate Governance Code" ("Regierungskommission Deutscher Corporate Governance Kodex") in the version dated December 16, 2019 (published on March 20, 2020) as published by the Federal Ministry of Justice and Consumer Protection in the official notice section of the German Federal Gazette since the execution of its last Declaration of Compliance in November 2020 except for the following deviations:

- With regard to recommendation B.3 of the Code, according to which first-time appointments of Management Board members shall be for a period of not more than three years. As part of its Management Board realignment in 2020, the Company appointed two new Board of Management members for a term of five years each. These decisions were made in the interest of a stable management structure with continuity for the future challenges and are also considered appropriate by the Supervisory Board in view of the qualifications of the candidates.
- With regard to recommendation C. 10 of the Code, according to which the Chair of the Supervisory Board and the Chair of the committee that addresses Management Board remuneration issues, shall be independent of the Company and the Management Board. Ms. Klatten, who is an indirect significant shareholder of the Company, currently holds both these positions. The current composition of the Supervisory Board and Personnel Committee Chair of the Company is considered appropriate by the Company. Ms. Klatten is viewed as particularly able for both positions and, in addition, the Company believes that the existing majority of independent members of the Supervisory Board members from the group of shareholder representatives ensure a sufficient balance in the relevant bodies.
- With regard to recommendation D.8 of the Code, according to which the report of the Supervisory Board should note how many meetings of the Supervisory Board and its committees the individual members attended in each case. In recent years, the participation rate in the meetings of the Supervisory Board and its committees, as shown in the respective report of the Supervisory Board, has been over 90%, so that the Company, at least insofar as the participation rate is not significantly reduced in the future, holds a consolidated presentation of the participation rates for being sufficiently adequate.
- With regard to recommendation G.13 sentence 2 of the Code, according to which, in the event of a post-contractual non-competition clause, the severance payment should be offset against the compensation for the non-competition clause. The service contract of Dr. Majerus, existing at the time such recommendation took effect, did not provide for an offsetting with respect to its non-competition clause, which is why Dr. Majerus, starting with his departure as of December 2020 and limited until May 31, 2021 will receive a compensation for the non-competition clause without being offset with the severance payment. The new remuneration system for the Management Board and the service contracts of the current members of the Management Board provide for a setting-off as provided in recommendation G.13 sentence 2 of the Code, though.

The Corporate Governance Principles of SGL Carbon SE furthermore satisfy a majority of the non-obligatory suggestions of the German Corporate Governance Code.

Wiesbaden, November 25, 2021

Susanne Klatten (Chair of the Supervisory Board of SGL Carbon SE), signatory for the Supervisory Board

Dr. Torsten Derr (Chair of the Board of Management of SGL Carbon SE), signatory for the Board of Management"

Composition and procedures of the Board of Management

The governance of SGL Carbon SE as a listed European company (SE) with its registered office in Germany is largely determined by Council Regulation EC No. 2157/2001 of October 8, 2001 on the Statute of a European Company (SE Regulation), Germany's SE Implementation Act, the Agreement on the Involvement of Employees in SGL Carbon SE as well as the German Stock Corporation Act (AktG), the suggestions and recommendations of the German Corporate Governance Code, and the Articles of Association of SGL Carbon SE.

SGL Carbon SE is subject to the dualistic system as per Art. 38 of the SE Regulation in conjunction with Section 5 of SGL Carbon SE's Articles of Association. The dualistic system is characterized by a separation of personnel between the management body (Board of Management) as the executive and management 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 shared goal is the sustained growth of the value of the company.

The Articles of Association specify that 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, 2021, the Board of Management consisted of two members and therefore no Board of Management committees were formed.

The Board of Management is responsible for managing SGL Carbon SE and the SGL Carbon Group in the interest of the company. The principle of overall responsibility applies, that is, the members of the Board of Management bear joint responsibility for management of the business; however, each member of the Board of Management is assigned responsibility for specific areas. More detailed information on the individual members of the Board of Management and their areas of responsibility can be found on the company's website (at www.sglcarbon.com under “Company/About us/Board of Management”). Certain matters determined by the full Board of Management shall both be dealt with by the full Board of Management and require its approval. The Chairperson of the Board of Management coordinates the work of the members of the Board of Management.

The Board of Management develops the corporate and Group strategy and ensures its implementation in consultation with the Supervisory Board. Its duties also include management and monitoring of operating activities and establishment and supervision of an appropriate and efficient control and risk management system. The Board of Management ensures compliance with legal provisions, official regulations and internal policies, and it works to ensure that these rules and regulations are also complied with by Group companies. The Board of Management prepares the company's interim financial reports, the financial statements of SGL Carbon SE, the consolidated financial statements, the management reports of SGL Carbon SE and the SGL Carbon Group and the separate non-financial report for the SGL Carbon Group.

The Board of Management informs the Supervisory Board regularly, promptly and comprehensively in regard to all issues relevant to the company and the Group, particularly including strategy, planning, business development, the risk situation, risk management and compliance. In this context, the Board of Management addresses instances in which the business situation deviates from the established plans and targets. When important events of material significance for the company occur, the Board of Management shall inform the Chairperson of the Supervisory Board without delay, and the Chairperson of the Supervisory Board shall subsequently inform the Supervisory Board and convene a Supervisory Board meeting if required.

The composition and procedures of the Supervisory Board and its committees

Supervisory Board

According to Section 8 (1) of the Articles of Association, the Supervisory Board of SGL Carbon SE consists of eight members, with half of them being shareholder representatives and the other half employee representatives. The shareholder members 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 Agreement on the Involvement of Employees in SGL Carbon SE. The Supervisory Board elects a Chairperson of the Supervisory Board from among its members and a Vice-Chairperson from among the shareholder representatives and employee representatives. If resolutions are to be adopted by a simple majority, the Chairperson of the Supervisory Board will cast the tie-breaking vote in the event of a tie, and if the Chairperson does not participate in the adoption of the resolution, the Vice-Chairperson who has been appointed to the Supervisory Board as a shareholder representative will cast the tie-breaking vote. In addition, the Chairperson of the Supervisory Board coordinates the work of the Supervisory Board and represents the interests of the Supervisory Board to the outside world.

The Supervisory Board advises and monitors the Management Board in managing the company. The Supervisory Board appoints and dismisses the members of the company's Board of Management, makes decisions regarding the remuneration system for Board of Management members and sets the individual remuneration for each member of the Board of Management. The remuneration system for the Board of Management and its approval by the Annual General Meeting is available on the company's website (www.sglcarbon.com, and available there under "Company/Corporate Governance"). At regular intervals, the Supervisory Board obtains reports from the Board of Management on the strategy, corporate planning, sales performance, profitability, business development and the situation of the company, as well as on the internal control system, the risk management system and the compliance management system. It is directly involved in decisions that are of fundamental importance to SGL Carbon SE and the Group; these include the launch of new sectors or the discontinuation of existing ones and the issuance of bonds. Section 11 of the Articles of Association of SGL Carbon SE contains a catalog of transactions for which the Board of Management requires the approval of the Supervisory Board (the Articles of Association of SGL Carbon SE are available on the company's website (www.sglcarbon.com, under "Company/Corporate Governance")). Furthermore, under certain circumstances it is required under law that the Supervisory Board or the Audit Committee approve transactions with related parties in advance. 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 proposal for appropriation of unappropriated profits. The activities of the Supervisory Board in the 2021 fiscal year are explained in the "Report of the Supervisory Board" (see page 7).

The Supervisory Board has adopted rules of procedure which govern in particular the convening and preparation of the Supervisory Board's meetings and the passing of resolutions in addition to its duties and responsibilities. The Rules of Procedure are available on the company's website (www.sglcarbon.com, under "Company/Corporate Governance").

Targets of the Supervisory Board regarding its composition

In accordance with the requirements of the German Corporate Governance Code, the Supervisory Board adopted targets for its composition and drafted a skill set profile for the body as a whole. In accordance with the targets it has set for itself, the Supervisory Board is to have a composition that ensures that its membership as a whole possesses the knowledge, skills and professional experience required to properly perform the duties of the Supervisory Board. The age limit for members of the Supervisory Board is 72. As a rule, a member of the Supervisory Board shall also no longer be proposed as a candidate for the Supervisory Board once they have completed their third term of office on the Supervisory Board. This rule does not apply to terms of office based on a court appointment to the Supervisory Board. If a Supervisory Board member holds a material stake in the company within the meaning of the German Corporate Governance Code, controls such a material shareholder of the company, or acts as a representative of such a material shareholder, there is a fundamental exception to the above-mentioned rule and no time restriction applies in this case. Each member of the Supervisory Board also ensures that they have sufficient time to perform their duties.

All members of the Supervisory Board must be able to properly perform their duties. To properly perform the duties in the context of the company's accounting, at least two members of the Supervisory Board should have special knowledge and experience in the areas of accounting and auditing (as financial experts); this is currently the case with Ms. Neumann and Mr. Denoke, as demonstrated by their training and education as well as their professional experience – amongst other things is Ms. Neumann public accountant by training and was Mr. Denoke CFO of a large listed company for many years. In addition, at least one member of the Supervisory Board must have considerable professional experience and industrial expertise in the SGL Carbon Group's sectors or key customer industries. Furthermore, each of the following areas should have at least one member who has extensive professional experience in the specified area: corporate management and corporate strategy, compliance and risk management, innovation expertise (including digitalization), executive development and human resources. Overall, the Supervisory Board should have a balanced number of members with experience in the technical fields (particularly in chemistry and engineering) and members with a background in business. The composition of the Supervisory Board should also reflect the international activities of the company; at least one member of the Supervisory Board should have special international knowledge and experience due to their national origin, education or professional activity.

The Supervisory Board shall always include a sufficient number of independent members. That is why at least half of the members of the Supervisory Board on the shareholder side should be independent; this is currently the case, as the Supervisory Board considers Ms. Neumann, Mr. Denoke and Mr. Eichler to be independent representatives, meaning that more than half of the shareholder representatives are independent.

With regard to appropriate participation of women on the Supervisory Board of the company, the "German Act on Equal Participation of Men and Women in Executive Positions in the Public and Private Sectors" of April 24, 2015, which is relevant for SGL Carbon SE, also requires that the Supervisory Board of the company be composed of at least 30% women and at least 30% men.

The aforementioned targets of the Supervisory Board with regard to its composition and the skill set profile for the entire body are taken into account in proposals for the appointment of new Supervisory Board members, and efforts are made to fill gaps in the skill set profile. In its current composition, the positions on the Supervisory Board are appropriately filled in terms of the members' expertise, diversity and independence according to the targets and skill set profile of the Supervisory Board.

More detailed information on the individual members of the Supervisory Board, including the length of their membership on the board, can be found on the company's website (www.sglcarbon.com, under "Company/About us/Supervisory Board").

Rules in the event of possible conflicts of interest

It is necessary for Supervisory Board members to disclose conflicts of interest to the Chairperson of the Supervisory Board. This includes both specific conflicts of interest that arise as well as potential conflicts of interest that are sufficiently probable. If a Supervisory Board member has conflicts of interest that are material and not merely temporary, this will lead to termination of the mandate. The Supervisory Board or the Audit Committee approves transactions with related parties in accordance with the statutory requirements. In addition, the Audit Committee examines whether there were any indications of improper influence in transactions between SGL Carbon Group companies and Supervisory Board members, persons or companies related to them, or shareholders with a stake in SGL Carbon SE of more than 5% of the voting rights. In the reporting period, no conflicts of interest were reported by members of the Supervisory Board or Board of Management that would be necessary to disclose to the Supervisory Board without delay. In the reporting period, there were also no consultancy or other service agreements between the members of the Supervisory Board and the company. Relationships to related parties are presented in Note **26** to the consolidated financial statements.

Committees of the Supervisory Board

The Supervisory Board has a total of three standing committees, which operate in accordance with the requirements of the German Corporate Governance Code, the German Stock Corporation Act, the company's Articles of Association and the Rules of Procedure for the Supervisory Board. These committees are:

Personnel Committee

The Personnel Committee, chaired by Ms. Klatten, advises the Supervisory Board primarily on the arrangements that regulate 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 full Supervisory Board for a final decision. The committee also prepares personnel decisions by the Supervisory Board by drafting proposals for the appointment of new and the dismissal of incumbent members of the Board of Management. Other members of the committee are Ms. Neumann and Mr. Jodl.

Nomination Committee

The task of the Nomination Committee is to prepare proposals for the election of shareholder representatives to the Supervisory Board by the Annual General Meeting. The committee chaired by Ms. Klatten includes all shareholder representatives of the Supervisory Board, that is, in addition to Ms. Klatten, Ms. Neumann, Mr. Denoke and Mr. Eichler.

Audit Committee

The Audit Committee consists of four members. The Chairperson of the Audit Committee is Mr. Denoke. The other members are Ms. Neumann, Mr. Stettberger and Mr. Züllighofen. The committee deals with matters that include audit of the accounting, monitoring of the accounting process, risk management, compliance, the company's internal control and audit system, as well as audit of the Group's transactions with related parties. In particular, it is responsible for the preliminary audit of the annual financial statements of SGL Carbon SE and SGL Carbon Group, the management report and Group management report (including the separate non-financial report) and the proposal for the appropriation of earnings.

Another of the committee's areas of responsibility is the company's relationship with the auditor. In this context, the committee primarily prepares the Supervisory Board's proposal to the Annual General Meeting on the election of the auditor. It is of key importance here to ensure that the auditor is both qualified and independent. The committee also determines audit priorities, agrees the audit fee, prepares the issuance of the audit engagement and reviews in advance the commissioning of non-audit services to be performed by the auditor.

In addition to these three permanent committees, the Supervisory Board may form temporary project-related committees as needed.

Efficiency review of the Supervisory Board

The Supervisory Board regularly assesses the effectiveness and efficiency of its work and the work of its committees. The Supervisory Board conducted this self-assessment for the last time at the end of 2019. In an extensive questionnaire, the members of the Supervisory Board were able to provide their assessment of current practice and suggestions for optimization in regard to a variety of topics such as cooperation on the Supervisory Board and with the Board of Management, as well as on the work in the committees. The results were evaluated by a notary, processed anonymously and then discussed by the Supervisory Board. The members of the Supervisory Board rated the cooperation within the Supervisory Board as positive overall. The next regular efficiency review is expected to take place in 2022.

Governance practices

SGL Carbon Code of Conduct

The SGL Carbon Code of Conduct underscores the commitment of SGL Carbon and its employees to responsible, lawful conduct and reflects the Group's shared values, its corporate culture and the type of behavior it aspires to in its business. A key factor in SGL Carbon's lasting success as a company is its responsible and appropriate treatment of all parties with whom the company has business relationships, including employees, customers, shareholders, governmental authorities and the public. The Code of Conduct is intended to play a key role in building and maintaining trust among all stakeholders. It underscores the commitment of the company and its employees to compliance with applicable laws and providing 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 Carbon Corporate Governance Principles

The SGL Carbon Corporate Governance Principles summarize the relevant statutory provisions and the company's Articles of Association, as well as supplementary practices of SGL Carbon SE and the Group that were drafted and developed over the years. This statement of principles is intended to ensure responsible and transparent governance and control as well as to foster the trust of stakeholders, business partners and employees, as well as that of the public over the long term. The principles are reviewed at least once a year and updated to take changes in the law, recommendations and market opportunities into account. 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 Carbon Corporate Governance Principles also include the essential corporate guidelines relating to Group-wide corporate governance and compliance.

The above-mentioned SGL Carbon Code of Conduct, which underscores the commitment of the Group and its employees to compliance with the law and internal guidelines and which sets standards for lawful and ethical behavior, is fundamental to all of these documents. Using the Code of Conduct as a starting point, the company has also developed detailed corporate guidelines which apply in equal measure to SGL Carbon SE and the Group, and which also form part of the SGL Carbon Corporate Governance Principles. These guidelines include:

- a guideline on compliance with antitrust regulations
- a guideline on compliance with capital market regulations
- a whistleblower guideline for reporting particularly serious compliance incidents
- principles for granting and accepting gifts and other benefits and dealings with business partners and public officials
- a guideline on the security of information and the underlying infrastructure of the company

- a guideline for defining the process structures for identifying and monitoring the core risks of the company and its business units and functions

Compliance as part of the management and corporate culture

At SGL Carbon, compliance is a key management task of the Board of Management. Management does not tolerate any violation of the Code of Conduct. The senior executives also foster a corporate culture in which issues relating to integrity can be openly addressed with one's supervisor, the compliance officers and the Group Compliance department. Each employee bears personal responsibility for ensuring that their actions comply with SGL Carbon's Code of Conduct and the rules applicable in their area of work. Compliance must be present in the minds of managers and employees and form an integral part of daily business. Then compliance will also sustainably support the success of the company.

SGL Carbon has been rolling out and implementing a Compliance program throughout the Group for many years. The Board of Management has commissioned the Group Compliance department with managing this program worldwide. The department's task is to manage the necessary overarching organizational, communication and control structures across all locations, to review them on a regular basis and to adjust them as required. The aim is for compliance to go beyond adherence to legal requirements and structures and for it to be enshrined in the organization as part of value-based corporate management. Over the past fiscal year, the external certification of SGL Carbon SE's compliance management system was subjected to a regular surveillance audit (see the separate non-financial Group report/CSR report on page 30).

As part of their responsibilities for personnel and leadership, the management and senior executives of SGL Carbon assume an important role-model function here. For this reason, the topic of compliance regularly occupies a fixed place on the agenda of the annual Global Leadership Conference (GLC), at which awareness for the issue of compliance is repeatedly raised among executives at the highest levels of management. At the most recent GLC, compliance was dealt with as part of the ESG strategy workshop (see the separate non-financial Group report/ESG strategy and ambition and targets on page 12).

In addition to the compliance representatives of the business units and corporate functions (see separate non-financial Group report/CSR report, page 31), the SGL Carbon compliance organization includes a network of regional and local compliance officers. All members of the network receive appropriate introductory training when they first assume their role. In addition, the Compliance Manual, which is available as a managed document in the Guidelines directory of SharePoint, describes the essential elements of the Compliance program and the role and responsibility of the Compliance Network. All relevant documents are also available to members on a dedicated SharePoint page. The compliance representatives of the business units and the corporate functions are members of the Compliance Committee, which meets twice a year. The Compliance Committee discusses and approves strategic compliance issues as well as changes to the existing Compliance program. An average of two to three conference calls are held each year to ensure that knowledge is transferred between the Compliance Network and Group Compliance. There are also face-to-face events every two years in the form of regional Compliance conferences in Europe, Asia and North America. The conference calls are used for ongoing exchange of information on the Compliance program as well as discussion of current issues. The Compliance conferences serve the purpose in particular of further development of the Compliance program, taking into account location-specific needs, and are also used to train local representatives of the Compliance function. Due to the pandemic, three Compliance conferences for the regions of Europe, North America and Asia were held virtually for the first time in May and June 2021. The agenda for the participating Local Compliance Representatives (LCRs) included new legal developments, Compliance refresher training and drafting a concept together for the human rights training program (see the separate non-financial Group report/CSR report on page 31).

The local managers are the contact persons for employees at the locations for all matters relating to compliance and support for the Group Compliance department in the local implementation of the Compliance program.

The overriding goal in Compliance is to ensure that all employees are aware of and follow the applicable policies in order to reduce the risk of legal violations and prevent any resulting damage to SGL Carbon. For this reason, the Compliance guidelines are an integral part of the documents that are provided to each new employee. The local Compliance representatives report twice a year to Group Compliance in order to confirm that this process has been properly implemented. An acknowledgment of receipt shall also be placed in each employee's personnel file, documenting in writing that the employee has taken note of the rules contained in the Code of Conduct. This process is also part of an internal check within the framework of the internal control system. The Code of Conduct, the Guideline on Gifts and Hospitality, the Guideline on Compliance with Antitrust Regulations and the Whistleblower Guideline for Reporting Particularly Serious Compliance Incidents are available in a total of nine local languages. The guidelines are available for employees to download on SharePoint and the intranet. The intranet also provides employees with crucial information and modules of the SGL Compliance program, which can be accessed with just a few clicks.

Employees also take part in mandatory compliance training, which is conducted as classroom or e-learning training. Initial training is usually provided as online training (see separate non-financial Group report/CSR report on page 31).

SGL Carbon launched a comprehensive global antitrust compliance program back in 2001. A fundamental component of this program is mandatory training courses held on a regular basis, with the courses offered in the form of classroom as well as e-learning training. The target group for this mandatory training is all senior executives at the top three management levels in the Group, along with all employees in the areas of Purchasing, Sales and Marketing, employees in Human Resources and the Legal and Compliance department, and members of the Compliance Network. All new employees in this target group receive the SGL Carbon Guideline on Compliance with Antitrust Regulations with their hiring documents or when they change functions, and they then need to participate in the mandatory online basic training. In 2021, a new online basic antitrust training was created to replace the previous training. Refresher training is regularly provided to all employees in the target group in both classroom and online formats.

Preventive measures in the area of anti-corruption are also an essential part of the Compliance program (see separate non-financial Group report/CSR report "Anti-corruption and bribery," page 31).

In 2015, SGL Carbon rolled out a Code of Conduct for suppliers and subcontractors (the Supplier Code of Conduct), according to which they must commit themselves to lawful, ethical and sustainable behavior (see separate non-financial Group report/CSR report "Responsibility in the Supply Chain," page 32). Over the past fiscal year, the Guideline on Conflict Minerals was revised.

SGL Carbon strives to create an environment in which all concerns relating to Compliance can be openly discussed. All employees are encouraged to raise all integrity issues and questions with their supervisors, the Compliance department or a member of the Compliance Network. In addition to the existing communication and reporting channels, SGL Carbon has a whistleblower system in the form of the "Compliance Helpdesk." This system makes it possible for employees to confidentially report information on potential compliance violations in accordance with the Whistleblower Guideline. The Whistleblower Guideline also regulates mandatory protection of the reporting person. Third parties can also contact whistleblower system by email via the SGL Carbon homepage.

Group Compliance reviews reported Compliance-relevant incidents as in the context of an internal Compliance investigation. The department's task is to ensure that misconduct and violations are prevented and identified in due time, that Company activities comply with applicable law and statutory provisions, and that potential for improvement with regard to internal business activities is identified.

In the reporting period, SGL Carbon recorded all indications of potential violations in regard to antitrust law, anti-corruption law, export controls and customs, protection of trade secrets, anti-fraud law and human rights law (such as discrimination and harassment) that could result in financial or reputational damage. All such indications were processed so that specific measures could be derived and implemented where necessary. SGL Carbon is convinced that the compliance management components and monitoring processes described are suitable for creating the best possible basis for ensuring that future conduct will be in compliance with the law in all areas of the SGL Carbon Group.

Additional compliance measures relate to capital market law and adherence to the corresponding Group guideline, which provides guidance on matters such as trading in securities of SGL Carbon SE for board members and employees as well as proper handling of potential insider information. The Ad Hoc Committee has been in place for years, with members who represent various functions in the evaluation of relevant matters for their ad hoc relevance. The objective of the committee is to ensure that potential insider information is handled in compliance with the law.

The existing Compliance program on export controls and customs ensures that goods and technologies are exchanged and that services are used according to the relevant internal and external requirements (see separate non-financial Group report/CSR report "Responsibility in the supply chain," page 32).

Within the scope of its regular audits in 2021, the Group Internal Audit department again reviewed the implementation of anti-corruption and anti-fraud management at individual subsidiaries. The focus here was on obtaining audit certainty as to whether the defined Compliance rules are being adhered to locally at the companies. The task also involved recognizing and uncovering individual rule violations. If the audits find that work processes need to be optimized or control measures need to be intensified, the relevant processes are updated.

An effective compliance management system includes regular risk assessments, which were carried out in 2021 on a top-down basis with all members of the management committees of the business units by way of structured risk assessment interviews (see separate non-financial Group report/CSR report on "Governance," page 30).

At its March meeting, the Audit Committee of the Supervisory Board dealt in detail with the Compliance Annual Report 2020.

Systematic risk management system

The SGL Carbon Group developed a risk management system at an early stage to address risks and opportunities in a responsible manner as part of good corporate governance. Further explanations in regard to the risk management system, is available in the opportunities and risks report on pages 73-79.

Disclosures in accordance with the Act on Equal Participation of Men and Women in Executive Positions and disclosures on minimum percentages on the Supervisory Board

In accordance with the German Act on Equal Participation of Men and Women in Executive Positions in the Public and Private Sectors, the company has set targets for the percentage of women on the Board of Management and subsequent management levels and their implementation period. In December 2019, the Supervisory Board set a target of 0% for the percentage of women on the Board of Management of SGL Carbon SE by December 31, 2022, particularly in view of the size of the Board of Management with only two members (percentage of women at the time of the resolution: 0%). The percentage of female members on the company's Board of Management as of December 31, 2021, was 0%, which was in line with the target figure. The Board of Management has in turn resolved a target for the percentage of women at the management level of SGL Carbon SE below the Board of Management of at least 20.83% by December 31, 2022 (percentage of women at the time of the resolution: 20.83%). As of December 31, 2021, the percentage of women at this management level was 29.41% (5 women). It was not possible to set a quota for women for a second management level below the Board of Management at the company. This is due to the fact that there is only one relevant management level (with relevant personnel and management expertise) below the Board of Management at SGL Carbon SE, which is purely a Group parent company with a flat hierarchical structure.

In addition, the Act on Equal Participation of Men and Women in Executive Positions requires that the Supervisory Board of SGL Carbon SE include at least 30% women and at least 30% men. The company fulfills these requirements with regard to the composition of the Supervisory Board, which had three female members (37.5%) and five male members (62.5%) in the reporting year.

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 first refers to professional diversity, which is manifested in the existing structure of the company in that at least one of the members of the Board of Management has extensive experience in the operating business of the Company, in strategic governance, and in the financial, controlling and reporting processes. Another crucial factor is that SGL Carbon's international nature is also reflected in its extensive professional experience in and with foreign countries. With regard to gender distribution, in view of the size of the company's Board of Management, which regularly consists of just two members, a far-reaching quota was neither deemed appropriate nor defined (see "Disclosures in accordance with the Act on Equal Participation of Men and Women in Executive Positions and Disclosures on minimum percentages on the Supervisory Board" above). With regard to the age structure, we intend for the limit for Board of Management members to be 65 years (age limit). When appointing new members, the Supervisory Board takes its bearings from this requirements profile, ensuring that the best candidate for a vacant position can be appointed in each case in the interest of the company. The current composition of the Board of Management meets the company's targets for appropriate appointments.

The Company is looking to develop suitable candidates from within the ranks of the Group in order to fill any Board of Management vacancies that arise. This does not preclude the Supervisory Board from drawing on external candidates exclusively or additionally in the selection process, depending on the specific situation. To identify and develop employees with appropriate leadership potential in order to fill top management roles, the company has a systematic approach to management development that includes the following key elements: (i) early identification of suitable candidates from a variety of different disciplines, nationalities and genders; (ii) systematic development of senior executives through the assignment of tasks with increasing responsibility, preferably in a variety of different businesses and functions; (iii) regular and systematic review of individual suitability requirements for the target levels under consideration (relevant skill sets, professional experience and role-model function in terms of corporate culture). Using the skill set profile developed by the Supervisory Board as a benchmark, the company will identify candidates who may be included in the Supervisory Board's selection process. This is intended to make it possible for the Supervisory Board to ensure sufficient diversity in terms of professional training and experience, cultural background and diversity in the appointment of members 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. When external candidates are involved, the company will regularly make an appropriate selection on the basis of the skill sets required for the Board of Management position by drawing on the assistance of qualified personnel consulting firms.

With regard to its own composition, the Supervisory Board of the company has defined a skill set profile and set detailed targets for itself in order to reflect various perspectives and backgrounds of experience on the Supervisory Board. The details of this diversity concept are described in this report above under "The composition and procedures of the Supervisory Board and its committees/Targets of the Supervisory Board regarding its composition." These targets are taken into account when new Supervisory Board members are proposed for appointment. In the current composition of the Supervisory Board, a Supervisory Board composition that is appropriate according to the above-mentioned targets is achieved.

Additional disclosures

Shareholders and the Annual General Meeting

The shareholders of SGL Carbon SE exercise their rights at the company's Annual General Meeting. At the Annual General Meeting, the shareholder representatives elect the Supervisory Board in particular, while also electing the auditor and passing the resolution on discharge of the Board of Management and the Supervisory Board. They also decide on the appropriation of unappropriated profits, on capital measures and on the approval of affiliation agreements, as well as on the remuneration of the Supervisory Board and on amendments to the company's Articles of Association. The Annual General Meeting is convened once per year. Each share is granted one vote. Shareholders may regularly exercise their voting rights at the Annual General Meeting either in person or through a proxy of their choice or through a company-nominated proxy acting on their behalf. In accordance with the rules, voting instructions may be issued to the company's proxy both before and during the Annual General Meeting until the end of general debate. Shareholders also have the opportunity to cast their votes in writing by postal vote without authorizing a proxy.

Active and transparent communication for the shareholders of SGL Carbon SE

The primary objective of the Board of Management is to comprehensively report to all target groups and in particular to the shareholders while providing the same information at the same time to all of these parties. Regularly recurring events (such as the Annual General Meeting, (telephone) conferences with analysts and investors) and reports or announcements (such as the Annual Report, interim reports, presentations at the Annual General Meeting, press releases and ad hoc announcements) are published on the company's website.

Remuneration system and remuneration report as per Section 162 of the German Stock Corporation Act (AktG)

The remuneration report on the most recent fiscal year as well as the auditor's report as per Section 162 AktG, the applicable remuneration system for the Board of Management and the Supervisory Board as per Section 87a (1 and 2) (1) AktG and Section 113 AktG, and the respective remuneration resolutions are made publicly available on the company's website at www.sglcarbon.com (available there under "Company/Corporate Governance"; www.sglcarbon.com/unternehmen/corporate-governance).

Disclosures on the auditor

The Frankfurt branch of KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, has been the auditor for SGL Carbon SE and the SGL Carbon SE Group since the 2017 fiscal year (January 1, 2017, to December 31, 2017). Mr. Janz has been signing as the responsible auditor since the 2017 fiscal year. The appointment was preceded by a tender and selection process for the audit as per Art. 16 (3) of Regulation (EU) No. 537/2014 of the European Parliament and of the Council of April 16, 2014 (Audit Regulation).

Information on auditor's fees can be found in the Annual Report on page 163.

Based on the recommendation of its Audit Committee, the Supervisory Board will propose to the Annual General Meeting 2022 to appoint KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, as auditors of the company and the Group for the 2022 fiscal year (and also for audit services required for any review of financial information during the year).

Deductible for D&O insurance

The company has taken out a directors' and officers' liability insurance (D&O insurance) policy for members of the Board of Management and Supervisory Board 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 concerned.

Share transactions by the Board of Management and Supervisory Board

The members of the Board of Management and the Supervisory Board, as well as persons closely related to them, are required by the relevant capital market regulations to disclose proprietary transactions involving shares, debt instruments or certain other related financial instruments of SGL Carbon SE if the total value of these transactions exceeds a threshold value within a calendar year. Notifications are published on the company's website (www.sglcarbon.com, under "Company/Investor Relations/Share/Managers' Transactions").

Wiesbaden, March 23, 2022

SGL Carbon SE

The Board of Management of SGL Carbon SE

Dr. Torsten Derr **Thomas Dippold**

Consolidated Financial Statements

Consolidated Income Statement

For the period from January 1 to December 31

€m	Note	2021	2020
Sales revenue	**5, 28**	**1,007.0**	**919.4**
Cost of sales		−796.7	−739.1
Gross profit		**210.3**	**180.3**
Selling expenses		−95.1	−88.5
Research and development costs	5	−31.0	−33.3
General and administrative expenses	5	−42.0	−46.5
Other operating income	6	58.0	24.0
Other operating expenses	6	−7.0	−7.5
Result from investments accounted for At-Equity	7	17.0	11.5
Restructuring expenses	8	0.2	−27.2
Impairment losses	9	-	−106.5
Operating profit/loss		**110.4**	**−93.7**
Interest income	10	0.8	0.7
Interest expense	10	−25.4	−27.8
Other financing result	10	−3.7	−2.3
Result from continuing operations before income taxes		**82.1**	**−123.1**
Income tax expense	11	−6.2	−7.0
Result from continuing operations		**75.9**	**−130.1**
Result from discontinued operations, net of income taxes		-	0.7
Net result for the year		**75.9**	**−129.4**
Thereof attributable to:			
Non-controlling interests		0.5	2.8
Consolidated net result (attributable to the shareholders of the parent company)		75.4	−132.2
Earnings per share basic (in €)	12	0.62	−1.08
Earnings per share, diluted (in €)	12	0.62	−1.08
Earnings per share continuing operations, basic and diluted (in €)		0.62	−1.09

Consolidated Statement of Comprehensive Income

For the period from January 1 to December 31

€m	Note	2021	2020
Net result for the year		**75.9**	**–129.4**
Items that may be reclassified subsequently to profit or loss			
Share of investments accounted for at-equity in other comprehensive income	7	–3.5	
Cash flow hedges [1]	27	–0.2	0.0
Currency translation [2]		26.5	–36.2
Items that will not be reclassified to profit and loss			
Actuarial gains/losses on pensions and similar obligations [3]	22	53.0	–29.6
Other comprehensive income		**75.8**	**–65.8**
Comprehensive income		**151.7**	**–195.2**
Thereof attributable to:			
Non-controlling interests		0.8	2.7
Consolidated net result (attributable to the shareholders of the parent company)		150.9	–197.9

1) Includes tax effects of €0.0 million (2020: €0.0 million)
2) Includes tax effects of €0.0 million (2020: €0.0 million)
3) Includes tax effects of minus €0.3 million (2020: €0.3 million)

Consolidated Balance Sheet

As of December 31

ASSETS €m	Note	Dec. 31, 21	Dec. 31, 20
Goodwill	13	22.1	20.7
Other intangible assets	13	20.5	32.7
Property, plant and equipment	14	558.3	538.3
Investments accounted for At-Equity	7	54.5	56.2
Other non-current assets	15	6.6	7.1
Deferred tax assets	20	4.6	3.7
Total non-current assets		**666.6**	**658.7**
Inventories	16	273.8	247.3
Trade receivables and contract assets	17	182.6	182.1
Other receivables and other assets	18	32.4	28.9
Cash and cash equivalents	19	220.9	141.8
Total current assets		**709.7**	**600.1**
Total assets		**1,376.3**	**1,258.8**

EQUITY AND LIABILITIES €m	Note	Dec. 31, 21	Dec. 31, 20
Issued capital	21	313.2	313.2
Capital reserves	21	1,041.5	1,041.6
Accumulated losses		−983.2	−1,134.1
Equity attributable to the shareholders of the parent company		**371.5**	**220.7**
Non-controlling interests		9.3	12.2
Total equity		**380.8**	**232.9**
Provisions for pensions and similar employee benefits	22	247.1	340.1
Other provisions	23	43.4	36.7
Interest-bearing loans	24	413.7	410.9
Other financial liabilities	24	32.0	29.8
Other liabilities	24	4.6	4.6
Deferred tax liabilities	20	1.5	1.8
Total non-current liabilities		**742.3**	**823.9**
Other provisions	23	85.8	70.1
Current portion of interest-bearing loans	24	4.7	3.7
Trade payables and contract liabilities	24	115.2	77.6
Other financial liabilities	24	13.7	12.7
Other liabilities	24	33.8	37.9
Total current liabilities		**253.2**	**202.0**
Total equity and liabilities		**1,376.3**	**1,258.8**

Consolidated Cash Flow Statement

For the period from January 1 to December 31

€m	Note	2021	2020
Cash flow from operating activities			
Result from continuing operations before income taxes		82.1	−123.1
Adjustments to reconcile the result from continuing operations to cash flow from operating activities:			
Interest expense (net)		24.6	27.1
Change in value of contract assets (IFRS 15)		3.7	8.1
Result from the disposal of property, plant and equipment		−19.6	−7.6
Depreciation/amortization expense		70.8	84.1
Impairment losses	9	0.0	106.5
Restructuring expenses	8	−0.2	27.2
Result from investments accounted for At-Equity	7	−17.0	−11.5
Amortization of refinancing costs		2.9	2.6
Interests received		2.8	0.7
Income taxes paid	11	−12.2	−5.6
Changes in provisions, net		−23.8	0.3
Changes in working capital			
Inventories		−15.1	53.7
Trade receivables		−1.0	10.8
Trade payables		34.4	−28.6
Changes in other operating assets/liabilities		−18.0	−20.5
Cash flow from operating activities – continuing operations		**114.4**	**124.2**

€m	Note	2021	2020
Cash flow from investing activities			
Payments to purchase intangible assets and property, plant and equipment		–50.0	–55.8
Proceeds from the sale of intangible assets and property, plant and equipment		31.3	14.2
Dividend payments from investments accounted for At-Equity		15.8	11.3
Cash flow from investing activities – continuing operations		**–2.9**	**–30.3**
Changes in time deposits		0.0	4.0
Cash flow from investing activities and cash management activities – continuing operations		**–2.9**	**–26.3**
Cash flow from investing activities and cash management activities – discontinued operations		0.0	–1.9
Cash flow from investing activities and cash management activities – continuing and discontinued operations		**–2.9**	**–28.2**
Cash flow from financing activities			
Proceeds from the issuance of financial liabilities		13.0	6.7
Repayment of financial liabilities		–14.1	–4.0
Changes in ownership interests in subsidiaries		–0.7	–51.4
Redemption payments for lease liabilities		–9.5	–16.0
Payments in connection with financing activities		0.0	–0.9
Interest paid		–19.5	–20.2
Other financing activities		–3.1	–0.7
Cash flow from financing activities – continuing operations		**–33.9**	**–86.5**
Cash flow from financing activities – discontinued operations		0.0	0.0
Cash flow from financing activities – continuing and discontinued operations		**–33.9**	**–86.5**
Effect of foreign exchange rate changes		1.5	–0.8
Net change in cash and cash equivalents		**79.1**	**8.7**
Cash and cash equivalents at beginning of year		141.8	133.1
Cash and cash equivalents at end of year		**220.9**	**141.8**

Consolidated Statement of Changes in Equity

For the period from January 1 to December 31

		Equity attributable		
€m	Issued capital	Capital reserves	Accumulated profit/loss	
Balance as of Jan. 1, 20	**313.2**	**1,041.6**	**−907.4**	
Net result for the year			−132.2	
Other comprehensive income			−29.6	
Comprehensive income			**−161.8**	
Dividends				
Balance as of Dec. 31, 20	**313.2**	**1,041.6**	**−1,069.2**	
Net result for the year			75.4	
Other comprehensive income			53.0	
Comprehensive income			**128.4**	
Dividends				
Equity component of convertible bond		−0.1		
Other changes in equity				
Balance as of Dec. 31, 21	**313.2**	**1,041.5**	**−940.8**	

	to the shareholders of the parent company						
	Accumulated losses						
	Accumulated other comprehensive income						
	Currency translation	Cash flow hedges (net)	Investments accounted for At-Equity	Accumulated losses	Equity attributable to the shareholders of the parent company	Non-controlling interests	Total equity
	−28.8	**0.0**		**−936.2**	**418.6**	**10.3**	**428.9**
				−132.2	−132.2	2.8	−129.4
	−36.1	0.0		−65.7	−65.7	−0.1	−65.8
	−36.1	**0.0**		**−197.9**	**−197.9**	**2.7**	**−195.2**
				0.0	0.0	−0.8	−0.8
	−64.9	**0.0**		**−1,134.1**	**220.7**	**12.2**	**232.9**
				75.4	75.4	0.5	75.9
	26.2	−0.2	−3.5	75.5	75.5	0.3	75.8
	26.2	**−0.2**	**−3.5**	**150.9**	**150.9**	**0.8**	**151.7**
				0.0	0.0	−3.1	−3.1
					−0.1		−0.1
				0.0	0.0	−0.6	−0.6
	−38.7	**−0.2**	**−3.5**	**−983.2**	**371.5**	**9.3**	**380.8**

Notes to the Consolidated Financial Statements

1. General information

SGL Carbon SE (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 special graphites. The Company has its registered office in Wiesbaden, Germany. Its mailing address is: SGL Carbon SE, Söhnleinstrasse 8, 65201 Wiesbaden. 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 requirements of German commercial law pursuant to Section 315e(1) of the German Commercial Code (HGB). These consolidated financial statements for the year ending December 31, 2021, were authorized for publication by the Board of Management on March 23, 2022.

The consolidated financial statements are generally prepared on the basis of historical cost unless stated otherwise in Note 2. The consolidated financial statements have been prepared in euros (€). The figures are presented in millions of euros (€ million), rounded to one decimal place, unless stated otherwise. Due to rounding, figures may not add up precisely to the totals provided.

Recognition of interest payments in the cash flow statement

For a more meaningful presentation of cash flows from operating activities, the option under IAS 7.33 has been exercised again and interest paid will be presented as part of cash flows from financing activities starting in 2021. The previous year's presentation has been adjusted accordingly, resulting in an improvement of €20.2 million in cash flow from operating activities and a corresponding deterioration in cash flow from financing activities.

New reporting structure since January 1, 2021

External reporting now reflects the realignment of the organizational structure that began in 2020. Effective January 1, 2021, we made a fundamental change to the organization's structure and resource allocation. The previous Graphite Materials & Systems (GMS) reporting segment was separated into Graphite Solutions (GS) and Process Technology (PT). The previous Composites – Fibers & Materials (CFM) reporting segment was divided into Carbon Fibers (CF) and Composite Solutions (CS). The four business units (BUs) GS, PT, CF and CS are the leading internal reporting structures and thus represent the reportable operating segments. Corporate covers the central functions and is a fifth reporting segment in addition to the four operational reporting segments. These central functions continue to support the four BUs by providing systems, standards and guidelines as well as defined services. The previous year's figures have been adjusted for reasons of comparability. For further information, see Note 28 "Segment reporting."

2. Summary of material accounting policies

The consolidated financial statements are prepared according to the following consolidation, accounting and valuation principles. In certain cases, it is necessary to make estimates and assumptions that may affect the carrying amounts of assets and liabilities on the balance sheet and the amounts of expenses and income. These estimates and assumptions can change over time and may have a significant impact on the net assets, financial position and results of operations of SGL Carbon.

The coronavirus (COVID-19) pandemic continued to affect our operations in 2021 for the second consecutive year. The impacts were mainly seen in the form of volatile raw material availability and significant price increases for raw materials, energy and transportation, especially in the second half of the year. The systematic implementation of the restructuring and transformation program initiated in the previous year largely compensated for the negative effects. The extent to which the pandemic will affect SGL Carbon's future business activities depends on emerging virus variants, the global progress of the vaccination and the effectiveness of the vaccines, as well as the possible effects of increasing phase-outs of government support programs. Possible impacts on the net assets, financial position and results of operations, such as from further increases in factor costs and scarce raw material availability, were simulated during the risk management process. The consolidated financial statements were prepared on a going concern basis, as cash and cash equivalents of €220.9 million on the balance sheet date and an undrawn credit line of €175 million provide sufficient financial resources to compensate for a potential deterioration in the underlying conditions.

The estimate-sensitive accounting policies applied by SGL Carbon are described below under this note (such as recognition of sales, impairment tests and provisions for pensions and similar employee benefits) and in more detail in particular under Notes 5, 8, 9, 20, 22 and 23.

Consolidation principles

The consolidated financial statements include SGL Carbon SE and its subsidiaries over which SGL Carbon exercises control. SGL Carbon controls a company to the extent that it has power over it. In addition, SGL Carbon is exposed or has rights to variable returns from its involvement with investees and has the ability to affect those returns through its power over the investee. As of December 31, 2021, 13 German (previous year: 15) and 30 foreign subsidiaries (previous year: 32) were consolidated in addition to SGL Carbon SE. One jointly controlled company (previous year: one) and two associated companies (previous year: two) were accounted for At-Equity. The list of companies included in the consolidated financial statements and the total shareholdings are shown in the list of shareholdings in Note 31 in accordance with section 313(2) HGB.

Associates and joint ventures

Associates are companies in which SGL Carbon may exercise significant influence over operating and financial policies. Joint ventures are companies in which SGL Carbon and at least one other party exercise joint control. Joint control exists when decisions about material activities require unanimous consent of the parties sharing joint control. Interests in joint ventures and associates in the Group are accounted for At-Equity. SGL Carbon's share of post-acquisition profit or loss of the joint ventures or associates is recognized in the consolidated income statement, while its share of other comprehensive income and of changes in equity that has not been recognized in profit or loss is recognized directly in Group equity. The cumulative changes after the acquisition date increase or decrease the carrying amount of the investment in the joint ventures and associates. If the losses of a joint venture or associate attributable to SGL Carbon correspond to or exceed the value of the investment in that company, there will be no further share of losses recognized in the financial statements. The investment in an associate or joint venture is the carrying amount of the investment plus any non-current loans that are attributable to SGL Carbon's net investment in the associate or joint venture.

Foreign currency translation

Translation of items denominated in foreign currency

In the separate financial statements of the Group companies, all foreign currency receivables and payables are valued at the middle rates at the balance sheet date, regardless of whether they are hedged or not. Exchange rate differences resulting from the remeasurement of items denominated in foreign currency are recognized in the income statement as other operating expenses and/or other operating income. This does not include monetary items designated as part of a hedge of the Group's net investment in a foreign operation. These are recognized directly in equity (currency translation reserve) until disposal of the net investment; only on disposal is the cumulative amount reclassified to the income statement. Taxes resulting from the exchange differences of these monetary items are also recognized directly in equity.

Translation of financial statements in foreign currency

The financial statements of consolidated companies prepared in foreign currencies are translated in accordance with the functional currency concept (IAS 21) using the modified closing rate method. As all subsidiaries operate their business independently in financial, economic and organizational terms, the functional currency is identical to the respective local currency. Balance sheet items are consequently translated at the closing rate on the balance sheet date and income statement items at average rates for the year. Exchange differences arising from the translation are recognized as a separate component of equity until disposal of the foreign operation.

Sales revenue, contract assets, trade receivables and contract liabilities

Sales revenue recognition: Sales revenue is recognized when control of the goods has been transferred or the service has been rendered, that is, when the customer has the ability to direct the use of the transferred goods or services and substantially obtains all of the remaining benefits from them. The prerequisite for this is that a contract with enforceable rights and obligations exists and, among other things, it is probable that SGL will collect the consideration, taking into account the customer's creditworthiness. Sales revenue comprises the equivalent value that SGL Carbon expects to receive for the transfer of goods or the rendering of services.

SGL Carbon agrees payment terms that are common industry practice. Material financing components are not included in the contracts with customers.

Warranty obligations provide assurance to the customer that the delivered goods comply with the contractually agreed specifications. Such obligations do not represent a separate performance obligation and are recognized as a provision in accordance with IAS 37.

Sales revenue from standard products: Revenue from the sale of standard products is recognized when control is transferred to the acquirer, usually upon delivery of the goods. Invoices will be issued at this point in time.

Revenue from contracts with customer-specific products: In the case of order-related production where contract work has to be delivered and the final product cannot be sold to (any) other customer (customer-specific asset with no alternative use), sales revenue is recognized over the manufacturing period using the percentage-of-completion method based on the ratio of costs already incurred to the estimated total costs. An expected loss from a contract is recognized immediately as an expense.

When recognizing revenue over a production period, the assessment of whether an asset is highly customized to a particular customer is of particular importance, as is the estimate of the consideration that SGL Carbon expects to receive. This estimate involves subjective assessments and the use of assumptions that are inherently characterized by uncertainty and subject to change.

Sales revenue from the rendering of services: Services are generally provided in connection with the sale of products and are recognized as soon as the service has been rendered. The amount of sales revenue from the provision of services plays a minor role compared with sales revenue from the transfer of goods.

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

For information on loss allowances on receivables from contracts with customers, please refer to Note 27 “Additional disclosures on financial instruments,” keyword “credit risks.”

Income and expenses

Operating expenses are recognized in profit or loss when the service has been used or when expenses have been incurred. Interest income and expenses are recognized on an accrual basis. Advertising and sales promotion expenses and other customer-related expenses are immediately recognized in profit or loss. Provisions for estimated expenses under statutory warranties are recognized upon sale of the respective product in the amount of the estimated usability based on past experience.

Government grants

Government grants are recognized when there is reasonable assurance that the grants will be received, and the entity will comply with the conditions attached to them. Grants related to income are presented as other operating income on a systematic basis over the periods that the related expenses for which they are intended to compensate are recognized. Government grants for the acquisition or construction of property, plant and equipment reduce the costs of acquisition or conversion of the relevant assets.

Earnings per share

"Basic earnings per share" are calculated by dividing results from continuing operations, results from discontinued operations and profit after tax attributable to the shareholders of the parent company by the weighted average number of shares outstanding during the fiscal year. "Earnings per share, diluted" takes into account all potentially dilutive convertible bonds and share-based payment plans, assuming conversion or exercise.

Goodwill

Goodwill is not subject to amortization but is tested for impairment once a year or more frequently if there are indications of impairment. Goodwill is carried at cost less any accumulated impairment. Goodwill is tested for impairment at the level of a cash-generating unit, which at SGL Carbon is represented by a segment or a level below the segment. The cash-generating unit (CGU) represents the lowest level at which goodwill is monitored for internal company management purposes. An impairment would arise if the carrying amount of the CGU to which goodwill is allocated is higher than its recoverable amount. For further information on the impairment test procedure, refer to the section "Impairment tests of property, plant and equipment and other intangible assets."

Property, plant and equipment, other intangible assets and investment property

Tangible and other intangible assets used in the business for more than one year are recognized at cost less amortization and any impairments. This also applies to investment property. These comprise property held by the company to earn rentals and/or for capital appreciation and that are not used in production or for administrative purposes. Where depreciable property, plant and equipment consists of material identifiable components, each with a different useful life, these components are treated as separate units of account and depreciated over their respective useful lives.

Depreciation of property, plant and equipment is calculated using the straight-line method on the basis of the following useful lives, which are applied uniformly throughout the Group:

Property, plant and equipment – useful lives	
Buildings	10 to 40 years
Plant and machinery	4 to 25 years
Other equipment	3 to 15 years
Office furniture and equipment	3 to 15 years

Other intangible assets are amortized on a straight-line basis over a maximum useful life of 12 years.

Leasing

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 payment.

As a lessee, SGL Carbon generally recognizes assets for the rights to use the leased assets and liabilities for the payment obligations entered into at present values for all leases on its balance sheet in accordance with IFRS 16. Lease liabilities include the following lease payments:

- Fixed payments, less any lease incentives payable by the lessor
- Variable payments linked to an index or interest rate
- The exercise price of a purchase option if it is reasonably certain that the option will be exercised.

Lease payments are discounted at the interest rate implicit in the lease, if that rate can be readily determined. Otherwise, discounting occurs at the incremental borrowing rate. SGL Carbon applies a single discount rate to a portfolio of leases with 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. Right-of-use assets are depreciated on a straight-line basis over the period of the contractual relationship.

Practical reliefs are used for low-value leased assets and for short-term leases (less than twelve months), and the payments are recognized as an expense in the income statement on a straight-line basis over the lease term. In the case of contracts containing both non-lease components and lease components, use is made of the option not to separate these components in the case of technical equipment and machinery. IFRS 16 is not applied to intercompany leases, and the periodic lease expense is recognized in the consolidated income statement.

If SGL Carbon concludes contracts as a lessor, these contracts are classified as finance leases in accordance with IFRS 16 if substantially all risks and rewards associated with ownership of the leased asset are transferred to the lessee. All other short-term rental and lease transactions are classified as operating leases in accordance with IFRS 16. If the Company enters into finance lease agreements as lessor, the lease installments payable to 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 recognizes the leased asset as an asset at amortized cost included in property, plant and equipment. Lease installments received during the period are shown under sales revenue.

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

At each balance sheet date, an assessment is made as to whether there are any indications (trigger events) that intangible assets and property, plant and equipment are impaired. If such indications are identifiable, the recoverable amount of the relevant asset is determined and compared with the carrying amount to determine the scope of any impairment that may need to be recognized. The recoverable amount is the higher of fair value less costs to sell (net realizable value) and value in use, with the value in use first being determined by SGL Carbon. If this amount is higher than the carrying amount, the net realizable value 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 the cash flows from other assets, the impairment test is not conducted at the level of the individual asset but at the level of the CGU to which the asset belongs.

The cash flows are based on five-year plans 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. The planning is based on internal expectations and assumptions that have been checked and verified against external data. The planning includes sales, revenue and cost planning, together with the associated forecasts of operating results and cash flows for each year and for each CGU. Sales revenues and earnings development are planned at product or product group level based on the expected market, economic and competitive developments over the next five years and aggregated on the CGU level. In exceptional cases, the fifth planning year is extrapolated by an additional five years, taking into account business-specific assumptions. Cash flows beyond the planning period are extrapolated using individual growth rates or limited to the duration of the expected remaining useful life of the primary production facilities.

Future cash flows are discounted to their present value using a discount rate that reflects current market expectations regarding interest rates and the specific risks related to the asset or CGU. Most material assumptions on which the determination of the recoverable amount is based include estimated cash flows (especially sales and profitability development), growth rates and the weighted average cost of capital as well as remaining useful lives of the primary production facilities. These assumptions and the underlying methodology may have a significant impact on the respective values and, ultimately, on the amount of any impairment applied to the asset.

As soon as there is any evidence that the reasons for the impairments recognized no longer exist, the need for a full or partial reversal of the impairment loss is assessed.

Financial instruments

A financial instrument as defined by IAS 32 is a contractually agreed right or obligation which results in an inflow or outflow of financial assets or the issuance of equity instruments. On the one hand, financial instruments include primary financial instruments such as trade receivables and payables, contract assets and contract liabilities, securities or financial receivables and borrowings and other financial liabilities; on the other hand, they also include derivative financial instruments used to hedge against risks arising from changes in exchange rates and interest rates.

Generally, financial instruments are initially recognized at their fair value upon initial measurement. Transaction costs directly attributable to the acquisition or issue of financial instruments are included in the initial measurement of the carrying amount. Under certain conditions, embedded derivatives are separated from the underlying instrument (financial instrument) and accounted for separately at fair value. A regular way purchase or sale of financial assets is recognized on 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 in other comprehensive income and financial assets and liabilities measured at fair value in profit or loss. In accordance with the classification requirements of IFRS 9, SGL Carbon classifies financial assets and financial liabilities into the following classes:

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

Financial liabilities measured at amortized cost: Financial liabilities, with the exception of derivatives, are measured at amortized cost using the effective interest method.

Financial assets measured at fair value in other comprehensive income: If the business model generally provides for the assets to be held but they are also sold and their cash flows consist exclusively of interest and principal payments, these assets are measured at fair value outside of profit or loss. SGL Carbon does not apply this measurement category.

Financial assets and liabilities measured at fair value through profit or loss: Financial assets that are solely payments of principal and interest, but that are not held within one of the two aforementioned business models, are recognized at fair value in profit or loss. This also includes trade receivables that are intended for sale based on a factoring agreement. Alternatively, IFRS 9 allows equity instruments to be measured at fair value through other comprehensive income. On the individual case level, SGL Carbon does not currently apply this option to measure 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 terminate. Financial liabilities are derecognized when the liability has been repaid, that is, when all financial obligations specified in the agreement have been settled or definitively canceled 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 liability and an equity component are presented in various balance sheet items according to their nature. The financial instruments relevant in this context include convertible bonds. The fair value of conversion rights is already allocated to the capital reserves when a convertible bond is issued and is deducted from the bond liability at the same time. Fair values of conversion rights of bonds issued at below-market rates are determined using the capitalized difference from the interest-rate advantage. The interest expense of the debt component is calculated over the term of the bond from the market interest rate on the date of issue for a comparable bond without a conversion right. The difference between the interest calculated and the interest paid increases the carrying amount of the bond liability. The issuing costs of the convertible bond reduce the acquisition costs of the equity and debt components in direct proportion.

Derivative financial instruments

In accordance with IFRS 9, all derivative financial instruments are recognized at fair value on the balance sheet. Financial instruments are recognized on the balance sheet as soon as SGL Carbon becomes a contractual party to a financial instrument. Financial instruments are recognized on the trade date of the transaction. When a derivative contract is concluded, the Company determines whether it will be used as a hedge for future cash flows (a cash flow hedge). Cash flow hedges are used to hedge against fluctuations in future cash flows resulting from planned transactions that are highly probable to occur. The documentation of hedging relationships includes the objectives and strategy of risk management, the type of hedging relationship, the hedged risk, the description of the hedging instrument and the hedged item, as well as an assessment of the effectiveness criteria. Hedging relationships are regularly assessed to determine whether they were effective throughout the reporting period for which they were designated. Even though individual derivatives constitute a hedge from an economic perspective, they do not fulfill the hedge accounting criteria stipulated by IFRS 9. Changes in the fair value of derivatives are recognized as follows:

1. Cash flow hedge: Only the change in the fair value of the forward exchange transaction is designated as the hedging instrument in cash flow hedging relationships. This effective portion of changes in the fair value of derivatives used to hedge future cash flows is recognized outside profit and loss in accumulated other comprehensive income. The ineffective portion of the change in value of the hedging instrument is recognized in profit or loss. Since it is immaterial, the change in the fair value of cross currency basis spreads of the derivatives is not recognized

separately. All amounts recognized in equity are subsequently reclassified to profit or loss if the hedged item also affects profit or loss.

2. Hedge 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 gains and losses from changes in the value of the hedging instrument used is recognized in equity and outside profit or loss. The ineffective portion is recognized in profit or loss. Upon disposal of the investment, the changes in the fair value of the hedging instrument included in equity are recognized in profit or loss.
3. Standalone (no hedge relationship): Derivatives that do not qualify for hedge accounting are classified as held for trading and are recognized at fair value through profit or loss. Changes in fair value are therefore recognized on the income statement. If the trade date and the settlement date are not the same, the settlement date is used as the date for initial recognition.

See Note 27 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 material discretionary decisions. In general, a three-stage model must be followed for determination of expected credit losses and allocation of loss allowances; this can be summarized as follows:

Stage 1: Upon initial recognition, all financial assets are assigned to Stage 1. A loss allowance is recognized in the amount of expected credit losses within the next 12 months.

Stage 2: When there is a material increase in the credit risk of a financial asset, but no objective evidence of impairment, it 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 has objective evidence of impairment or has already defaulted, it is transferred to Stage 3. The recognized loss allowance corresponds 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 risk provisioning). Objective evidence indicating that a financial asset is credit-impaired includes being past due 45 days or more and additional information on material financial difficulties on the part of the debtor.

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

SGL applies a simplified approach for trade receivables and contract assets that measures loss allowances based on lifetime expected credit losses.

Inventories

Inventories are valued at purchase or production cost using the weighted average cost method. Where required, the lower net realizable value is recognized. Net realizable value is determined, taking into account the expected sale prices less costs of completion and selling expenses and other factors relevant to sales. In addition to directly attributable costs, costs of conversion also include appropriate portions of material and production overheads. Directly attributable costs mainly include costs for personnel, including retirement benefits, depreciation/amortization and directly attributable costs of material. Interest on borrowings is not capitalized. Impairment expenses are recognized as costs of sales.

Cash and cash equivalents

Cash and cash equivalents comprise all near-cash assets with an original maturity of less than three months from the time of the acquisition and are measured at cost.

Deferred taxes

In accordance with IAS 12, deferred tax assets and liabilities are determined for temporary differences between the tax base and their carrying amounts in the IFRS consolidated balance sheet as well as for tax loss carryforwards including unused tax depreciation, for interest not yet claimed for tax purposes and for unused tax credits. Deferred tax assets are recognized if sufficient taxable profit is available in the future. This includes results from planned operating activities, the impact on earnings from the reversal of taxable temporary differences and possible tax strategies. To the extent that the company or tax group has a history of recent losses, deferred tax assets arising from tax loss carryforwards are recognized only to the extent that either sufficient taxable temporary differences are available or persuasive evidence exists that there will be availability of sufficient taxable profit against which the unused tax losses can be utilized. Deferred tax assets are impaired to the extent that convincing substantial evidence for usability cannot be provided. A series of losses constitutes substantiated negative evidence, which generally must be balanced against several equally material or more important positive indications. If there is a history of tax losses, the review horizon does not extend beyond three years in relation to the detailed planning period, as the usability of deferred tax assets on the company level or on the level of tax groups cannot be forecasted with sufficient accuracy and with the required high degree of certainty for years beyond then. If a company or a tax group begins to report a sustained positive tax result in the future, but the recent past still contains loss years over the last three years, the planning horizon is extended from three years to five years assuming appropriate planning accuracy. If a company or tax group has sustainably and demonstrably overcome its history of losses, that is, it has been profitable for at least the last three years, the limitation of the period under review does not apply at all in regard to the recognition of deferred tax assets. The change in deferred taxes on the balance sheet generally results in tax expenses and income. However, if items that result in a change in deferred taxes are recognized directly in a component of equity, the change in deferred taxes is also recognized directly in this component of equity. Deferred tax assets and liabilities are offset against each other if the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and these relate to income taxes levied on the same taxable entity and by the same taxation authority.

Accumulated other comprehensive income and accumulated profit/loss (Consolidated Statement of Changes in Equity)

In accordance with IFRS 9, unrealized gains or losses from financial derivatives used to hedge a future cash flow (cash flow hedges) or a net investment in a foreign business operation are recognized in other comprehensive income under accumulated other comprehensive income, in addition to currency translation differences. 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 in the full amount. Accordingly, deferred taxes on the above items are also recognized in comprehensive income in the respective component of accumulated other comprehensive income.

Provisions for pensions and similar employee benefits

SGL Carbon maintains defined benefit plans in various countries based on the pensionable remuneration of employees according to their periods of service. These plans are funded in part through external pension funds and by contributions to a contractual trust agreement (CTA). Provisions for defined benefit plans are calculated using the projected unit credit method. The present value of the defined benefit obligation (DBO) is calculated with consideration for the expected future salary and pension trends. If the benefit entitlements are not funded by assets, the amount included in the “Provisions for pensions and similar employee benefits” item corresponds to the DBO. If the benefit entitlements are funded by assets, SGL Carbon offsets the fair value of the plan assets against the DBO and recognizes the net amount that was determined in “Provisions for pensions and similar benefits.” If the value of the assets exceeds the corresponding scope of the obligations, an asset is recognized under other assets in the amount of the excess.

The DBO is calculated on the reporting date using the maturity-equivalent interest rate for prime-rated corporate bonds. The assumptions used to calculate the DBO as of the previous year’s balance sheet date apply to the determination of current service cost and interest income and the interest expenses for the following fiscal year. The net interest income or expense for a fiscal year is generally calculated by multiplying the discount rate for the respective fiscal year by the net asset value or net liability on the balance sheet date of the previous fiscal year and is recognized in the financial result. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized directly in other comprehensive income in the period in which they occur, together with the attributable deferred taxes (accumulated profit/loss). The current service cost is classified as an operating expense. Negative past service cost due to a change in the pension plan and gains/losses from plan settlements are recognized immediately in profit or loss and allocated to other operating income.

If the information necessary for accounting for defined benefit plans is unavailable, obligations under defined benefit multi-employer plans are accounted for in the same way as obligations under defined contribution plans according to IAS 19.34. The obligations are determined by the amounts payable for the current period.

Some Group companies grant their employees defined contribution plans on the basis of statutory or contractual provisions, with payments being made to state or private pension insurance providers. With defined contribution plans, the employer does not enter into any obligations other than payment of contributions to an external pension provider. The amount of future pension benefits is based solely on the amount of contributions paid by the employer (and its employees, if applicable) to the external pension provider, including income from investment of these contributions. The amounts payable are expensed when the obligation to pay them arises and are reported as a component of operating expenses.

Actuarial valuations are based on material assumptions, including discount rates, expected salary and pension trends, acceptance rates of capital options and disability and mortality rates. Due to changing market, economic and social conditions, the underlying assumptions may differ from what will actually happen.

Other provisions

Other provisions are recognized when there is a present obligation to third parties arising from past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be measured with sufficient reliability. Non-current provisions are discounted at the risk-free interest rate (negative, when applicable). See Note 29 for a description of the accounting treatment and the recognition of provisions for obligations in conjunction with management and employee participation plans.

SGL Carbon recognizes expenses for provisions for product warranties in cost of sales at the time of revenue recognition. The amount of the provision is determined on a case-by-case basis. In the measurement of the provision, SGL Carbon takes into account both experience from actual warranty expenses previously incurred and technical information about product weaknesses discovered during the design and testing phase. Provisions for restructuring measures are recognized to the extent that a detailed and formal restructuring plan has been prepared and communicated to the affected parties. Provisions for expected losses from onerous contracts are recognized when the economic benefits expected to be received from the contract are less than the unavoidable costs of meeting the obligations under the contract. The amount and probability of provisions are based on management estimates. Significant estimates and assumptions are also made to determine provisions for asset retirement obligations, dismantling and decommissioning activities.

3. Recently issued accounting pronouncements

In fiscal year 2021, SGL Carbon applied the following amendments to existing standards for the first time, with these amendments having no material impact on the presentation of the financial statements:

- Amendments to IFRS 9, IAS 39 and IFRS 7, IFRS 4 and IFRS 16: “Interest Rate Benchmark Reform – Phase 2”

The changes in Interest Rate Benchmark relate to the modification of financial instruments, specific hedge accounting requirements, and disclosure requirements applying IFRS 7 to accompany the amendments regarding modifications and hedge accounting. In addition, the IASB has published additional standards, interpretations and amendments to standards and interpretations whose application is not yet mandatory 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, interpretations and amendments will not a material impact on the consolidated financial statements.

4. Change in the scope of consolidation

In fiscal year 2021, SGL Carbon liquidated SGL Land Holding Inc., Canada, as planned. In addition, SGL Technologies Beteiligung GmbH, SGL Composites Verwaltungs GmbH and SGL Composites Deutschland Verwaltungs GmbH (all based in Meitingen), as well as SGL Carbon GmbH, Ried im Innkreis, Austria, were dissolved through intercompany mergers. In addition, SGL Fuel Cell Components GmbH, Meitingen, was founded.

5. Sales revenue/functional costs

The breakdown of sales revenues by segment, region, customer industry and type of revenue recognition are presented in Note 28 in "Segment reporting."

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

€m	2021	2020
Wages and salaries (including bonus)	–277.8	–267.7
Social security contributions, post-employment and other employee benefit costs (thereof for pensions: minus €18.2 million: 2020: minus €18.3 million)	–73.7	–72.5
Personnel expenses	**–351.5**	**–340.2**

Personnel expenses in the current reporting year include expenses for restructuring measures amounting to €6.3 million (previous year: €18.2 million).

The employees worked in the following functions (average number of employees based on headcount):

Headcount	2021	2020
Production and auxiliary plants	3,516	3,626
Sales and marketing	348	378
Research and development	106	141
Administration, other functions	736	832
Total	**4,706**	**4,977**

The following tables provide an overview of average employee numbers by geographical region:

Headcount	2021	2020
Germany	2,135	2,306
Europe excluding Germany	1,311	1,379
North America	744	774
China	406	399
Rest of Asia	110	119
Total	**4,706**	**4,977**

Depreciation and amortization

Amortization and depreciation of intangible assets and property, plant and equipment totaled €70.8 million (previous year: €84.1 million) and include carryforwards of the purchase price allocations of SGL Composites GmbH and SGL Composites Materials Germany GmbH, Meitingen (SGL Composites DE) and SGL Composites LLC, Moses Lake, Washington (SGL Composites US), totaling €10.5 million (previous year €10.8 million). Amortization of intangible assets amounting to €12.6 million (previous year: €13.9 million) primarily relates to the scheduled amortization of the customer base from the purchase price allocation of SGL Composites DE. In 2021, a total of €58.2 million was depreciated in property, plant and equipment (previous year: €70.2 million).

Personnel expenses, amortization and depreciation expense are included in all functional costs such as cost of sales, selling expenses, research and development costs, and general and administrative expenses.

6. Other operating income/expense

Other operating income

€m	2021	2020
Income from amendments (including curtailments) and settlements of pension plans	18.1	-
Exchange-rate gains	3.5	4.5
Gains on the sale of intangible assets and property, plant and equipment	20.0	9.1
Grants received	6.8	3.8
Insurance compensations	3.2	1.7
Reversal of provisions for anniversaries	2.8	
Miscellaneous other operating income	3.6	4.9
Total	**58.0**	**24.0**

The line item "Income from amendments (including curtailments) and settlements of pension plans" includes effects on earnings from restructuring of pension commitments recognized in the balance sheet. The amount includes negative past service cost from a plan amendment in Germany due to the introduction of a capital option (€17.2 million) and from a plan curtailment in the USA (€1.6 million), less a loss from the settlement of a plan in the United States (€0.7 million). For additional details, see Note 22 "Provisions for pensions and similar employee benefits."

The line item "Gains on the sale of intangible assets and property, plant and equipment" includes income from the sale of two properties not required for operations in the United

States (€15.6 million) and in Meitingen (€4.1 million) (previous year: €9.1 million).

The increase in grants received results from grants for the development and industrialization of innovative anode materials made of synthetic graphite for use in lithium-ion batteries in the context of the second European IPCEI (Important Project of Common European Interest) program/EUBatIn (European Battery Innovation). The Company received a corresponding funding notification of €42.9 million in the reporting year. The approved grants will partially reimburse SGL Carbon for the amortization and depreciation of investments as well as the operating expenses in conjunction with the funding project over the term extending until 2028.

Other operating expenses

€m	2021	2020
Exchange-rate losses	–2.9	–4.3
Losses on the sale of other intangible assets and property, plant and equipment	–0.4	–1.4
Other operating expenses	–3.7	–1.8
Total	**–7.0**	**–7.5**

The currency effects reported as other operating income and expenses result from measurement of receivables and liabilities not denominated in the respective functional currency at the closing rate.

In addition, other operating income and other operating expenses include a large number of individual items of low value.

7. Investments accounted for At-Equity

Result from investments accounted for At-Equity

€m	2021	2020
Share in the net result of the year	17.0	11.5
Thereof joint ventures	*16.0*	*10.0*
Thereof associates	*1.0*	*1.5*
Result from investments accounted for At-Equity	**17.0**	**11.5**

€m	Dec. 31, 21	Dec. 31, 20
Interests in joint ventures	47.4	45.7
Interests in associates	7.1	10.5
Carrying amount	**54.5**	**56.2**

Joint ventures

At the end of the reporting year, SGL Carbon held a stake in the joint venture Brembo SGL Carbon Ceramic Brakes S.p. A., Stezzano, Italy (BSCCB). BSCCB develops and produces carbon-ceramic brake discs especially for sports cars and luxury vehicles. The following tables summarize the results of operations and the financial position of BSCCB as reported in each of its 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 stake in the BSCCB joint venture. SGL Carbon received dividend payments in the amount of €15.0 million from BSCCB in the reporting year (previous year: €10.0 million).

€m	2021	2020
Ownership interest	**50.0%**	**50.0%**
Income statement		
Sales revenue (100%)	200.7	158.6
Operating profit	44.3	27.9
Financial result	–0.4	–0.5
Net result for the year (100%)	31.9	20.9
Share of SGL Carbon in the net result of the year (50%)	**16.0**	**10.0**
Share of SGL Carbon in the changes of other equity (50%)	0.7	–0.4
Total comprehensive income of the companies	16.7	9.6

Balance sheet	Dec. 31, 21	Dec. 31, 20
Non-current assets	60.2	67.1
Current assets	84.0	80.3
Thereof cash and cash equivalents	*25.5*	*34.4*
Non-current liabilities	22.0	24.6
Thereof financial debt	*0.0*	*0.0*
Current liabilities	34.6	38.6
Thereof financial debt	*0.0*	*0.0*
Net assets (100%)	**87.6**	**84.2**
Share of SGL Carbon in net assets (50%)	43.8	42.1
Goodwill/customer base	3.6	3.6
Carrying amount of material joint ventures	**47.4**	**45.7**

Associates

€m	2021	2020
Associates		
Carrying amount of interests in associates Dec. 31	7.1	10.5
Share in the net result of the year	1.0	1.5
Share of SGL Carbon in change of other equity [1]	−3.5	-

[1] Relates to the share in the negative fair value of cash flow hedges (net of tax)

All associated companies have a fiscal year that corresponds to the calendar year, with the exception of MCC-SGL Precursor Co. Ltd., which uses a fiscal year ending March 31.

8. Restructuring expenses

€m	2021	2020
Income/Expenses for initiated restructuring measures	0.2	−27.2
Total	**0.2**	**−27.2**

Restructuring expenses arose in conjunction with the implementation of the global restructuring and transformation program initiated in the previous year. Based on actual costs in 2019, earnings-improving measures of more than €100 million are to be achieved by the end of 2023 through staff reductions of more than 500 employees as well as extensive material cost savings. 85% of the initiatives identified to date have been implemented as of December 31, 2021.

Restructuring expenses in fiscal year 2021 relate to personnel measures (obligations under severance agreements, termination of employment contracts and early retirement arrangements) of minus €6.3 million and other restructuring expenses of minus €3.6 million, which include external consulting costs that are directly associated with the restructuring.

The remeasurement of assets and liabilities of the former production site in Frankfurt-Griesheim had an offsetting effect totaling €10.1 million. This consisted of the reversal of an impairment loss on an asset amounting to €11.9 million, less adjustments to the asset retirement obligation and the provision for uncovered costs totaling minus €1.8 million. For additional details, see Note 14. “Property, plant and equipment.”

Restructuring expenses in fiscal year 2020 relate to personnel measures in the amount of minus €18.2 million. External consulting expenses of minus €7.0 million were also reported as restructuring costs. In addition, the restructuring expenses of the previous year included follow-up costs of €2.0 million from restructuring programs from previous years for closed-down sites.

9. Impairment losses

€m	2021	2020
Impairment losses on		
Goodwill	-	−19.5
Other intangible assets and property, plant and equipment	-	−87.0
Total	**-**	**−106.5**

There were no impairments in fiscal year 2021.

The impairment losses recognized in the previous year include full impairment of the goodwill of the former CGU Composites DE (€19.5 million) and impairments of other intangible assets and property, plant and equipment of the CGU Composites DE (€14.0 million) and the CGU Carbon Fibers (€73.0 million).

For additional information on the annual impairment testing of goodwill, please refer to Note 13 “Intangible assets.”

10. Financial result

€m	2021	2020
Interest in other securities, other interest and similar income	**0.8**	**0.7**
Interest on financial liabilities and other interest expense [1]	−18.4	−18.1
Interest component of additions to provisions for pensions	−2.4	−4.1
Imputed interest convertible bond [1]	−3.0	−2.7
Imputed interest on lease liabilities and other financial liabilities [1]	−1.6	−2.9
Interest expense	**−25.4**	**−27.8**
Interest expense, net	**−24.6**	**−27.1**
Amortization of refinancing costs [1]	−2.9	−2.6
Foreign currency valuation of intercompany loans	−0.7	−0.1
Other financial income/expenses	−0.1	0.4
Other financing result	**−3.7**	**−2.3**
Financial result	**−28.3**	**−29.4**
[1] Total interest expense from financial instruments	−25.9	−26.3

Interest expenses include interest from the corporate bond with an interest rate of 4.625% and the cash interest components (coupon) for the convertible bond 2018/2023 with an interest rate of 3.0%. The non-cash imputed interest on the convertible bond is established by approximating the below-market coupon with the comparable market interest rate at the time the convertible bonds were issued.

11. Income tax expense

A corporate income tax rate of 15%, a solidarity surcharge of 5.5% on corporate income tax and a trade tax rate of 14% were used to calculate deferred taxes for the domestic companies in 2021 and 2020. To calculate the deferred taxes, a total tax rate of 29.8% (previous year: 29.8%) was applied to the domestic companies. The calculation of deferred taxes for the foreign companies was based on country-specific tax rates.

The tax expense was as follows:

€m	2021	2020
Current income taxes		
Germany	−1.2	−3.4
Other countries	−6.2	−6.3
Total	**−7.4**	**−9.7**
Deferred taxes		
Germany	0.0	1.5
Other countries	1.2	1.2
Total	**1.2**	**2.7**
Total sum	**−6.2**	**−7.0**

The current tax expense includes taxes for prior years from domestic and foreign companies amounting to €4.6 million (previous year: €0.7 million). The amount of deferred tax income attributable to the reversal of temporary differences, including valuation allowances, is €0.5 million (previous year: €5.7 million).

Based on a tax rate of 29.8%, the following table reconciles the expected tax expense to the effective tax expense recognized:

€m	2021	2020
Result from continuing operations before income taxes	**82.1**	**−123.1**
Expected tax expense/income at 29.8% (previous year: 29.8%)	**−24.4**	**36.7**
Increase/decrease in income tax charge from:		
Income adjustments	−4.1	−3.4
Change in expected tax rate	−0.3	−8.9
Changes in valuation allowances/recognition adjustments	12.0	−38.2
Tax effect on investments accounted for At-Equity	5.1	3.3
Tax free income	−0.4	0.4
Tax rate changes	0.0	−0.8
Tax from prior periods	4.9	1.6
Other	1.0	2.3
Effective tax expense	**−6.2**	**−7.0**

The income adjustments primarily relate to non-deductible operating expenses. A reduction due to change in expected tax rate takes account effects from withholding taxes and local taxes as well as taxation differences in Germany and abroad due to varying income tax rates. The change in valuation allowances/recognition corrections takes into account the change in unrecognized deferred tax assets based on an assessment of their future usability.

In the reporting year, the actual tax expense was reduced by €8.5 million (previous year: €4.8 million) due to the usability of previously unrecognized tax losses.

IFRIC 23 clarifies the application of the recognition and measurement requirements of IAS 12 when there is uncertainty about the income tax treatment. For recognition and measurement, it is necessary to arrive at estimates and assumptions. To do this, decisions must be made regarding whether an estimate is created separately or together with other uncertainties, whether a probable or expected value is used for the uncertainty, and whether changes have occurred compared with the previous period, for example. The risk of detection is irrelevant for recognition of uncertain financial position items. The accounting is based on the assumption that the tax authorities are investigating the matter in question and that they have all the relevant information. There are no material effects on the consolidated financial statements of the Company.

12. Earnings per share

Earnings per share are calculated by dividing the net result attributable to the shareholders of SGL Carbon by the average number of shares outstanding in the reporting year. Diluted earnings per share are based on the assumption that outstanding debt instruments can be converted into shares (convertible bonds). Inclusion of additional shares from the convertible bonds does not result in a dilution of earnings per share, as the net result for the period is simultaneously adjusted for the interest expense (interest payments and imputed interests) recognized in the financial result for the convertible bonds. In the future, these instruments may become fully dilutive. The following table contains the calculation of earnings per share for fiscal years 2021 and 2020:

Reconciliation between basic to diluted earnings per share

€m	Overall potentially dilutive financial instruments 2021	Share of net result attributable to the shareholders of the parent company 2021	Share of net result attributable to the shareholders of the parent company 2020
Numerator for basic earnings per share (share of net result attributable to the shareholders of the parent company)	**75.4**	**75.4**	**–132.2**
plus: increase of the income by the interest costs of the convertible bonds	8.3		
Numerator for diluted earnings	**83.7**	**75.4**	**–132.2**
Number of shares			
Denominator for basic earnings per share (weighted average number of shares)	**122,270,977**	**122,270,977**	**122,270,977**
Potentially dilutive securities (weighted average, in each case)			
Convertible bond 2018/2023 (see Note 24)	11,925,970		
Denominator for potentially diluted earnings per share	**134,196,947**	**122,270,977**	**122,270,977**
Thereof to be included for dilution (adjusted weighted average)		**122,270,977**	**122,270,977**
Basic earnings per share (€)		0.62	–1.08
Diluted earnings per share (€)		0.62	–1.08

13. Intangible assets

€m	Industrial rights, software and similar rights	Customer relationships	Capitalized development costs	Goodwill	Total
Historical costs					
Balance as of Jan 1, 21	70.4	52.7	18.4	65.8	207.3
Foreign currency translation	1.2	0.0	0.0	1.4	2.6
Reclassifications	0.1	0.0	0.0	0.0	0.1
Additions	0.7	0.0	0.0	0.0	0.7
Disposals	0.0	0.0	−0.8	0.0	−0.8
Balance as of Dec. 31, 21	**72.4**	**52.7**	**17.6**	**67.2**	**209.9**
Accumulated amortization/Impairment losses					
Balance as of Jan 1, 21	59.2	33.0	16.6	45.1	153.9
Foreign currency translation	0.7	0.0	0.0	0.0	0.7
Reclassifications	0.8	0.0	0.0	0.0	0.8
Additions	2.6	9.9	0.1	0.0	12.6
Disposals	0.0	0.0	−0.7	0.0	−0.7
Balance as of Dec. 31, 21	**63.3**	**42.9**	**16.0**	**45.1**	**167.3**
Net carrying amount as of Dec. 31, 21	**9.1**	**9.8**	**1.6**	**22.1**	**42.6**
Historical costs					
Balance as of Jan. 1, 20	69.4	52.7	18.4	67.3	207.8
Foreign currency translation	−0.7	0.0	0.0	−1.5	−2.2
Reclassifications	0.2	0.0	0.0	0.0	0.2
Additions	1.5	0.0	0.0	0.0	1.5
Disposals	0.0	0.0	0.0	0.0	0.0
Balance as of Dec. 31, 20	**70.4**	**52.7**	**18.4**	**65.8**	**207.3**
Accumulated amortization/Impairment losses					
Balance as of Jan. 1, 20	56.2	23.1	16.2	25.6	121.1
Foreign currency translation	−0.7	0.0	0.0	0.0	−0.7
Additions	3.6	9.9	0.4	0.0	13.9
Impairment losses [1]	0.1	0.0	0.0	19.5	19.6
Balance as of Dec. 31, 20	**59.2**	**33.0**	**16.6**	**45.1**	**153.9**
Net carrying amount as of Dec. 31, 20	**11.2**	**19.7**	**1.8**	**20.7**	**53.4**

[1] Refer to Note 9

Industrial protective rights, software rights and similar rights mainly comprise purchased and internally developed computer software.

The table below shows the key assumptions used in the impairment testing of CGUs to which goodwill has been allocated for determination of the values in use as of October 1:

€m	Recognized goodwill	Discount rate before tax	Long-term growth rate
Oct. 1, 21			
Graphite Specialties	19.8	9.7%	1.0%
Process Technology	1.9	9.6%	1.0%
Oct. 1, 20			
Graphite Specialties	19.5	11.0%	1.0%
Process Technology	1.9	10.6%	1.0%
Composites DE [1]	0.0	9.6%	1.0%

[1] Corresponds to the net carrying amount after impairment test

SGL Carbon performed its mandatory annual impairment test in the fourth quarter. As the recoverable amount determined on the basis of the value in use was estimated to be higher than their carrying amount, no impairment was identified for either of the CGUs with allocated goodwill.

The value in use is primarily determined by the terminal value, which is particularly sensitive to changes in the assumptions regarding the level of and return on sales, the non-current growth rate and the discount rate. The discount factors reflect the current market assessment of the specific risks of each CGU and are based on the CGUs' weighted average cost of capital. Graphite Specialties has the highest recognized goodwill. The recoverable amount (value in use) of Graphite Specialties considerably exceeds its carrying amount. An increase in the discount rate of 1 percentage point with a simultaneous reduction in cash flows of 10% would not result in any impairment.

14. 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, 21	532.8	1,230.8	74.0	39.3	5.5	1,882.4
Foreign currency translation	15.5	35.0	0.9	1.6	0.0	53.0
Reclassifications	−14.5	30.3	0.5	−35.0	18.6	−0.1
Additions	1.8	14.6	2.5	30.4	0.0	49.3
Additions to right-of-use assets	2.5	8.3	0.8	0.0	0.0	11.6
Disposals	−23.9	−11.7	−2.3	−0.1	0.0	−38.0
Balance as of Dec. 31, 21	**514.2**	**1,307.3**	**76.4**	**36.2**	**24.1**	**1,958.2**
Accumulated depreciation and amortization/reversals of impairment losses						
Balance as of Jan 1, 21	315.5	965.2	63.2	0.3	−0.1	1,344.1
Foreign currency translation	10.2	24.4	0.9	0.0	0.0	35.5
Reclassifications	−20.0	0.2	−0.1	0.5	18.6	−0.8
Additions	13.5	39.9	4.8	0.0	0.0	58.2
Reversal of impairment losses [1]	0.0	0.0	0.0	0.0	−11.9	−11.9
Disposals	−11.6	−11.4	−2.2	0.0	0.0	−25.2
Balance as of Dec. 31, 21	**307.6**	**1,018.3**	**66.6**	**0.8**	**6.6**	**1,399.9**
Net carrying amount as of Dec. 31, 21	**206.6**	**289.0**	**9.8**	**35.4**	**17.5**	**558.3**
Historical costs						
Balance as of Jan. 1, 20	535.1	1,203.9	71.5	70.1	19.8	1,900.4
Foreign currency translation	−18.0	−36.7	−1.1	−1.0	0.0	−56.8
Reclassifications	8.9	48.4	1.1	−58.6	0.0	−0.2
Additions	7.4	16.0	1.5	28.8	0.6	54.3
Additions to right-of-use assets	1.5	2.7	2.1	0.0	0.0	6.3
Disposals	−2.1	−3.5	−1.1	0.0	−14.9	−21.6
Balance as of Dec. 31, 20	**532.8**	**1,230.8**	**74.0**	**39.3**	**5.5**	**1,882.4**
Accumulated depreciation/Impairment losses						
Balance as of Jan. 1, 20	273.3	876.6	58.9	13.5	8.5	1,230.8
Foreign currency translation	−6.2	−22.5	−0.8	0.0	0.0	−29.5
Reclassifications	0.0	13.3	0.0	−13.3	0.0	0.0
Additions	15.9	48.0	5.6	0.1	0.6	70.2
Impairment losses [1]	33.3	53.1	0.5	0.0	0.0	86.9
Disposals	−0.8	−3.3	−1.0	0.0	−9.2	−14.3
Balance as of Dec. 31, 20	**315.5**	**965.2**	**63.2**	**0.3**	**−0.1**	**1,344.1**
Net carrying amount as of Dec. 31, 20	**217.3**	**265.6**	**10.8**	**39.0**	**5.6**	**538.3**

[1] Refer to Note 9

In the reporting year, borrowing costs directly attributable to the construction or production of property, plant and equipment were capitalized in the amount of €0.8 million (previous year: €1.7 million), with application of an interest rate of 4.5%.

Leases

Leases are presented in accordance with the explanations given in Note 2 Summary of material accounting policies, "Leasing."

Leases as lessee

SGL Carbon has entered into lease agreements for various land rights, buildings, technical equipment, machinery, furniture and office equipment which the Company uses in its operations. Lease agreements for real estate generally have terms of between 1 and 15 years. For technical equipment and machinery as well as for furniture and office equipment, the term is usually between 3 and 10 years. SGL Carbon leases IT equipment with contractual terms of between one and three years, and in some cases the terms extend up to five years. These leases are generally either short-term and/or based on objects of low value. SGL Carbon has decided not to recognize either right-of-use assets or lease liabilities for these leases. Information on leases for which SGL Carbon is the lessee is presented below.

Right-of-use assets

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

€m	Land, land rights and buildings	Plant and machinery	Office furniture and equipment	Total
Balance as of Jan 1, 21	12.8	5.5	2.4	20.7
Additions to right-of-use assets	2.5	8.3	0.7	11.5
Depreciation	−3.6	−2.0	−1.3	−6.9
Disposal of right-of-use assets	−2.1	−0.8	−0.1	−3.0
Foreign currency translation	0.2	0.2		0.4
Balance as of Dec. 31, 21	**9.8**	**11.2**	**1.7**	**22.7**

€m	Land, land rights and buildings	Plant and machinery	Office furniture and equipment	Total
Balance as of Jan. 1, 20	23.2	5.6	2.4	31.2
Additions to right-of-use assets	1.5	2.7	2.1	6.3
Depreciation	−3.8	−2.5	−1.9	−8.2
Disposal of right-of-use assets	−1.1	−0.2	−0.1	−1.4
Reclassification due to acquisition by purchase	−6.7			−6.7
Foreign currency translation	−0.3	−0.1	−0.1	−0.5
Balance as of Dec. 31, 20	**12.8**	**5.5**	**2.4**	**20.7**

The maturity analysis of lease liabilities is presented in Note 24.

Amounts recognized on the income statement:

Lease agreements in accordance with IFRS 16		
€m	2021	2020
Income from subleases of right-of-use assets	0.5	0.5
Expenses for short-term leases	–2.5	–2.9
Expenses for leases for low value assets	–2.8	–3.6
Depreciation of right-of-use assets	–6.9	–8.2
Interest expenses from lease liabilities	–0.7	–0.8

SGL Carbon's cash outflows for leases totaled €14,8 million in 2021 (previous year: €22.5 million). In addition, the company reported non-cash additions to right-of-use assets and lease liabilities of €11.5 million in 2021 (previous year: €6.3 million).

Leases as lessor

From the lessor's perspective, all leases are classified as operating leases. This does not include a sublease, which SGL Carbon has classified as a finance lease due to the matching maturities of the master lease and the sublease: This lease is recognized as a lease receivable in the amount of the net investment. Both, the master lease and the sublease, expire at the end of 2022.

Investment property
As in previous years, SGL Carbon has pooled the investment property of a former business unit into a real estate company. SGL Carbon has classified this lease as an operating lease because not all of the risks and rewards associated with ownership have been transferred. Following the partial sale of land and buildings as of December 31, 2020, the real estate consists of land. The fair values of the land and the land value of the land held for construction purposes are determined on the basis of an external expert opinion and total €12.2 million (previous year: €12.2 million, determined on the basis of an adjusted standard land value).

In fiscal year 2021, rental income from this land totaled €0.3 million (previous year: €0.7 million). Expenses of €0.6 million were incurred (previous year: €1.8 million). The lease receivable under the lease to be received after the balance sheet date amounts to €0.2 million (previous year: €0.7 million) and is due in less than one year.

Furthermore, an impairment loss recognized in prior periods for a leasehold in Frankfurt-Griesheim (a former production site) was reversed during the reporting year, as there has been a change in the estimate used to determine the recoverable amount since the last impairment was recognized. The reversal of impairment loss reflects the increase in the estimated performance potential due to first-time conclusion of an long-term lease for a portion of the land and a simultaneous decrease in ancillary costs following the takeover of the site by a new site operator. The reversal of impairment loss was limited to the amount of the amortized carrying amount and amounts to €11.9 million. The recoverable amount is approximately €12.3 million. Rental income from the heritable building right totaled €0.6 million in fiscal year 2021. Expenses were incurred in the amount of €0.7 million. The lease receivable to be received after the balance sheet date under the lease amounts to €0.0 million (previous year €0.0 million) and is due in less than one year.

The fair values disclosed correspond to level 3 of the fair value hierarchy of IFRS 13.

15. Other non-current assets

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

16. Inventories

€m	Dec. 31, 21	Dec. 31, 20
Raw materials and supplies	95.9	80.1
Work in progress	121.7	107.6
Finished goods and merchandise	56.2	59.6
Total	**273.8**	**247.3**

Cost of sales in fiscal 2021 included consumption of inventories amounting to €717.8 million (previous year: €700.0 million), which was recognized as an expense. The total amount of inventories recognized at net realizable value as of December 31, 2021, amounts to €26.0 million (previous year: €7.8 million). Write-downs on inventories of €5.7 million (previous year: €4.5 million) increased the total cost of sales recognized. Reversals of write-downs of €1.7 million (previous year: €1.9 million) due to sales reduced the cost of sales.

17. Trade receivables and contract assets

€m	Dec. 31, 21	Dec. 31, 20
From customers	115.3	103.1
From investments accounted for At-Equity	3.6	11.0
Trade receivables	**118.9**	**114.1**
Contract assets	63.7	68.0
Trade receivables and contract assets	**182.6**	**182.1**

Additional information on the extent of credit risks included in trade accounts receivable and contract assets is provided in Note 27 under “Credit risks.”

18. Other receivables and other assets

€m	Dec. 31, 21	Dec. 31, 20
Other tax claims	9.2	5.1
Advance payments for leases and insurance premiums	6.3	5.5
Other receivables due from suppliers	3.1	3.5
Other receivables due from investments accounted for At-Equity	0.0	2.4
Receivables due from employees	1.8	2.0
Lease receivable	0.5	0.8
Income tax assets	3.0	1.2
Positive fair values of financial instruments	1.3	0.7
Other assets	7.2	7.7
Other receivables and other assets	**32.4**	**28.9**

19. Cash and cash equivalents

Cash and cash equivalents of €220.9 million (previous year: €141.8 million) include cash at banks, checks and cash on hand. Also included are time deposits of €109,4 million (previous year: €10.0 million) with a remaining term of up to three months, calculated from the acquisition date.

20. Deferred taxes

As of December 31, 2021, there are unrecognized domestic loss carryforwards in the amount of €466.0 million (previous year: €472.5 million) for corporate income tax, in the amount of €334.5 million (previous year: €314.7 million) for trade tax, and for interest carryforwards in the amount of €45.9 million (previous year: €55.9 million). In addition, there are unrecognized foreign loss carryforwards primarily in the United States for federal income tax purposes amounting to USD 485.5 million (previous year: USD 481.7 million) and in the United Kingdom amounting to GBP 114.6 million (previous year: GBP 112.3 million). In addition, as of December 31, 2021, there are unrecognized interest carryforwards and capital losses in the United States totaling USD 67.7 million (previous year: USD 64.9 million). Under current legislation, the loss carryforwards in Germany and the United Kingdom can be carried forward indefinitely. In the United States, loss carryforwards that arose on or before December 31, 2017, will expire starting in 2023. For losses incurred in tax years ending after December 31, 2017, the loss can be carried forward indefinitely.

Deferred tax assets have not been recognized for the following items as of December 31, 2021 and December 31, 2020, as their utilization is subject to uncertainty:

€m	Dec. 31, 21	Dec. 31, 20
From recognition and measurement differences	316.5	356.3
From tax loss carry forwards and tax credits	1,705.9	1,716.9
Total	**2,022.4**	**2,073.2**

Deferred tax assets are offset against deferred tax liabilities if they relate to income taxes levied by the same taxation authority and there is a legal right of set-off of a current tax asset against an actual tax liability that is current. On the consolidated statement of financial position, no distinction is made between current and non-current deferred tax assets and liabilities.

The (gross) deferred tax assets and liabilities relate to loss carryforwards and differences between IFRS and the tax basis as follows. The development of deferred taxes is also shown in the following table:

€m	Deferred tax assets as of Dec. 31, 21	Deferred tax liabilities as of Dec. 31, 21	Deferred tax assets as of Dec. 31, 20	Deferred tax liabilities as of Dec. 31, 20	Income statement 2021	Equity 2021
Non-current assets	34.6	33.3	31.1	37.4	7.6	
Inventories	10.3	0.4	8.8	0.1	1.2	
Receivables/other assets	3.9	11.2	6.4	17.8	4.1	
Provisions for pensions and similar employee benefits	120.5	67.5	129.9	53.2	−23.7	0.0
Other provisions	15.2	0.6	15.4	0.3	−0.5	
Liabilities/other liabilities	19.1	5.4	21.0	5.4	−1.9	
From tax loss carry forwards, interest carry forwards and tax credits	318.8		303.0	0.0	15.8	
Gross amount	**522.4**	**118.4**	**515.6**	**114.2**	**2.6**	
Valuation allowances	−400.9	0.0	−399.5	0.0	−1.4	
Netting	−116.9	−116.9	−112.4	−112.4	0.0	
Carrying amount	**4.6**	**1.5**	**3.7**	**1.8**		
Changes of the year recognized in equity						**0.0**
Deferred tax income					**1.2**	

SGL Carbon recognizes in equity the cumulative deferred tax effects on items recognized outside profit or loss totaling €46.0 million gross (previous year: €46.3 million gross), primarily from pension provisions.

21. Equity

Issued capital

As of December 31, 2021, the issued capital of the parent company SGL Carbon SE amounted to €313,194,183.68 (previous year: €313,194,183.68) and was divided into 122,341,478 (previous year: 122,341,478) no-par value ordinary 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 shares on one or more occasions (Authorized Capital 2019). The Authorized Capital 2019 was created by the Annual General Meeting of May 10, 2019 and can be exercised until May 9, 2024. In principle, the shareholders will be entitled to preemptive subscription rights if the Authorized Capital 2019 is utilized. However, preemptive rights can or must be disapplied for fractional amounts, for the benefit of holders of bonds with warrants, conversion rights or mandatory conversion issued or to be issued, shares issued in return for contributions in kind to acquire companies, parts of companies or investments in companies, and, with the approval of the Supervisory Board, when issuing shares up to 10% of the issued share capital in the event of a capital increase against cash contributions.

Conditional capital

The Annual General Meeting has approved conditional capital increases in recent years to service the share-based management incentive plans (see Note 29) and to service convertible bonds (see Note 24).

Conditional capital as of December 31, 2021

Articles of association	Date of resolution	€/Number of shares	Capital increase via:	Disapplication of pre-emptive rights/execution of the capital increase
Section 3 (9)	May 17, 2017	€31,319,040.00.00 =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	€31,319,040.00.00 =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. 2021, on the basis of which a capital increase could occur
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 29

The Annual General Meeting 2021 resolved to cancel the Conditional Capital resolved by the Annual General Meeting on April 30, 2004 in accordance with section 3 (7) of the Articles of Association. Section 3 (7) of the Articles of Association was deleted without replacement. Furthermore, the Conditional Capital 2015 resolved by the Annual General Meeting on April 30, 2015 in accordance with section 3 (11) of the Articles of Association was cancelled. Section 3 (11) of the Articles of Association was deleted without replacement.

Changes in share capital

Number of shares	2021	2020
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, 2021, 70,501 (previous year: 70,501) treasury shares were held at a carrying amount of €180,482.56 (previous year: €180,482.56).

Disclosures on capital management

The Group's capital management involves the interests of shareholders, employees and other stakeholders. The aim is to secure the long-term going concern of the Company and to achieve a return on capital employed that is in line with market expectations.

Capital management includes both equity and debt components. Key financial indicators include net financial debt, the leverage ratio, the equity ratio and return on capital employed. Net financial debt is defined as interest-bearing loans at their nominal value less cash, cash equivalents and time deposits. The leverage ratio is the ratio of net financial debt to EBITDA pre. Return on capital employed (ROCE) is the ratio of EBIT pre to the average amount of capital employed.

In the medium term, SGL Carbon aims to achieve a leverage ratio of ≤ 2.5, an equity ratio of ≥ 30% and a return on capital employed of ≥ 10%.

The key capital management figures developed as follows:

€m	Dec. 31, 21	Dec. 31, 20
Net financial debt	206.3	286.5
Equity attributable to the shareholders of the parent company	371.5	220.7
ROCE $_{\text{EBIT pre}}$	8.0%	1.8%
Equity ratio	27.0%	17.5%
Leverage ratio	1.50	3.10

SGL Carbon has an obligation to comply with certain covenants with respect to its lenders and bondholders. Adherence to these covenants is monitored continuously. Financial risks are continuously monitored and controlled using certain key performance indicators and regular internal reports. This includes, among other things, the internal financing framework for subsidiaries and its utilization, monitoring the hedged currency exposure, the change of actual cash flows, the change in the market value of the derivatives portfolio and the maintaining and utilization of guaranteed credit lines.

SGL Carbon has commissioned the rating agencies Moody's and Standard & Poor's (S&P) to prepare an issuer rating, which supports investors in assessing SGL's credit quality. The assigned rating agencies have given SGL Carbon the following Group ratings:

Rating agency	Rating	Date of the rating
Moody's	Caa1 (Outlook: positive)	Aug 21
Standard & Poors	CCC+ (Outlook: stable)	May 21

Change of control agreement

As of December 31, 2021, the Company had one convertible bond outstanding, maturing in 2023. The convertible bond entitles the bondholders to demand full repayment of the principal amount of their bonds in the event of a change of control (plus any accrued interest) on a reference date to be set by the Company. This reference date must be no less than 40 and no more than 60 calendar days after the change of control. The bonds may also be converted into shares, in which case the bondholders will receive an improved conversion ratio, which will vary depending on the residual time remaining until the bonds mature. A change of control is deemed to occur for the 2023 convertible bonds if one or more persons acquire control over the Company, where control means direct or indirect ownership of more than 30% of the voting shares. For the 2023 convertible bond, the improved conversion ratio will also apply in the case of a public takeover offer if, at the end of the acceptance period, the acceptance rate of the offer exceeds 30% of voting shares, any minimum acceptance threshold for the offer in excess of this amount has also been reached, and no further offer conditions remain unfulfilled (other than conditions that can legally be met after the acceptance period has expired).

The €250 million corporate bond issued by the Company and maturing in 2024 entitles investors to demand early redemption of their bonds, in which case they receive payment of 101% of the principal amount (net of any tax deduction) plus the interest accrued up to the redemption date. Redemption may be demanded if (a) a person (other than Ms. Klatten, BMW AG and persons or entities attributable to them) directly or indirectly acquires 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 one person or entity (other than Ms. Klatten, BMW AG and persons or entities attributable to them), or (c) the shares of SGL Carbon SE are no longer listed on the Frankfurt Stock Exchange or another European regulated market.

Other

In accordance with IFRS, it has to be assessed whether an entity is required to be included in consolidation in case of a parent-subsidiary relationship also on the level of the potential subsidiary. The assessment of consolidation in accordance with IFRS 10 is based on a consistent consolidation model, the "control concept", for all companies, regardless of whether control exists due to regulations under corporate law or contractual arrangements or whether it is based on economic substance. Accordingly, the concept has to be applied also for parent-subsidiary relationships that are based on voting rights as well as for relationships that are substantiated by contractual arrangements (please also refer to Note 2 Consolidation principles). On the basis of these principles, SGL Carbon regularly assesses whether SGL Carbon SE is controlled by another parent company. SGL Carbon currently has no information that indicates that SGL Carbon SE is a subsidiary of any of its shareholders. SGL Carbon also has no indication that voting rights are exercised jointly or in concert by any shareholders. SGL Carbon SE therefore prepares consolidated financial statements as the ultimate parent company of the SGL Carbon Group.

SGL Carbon SE, as the parent company of SGL Carbon, reported net income for 2021 of €196.5 million in accordance with the German Commercial Code (HGB). Taking into account the loss brought forward of minus €1,108.4 million, the accumulated loss totaled €911.9 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.

22. Provisions for pensions and similar employee benefits

The employees of SGL Carbon worldwide benefit from various arrangements 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 linked to an employee's salary bracket and position within the company hierarchy. Some arrangements also provide for future increases linked to inflation.

In the past fiscal year, all Group pension plans were reviewed in the course of a pension project. This was prompted in particular by the rise in pension obligations caused by persistent low interest rates. Low interest rates increase the amount of the provisions that the Company must set aside in order to be able to make future pension payments. The aim of the pension project was to make the company retirement benefit scheme sustainable for the Group in the long term. A further aim was to put employees on an equal footing with respect to the earning of future retirement benefit entitlements, irrespective of their joining date. This was to be achieved, to the extent possible, by adopting uniform systems in the form of defined contribution plans. In the year under review, this enabled SGL Carbon to reduce its retirement benefit provisions or eliminate them entirely from the balance sheet. The measures include, in particular, the introduction of a capital option for active and former members of various closed German pension plans, the settlement of certain ongoing pensions for pensioners in the US, the curtailment of plans for active employees in the US and the (partial) funding of pension plans through increases of plan assets in the US and France. For further details and a description of the main effects, see "Plan descriptions."

Plan descriptions

The various pension arrangements for SGL Carbon employees in Germany are pooled in the legally independent Pension Fund for the Employees of the Hoechst Group (Pensionskasse der Mitarbeiter der Hoechst-Gruppe VVaG). In case of defined contribution plans for basic pension plans in relation to employees for income up to the contribution ceiling, 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 Group VVaG pension fund (Penka I) is a multi-employer defined benefit 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 investment returns of the fund. Based on the statutory actuarial calculation for 2020, the pension fund's obligations are fully funded. It is assumed that this will also be the case for 2021. Should the multi-employer plan find itself in a situation where the plan's liabilities exceed its assets, this can be remedied by either increasing employer contributions to the plan or reducing benefits to beneficiaries. In the event of a reduction in benefits, it must be checked whether this would create a contribution obligation for the employer. If the pension plan were to be wound up, the remaining funds would be distributed among the plan members. If there are no more plan members, the remaining funds would be transferred to social organizations. If SGL Carbon were to leave the pension fund, all of the employer's rights and obligations vis-à-vis the pension plan would continue to exist for as long as the pension plan continues to provide pension benefits for the Group's plan members. The contributions paid to the pension plan by SGL Carbon amounted to €5.6 million in 2021 (previous year: €6.0 million) and are expected to be €7.5 million in 2022 due to an increase in employer contributions as of January 1, 2022. Effective April 1, 2009, the defined benefit plan was closed to new entrants and changed to a defined contribution plan. Employer contributions remained constant at 230% of employee contributions. All obligations were settled with the payment of contributions to the Höchster Pensionskasse VVaG (Penka II).

In addition, there is Altersversorgungplus (AVplus) in Germany. The employee contributes 2.0% of pensionable gross pay to AVplus by way of a salary deduction, while the employer contributes twice that amount in the form of a direct pension commitment which is covered by assets in a trust vehicle (contractual trust arrangement, CTA). Employees may contribute an additional amount of 1.0% to the pension fund, in which case the employer's matching direct pension commitment is equal 100% of the employee's additional contribution. The employee's entitlement to benefits from the pension fund vests immediately when he makes his contributions. The employer's direct pension commitment is subject to a guaranteed minimum return of 2.25% p.a.. When a benefit becomes payable, any benefit payable (one-off disbursement or payment in form of an annuity) are determined based on the higher of the guaranteed minimum return or the current individual value of the assets. To cover AVplus obligations, assets are invested in an Asian equity fund (1.0%), a European small cap equities fund (1.6%), a European equities fund (35.7%), an international equities fund (7.2%) and a

European fixed-income fund (54.5%) via an external investment company.

The defined benefit plan for senior management for income above the contribution ceiling set by the German government pension insurance plan (Deutsche Rentenversicherung), which was covered by a direct pension commitment, was closed to participants as of December 31, 2014 and was replaced by a defined contribution scheme (ZVplus). The entitlements earned by the participants have been frozen and will not be 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. At the end of 2021, a capital option was granted in respect of entitlements under the old commitments, according to which active and former employees or their surviving spouses had the option of receiving a lump sum, either in the form of a one-off payment or in 10 annual installments, instead of a retirement pension or survivor's pension. The capital option can only be exercised before taking retirement. The lump sum payment is equal to the present value of the accrued pension benefit, using a capitalization factor of 220. For valuation purposes, the installment option was included in the one-off payment option and an acceptance rate of 55% was assumed. The probability of utilization for the different payout options was derived from the empirical acceptance rates for comparable cases. Introduction of the capital option reduced the present value of the obligation by €17.2 million. The reduction was recognized in profit or loss. The effects are included in the table "Funding status 2021" in the line "Past service cost due to plan changes (including plan curtailments)." Due to the short period of time between the plan change and the reporting date, SGL Carbon updated the actuarial assumptions as of the reporting date and did not recalculate the current service cost and net interest cost for the remainder of the reporting period after the adjustment.

Under the new defined contribution plan, the Company grants contributions based on a set percentage of pensionable income. The contributions are subject to a minimum rate of return, which is the maximum rate for life insurance policies plus one percentage point (1.5% p.a.). In addition, the amounts are contributed as assets to a trust vehicle (contractual trust arrangement, CTA). When a benefit becomes payable, the lump-sum or pension is based on the higher of the guaranteed minimum return or the current individual value of the assets. To cover ZVplus obligations, assets are invested in a Asian equity fund (0.5%), European small cap equities fund (7.8%), a European equities fund (14.6%), an international equities fund (40.3%) and a European fixed-income fund (36.8%) via an external investment company. Senior management is also able to contribute short- and/or long-term incentives into ZVplus.

The North American subsidiaries have pension plans that are mainly covered by pension funds. This plan is subject to the legal and regulatory framework of the US 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. At the end of 2021, the Company decided to transfer the pension obligations for retirees drawing monthly pensions of up to USD 1,000 to an insurance company for a price of USD 27.5 million. The plan settlement price consisted of a transfer of USD 28.4 million in plan assets, including payments of USD 12.8 million made directly by SGL Carbon in connection with the settlement. All further legal and substantive obligations for these pension payments are eliminated with this agreement. Settlement of the plan resulted in a loss of €0.7 million from the difference between the DBO (defined benefit obligation) and the settlement price. This amount is included in the line "Plan settlements." Furthermore, the direct pension commitment for the defined benefit pension scheme was closed for active employees as of December 31, 2021. The entitlements earned by the participants have been frozen and will not be subject to indexation until benefits commence. This plan curtailment reduced the present value of the obligation by €1.6 million. The reduction was recognized through profit or loss. The effects are included in the table "Funding status 2021" in the line "Past service cost due to plan changes (including plan curtailments)." Finally, the gap in coverage that still existed after the plan had been settled was fully funded by the contribution of USD 9.4 million in plan assets. The effective funding ratio for the US pension plan as of December 31, 2021 was therefore 99.8% (previous year: 74.1%).

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 US pension fund, plan assets are invested solely for the purpose of providing future pension benefits to the beneficiaries, thereby minimizing the asset management costs. SGL Carbon regularly reviews the expected return on the plan assets of the North American funded pension plan. As part of this review, independent actuaries determine a range for expected long-term returns on total plan assets. For the purpose of determining the net interest, plan assets are measured using the discount interest rate at the end of the previous year.

The effective rate of return on plan assets in the US in 2021 was 8.6% (previous year: 9.4%), above the expected return based on the discount rate of 2.6% as of December 31, 2020.

SGL Carbon's investment policy is geared more heavily toward fixed income bonds and cash than more speculative investments in equities and participating interests. As of December 31, 2021, 78.4% of US plan assets were invested in fixed income investments (previous year: 59.8%), 7.3% in equities and participating interests in companies (previous year: 27.8%), 9.1% in real estate (previous year: 7.7%), 3.9% in hedge funds (previous year: 3.5%) and 1.3% in bank deposits (previous year: 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 cost increases in the healthcare sector. In the year under review, the assumed rates of increase for medical costs (first / last / year) (5.92% / 4.5% / 2027+) for beneficiaries under the age of 65 and (6.55% / 4.5% / 2027+) for those over 65. The assumptions for 2020 were (6.19% / 4.5% / 2027+) and (6.96% / 4.5% / 2027) respectively. An increase (decrease) of 1 percentage point in the assumed growth rate for healthcare costs would have led to an increase (decrease) in the present value of the defined benefit obligation of €0.1 million (minus €0.1 million) and an increase (decrease) in the service cost and interest cost of €0.0 million (€0.0 million) as of the end of 2021.

Actuarial assumptions

In addition to biometric assumptions and the current long-term market interest rate, assumptions regarding future salary and pension increases are also taken into account. The following parameters are used in Germany and the US, the most significant countries:

	German plans		US plans	
	2021	2020	2021	2020
Discount rate as of Dec. 31	1.10%	0.60%	3.01%	2.57%
Projected pension increase as of Dec. 31	1.25%	1.50%		
Expected return on plan assets in fiscal year	1.10%	0.60%	3.01%	2.57%
probability of acceptance of capital option	55%	-	-	-
Duration (years)	12.9	17.0	16.0	15.2

The disability tables used in Germany were SGL-specific tables, with a disability trend based on the Heubeck 2018G mortality tables (previous year: application of the unmodified Heubeck 2018G mortality tables). This adjustment to the statistical tables had an effect of €2.2 million, which was recognized directly in equity as an actuarial gain.

Sensitivity analysis

A change of half a percentage point in any of the above assumptions (+/- 5 percentage points for the capital option) would increase or decrease the DBO as follows:

	Change in DBO			
in million €	Dec. 31, 21		Dec. 31, 20	
	Increase	Decrease	Increase	Decrease
Discount rate (+/- 0.5%-pts)	−22.6	26.2	−34.9	40.3
Projected pension increase (+/- 0.5%-pts)	13.1	−12.1	22.6	−21.1
Probability of acceptance of capital option (+/- 5%-pts)	−1.6	1.6	-	-

The sensitivities reflect the change in the DBO caused by changed assumption only, with all other assumptions remaining the same.

Change in defined benefit plans

The change in pension obligations relating to direct commitments and post-employment healthcare obligations, the change in plan assets and the funding status of the pension plans are described in the table below.

The funded status for 2021 was as follows:

€m	Germany 2021	USA 2021	Other 2021	Total 2021
Present value of the defined benefit obligation at beginning of year	343.3	115.2	11.3	469.8
Service cost	4.8	3.1	0.3	8.2
Interest cost	2.0	3.0	0.1	5.1
Actuarial gains (–)/losses (+)	–37.4	–5.4	–1.1	–43.9
Past service cost due to plan amendments (including curtailments)	–15.8	–1.6	0.0	–17.4
Plan settlements	0.0	0.7	0.0	0.7
Benefits paid	–9.8	–4.9	–1.3	–16.0
Settlement payments	0.0	–25.0	0.0	–25.0
Other changes	0.2	0.1	1.6	1.9
Currency differences		9.6	0.0	9.6
Present value of the defined benefit obligation at end of year [1]	**287.3**	**94.8**	**10.9**	**393.0**
Fair value of plan assets at beginning of year	61.4	70.3	1.5	133.2
Actual return on plan assets	4.5	6.6	0.0	11.1
Employer contributions	3.7	20.3	5.3	29.3
Employee contributions	0.2	0.1	0.0	0.3
Benefits paid	–1.7	–4.9	–0.5	–7.1
Settlement payments		–25.0		–25.0
Currency differences		6.9	0.0	6.9
Fair value of plan assets at end of year [2]	**68.1**	**74.3**	**6.3**	**148.7**
Funded status as of Dec. 31	**219.2**	**20.5**	**4.6**	**244.3**
Amount recognized	**219.2**	**20.5**	**4.6**	**244.3**
Termination benefits		0.4	2.4	2.8
Provisions for pensions and similar employee benefits	**219.2**	**20.9**	**7.0**	**247.1**

[1] Of which €5.7 million relate to post-retirement health care benefits
[2] This item also includes assets of €5.6 million to cover pension entitlements recognized as other non-current assets

The funded status for 2020 was as follows:

€m	Germany 2020	USA 2020	Other 2020	Total 2020
Present value of the defined benefit obligation at beginning of year	318.8	114.1	11.5	444.4
Service cost	4.8	3.0	0.3	8.1
Interest cost	3.5	3.5	0.1	7.1
Actuarial gains (–)/losses (+)	25.5	9.1	0.5	35.1
Benefits paid	–9.7	–4.9	–1.1	–15.7
Other changes	0.4	0.1	0.0	0.5
Currency differences	0.0	–9.7	0.0	–9.7
Present value of the defined benefit obligation at end of year [1]	**343.3**	**115.2**	**11.3**	**469.8**
Fair value of plan assets at beginning of year	55.5	73.3	0.9	129.7
Actual return on plan assets	2.7	6.6	0.0	9.3
Employer contributions	4.1	1.5	1.4	7.0
Employee contributions	0.3	0.1	0.0	0.4
Benefits paid	–1.2	–4.9	–0.8	–6.9
Currency differences	0.0	–6.3	0.0	–6.3
Fair value of plan assets at end of year [2]	**61.4**	**70.3**	**1.5**	**133.2**
Funded status as of Dec. 31	**281.9**	**44.9**	**9.8**	**336.6**
Amount recognized	**281.9**	**44.9**	**9.8**	**336.6**
Termination benefits		0.5	3.0	3.5
Provisions for pensions and similar employee benefits	**281.9**	**45.4**	**12.8**	**340.1**

[1] Of which €5.9 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 consolidated statement of comprehensive income includes the following amounts:

€m	Germany 2021	USA 2021	Other 2021	Total 2021	Total 2020
Actuarial gains (+)/losses (–) on pensions	37.4	5.4	1.1	43.9	–35.1
Actual return on plan assets	4.5	6.6	0.0	11.1	9.3
Less expected return on plan assets	–0.8	–1.9	0.0	–2.7	–3.2
Currency effects	0.0	0.3	0.0	0.3	–0.5
Share of investments accounted for At-Equity in other comprehensive income	0.7	0.0	0.0	0.7	–0.4
Gains (+)/losses (–) for the reporting year (gross) recognized in equity	**41.8**	**10.4**	**1.1**	**53.3**	**–29.9**
Tax effect	–12.3	–2.4	–0.3	–15.0	8.3
Valuation allowances on deferred taxes	12.3	2.4	0.0	14.7	–8.0
Gains (+)/losses (–) for the reporting year (net) recognized in equity	**41.8**	**10.4**	**0.8**	**53.0**	**–29.6**

The cumulative amount of actuarial losses recognized in equity (accumulated results) was €214.5 million net (previous year: €267.5 million).

In fiscal year 2021, the following developments affected the defined benefit obligation: an actuarial gain of €33.0 million resulting from the increase of the discount factor for pension plans (previous year: actuarial loss of €37.0 million resulting from the reduction of the discount rate) and an actuarial gain of €8.6 million from the reduction in the projected pension increase for the German plans from 1.5% to 1.25% (previous year: actuarial gain of €16.1 million due to the reduction in the projected pension increase from 1.9% to 1.5%), an actuarial gain of €2.6 million from the introduction of company-specific probability tables for disability (previous year: actuarial loss of €1.2 million due to the introduction of new mortality tables in the US) and a reduction of €0.3 million (previous year: increase of €1.8 million) due to experience adjustments, resulting from the differences between actuarial assumptions and actual outcomes. Pension provisions with a maturity of less than one year amounted to €14.9 million (previous year: €14.9 million).

SGL Carbon has pension and healthcare obligations of €120.8 million (previous year: €137.8 million) in relation to funded pension plans. Pension obligations under unfunded pension plans were €272.1 million (previous year: €332.0 million). The actual return on plan assets totaled €11.1 million in 2021 (previous year: €9.3 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, 2021, the asset values included in the pension provisions totaled €29.4 million (previous year: €29.6 million). The expected return corresponds to the discount rate for the pension obligations. In fiscal year 2021, one-off payments of €0.0 million were made to reinsurers (previous year: €0.5 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 26.

The breakdown of pension expenses for 2021 and 2020 is as follows:

€m	Germany 2021	USA 2021	Other 2021	Total 2021	Total 2020
Current service costs	4.8	3.1	0.3	8.2	8.1
Past service cost due to plan amendments (including curtailments)	–15.8	–1.6	0.0	–17.4	-
Expenses from plan settlements	0.0	0.7	0.0	0.7	0.0
Service cost	**–11.0**	**2.2**	**0.3**	**–8.5**	**8.1**
Interest cost	2.0	3.0	0.1	5.1	7.1
Expected return on plan assets	–0.8	–1.9	0.0	–2.7	–3.0
Net interest expense	**1.2**	**1.1**	**0.1**	**2.4**	**4.1**
Pension expenses for defined benefit plans	**–9.8**	**3.3**	**0.4**	**–6.1**	**12.2**
Pension expenses for defined contribution plans	5.9	1.5	1.9	9.3	10.2
Pension expenses	**–3.9**	**4.8**	**2.3**	**3.3**	**22.4**

SGL Carbon's contributions to the state plans amounted to €17.9 million in 2021 (previous year: €21.2 million). Employer contributions to plan assets and reinsurance policies for 2022 are estimated at €4.9 million (previous year: €6.8 million). As of December 31, 2021, 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
2021	16.2
Due 2022	16.1
Due 2023	21.0
Due 2024	15.1
Due 2025	16.1
Due 2026	17.8
Due 2027-2031	96.3

23.Other provisions

€m	Taxes	Personnel	Warranties, price reductions and guarantees	Restructu-ring	Other	Total
Balance as of Jan 1, 21	0.2	28.7	4.6	53.5	19.8	106.8
Utilizations	0.0	−10.5	−1.9	−18.3	−6.7	−37.4
Releases	−0.1	−5.2	−0.1	0.0	−0.5	−5.9
Additions	1.5	39.5	3.7	11.7	10.9	67.3
Other changes/exchange differences	0.1	−0.7	0.0	0.0	−1.0	−1.6
Balance as of Dec. 31, 21	**1.7**	**51.8**	**6.3**	**46.9**	**22.5**	**129.2**
thereof with a maturity of up to one year	*1.7*	*41.9*	*6.2*	*14.6*	*21.4*	*85.8*
thereof with a maturity of more than one year	-	*9.9*	*0.1*	*32.3*	*1.1*	*43.4*

Provisions for personnel expenses mainly comprise provisions for variable bonuses of €32.7 million (previous year: €6.4 million), provisions for jubilee benefits of €2.2 million (previous year: €5.3 million) and provisions for outstanding vacation and accumulated time credits of €8.8 million (previous year: €9.7 million).

Warranties, price reductions and guarantees include provisions for price reduction risks, including bonuses, volume discounts and other reductions in price, as well as warranty provisions. The decrease in provisions for restructuring to €46.9 million essentially reflects the progress of the ongoing restructuring program. The item also includes provisions for clean-up work and dismantling costs.

The “Other” item includes provisions for outstanding invoices of € 9.0 million (previous year: €5.7 million). A large number of low-value items are also included.

24. Liabilities

€m	Dec. 31, 21	Remaining term to maturity > 1 year	Dec. 31, 20	Remaining term to maturity > 1 year
Interest-bearing loans				
Corporate bond	250.0	250.0	250.0	250.0
Nominal value of convertible bond	*151.3*		*159.3*	
Less IFRS equity component	*–4.8*		*–8.0*	
Convertible bond	146.5	146.5	151.3	151.3
Bank loans, overdrafts and other financial liabilities	25.9	21.2	19.0	15.3
Refinancing costs	–4.0	–4.0	–5.7	–5.7
	418.4	**413.7**	**414.6**	**410.9**
Trade payables and contract liabilities	**115.2**	**0.0**	**77.6**	**0.0**
Other financial liabilities				
Derivative financial instruments	0.3	0.0	-	-
Lease liabilities	40.9	32.0	37.9	29.8
Miscellaneous other financial liabilities	4.5	0.0	4.6	0.0
	45.7	**32.0**	**42.5**	**29.8**
Income tax liabilities	10.5	0.0	10.7	0.0
Miscellaneous other liabilities	27.9	4.6	31.8	4.6
Other liabilities	**84.1**	**36.6**	**85.0**	**34.4**
Total	**617.7**	**450.3**	**577.2**	**445.3**

Interest-bearing loans

Corporate bond
SGL Carbon SE issued a senior secured corporate bond in April 2019. The bond has a nominal value of €250.0 million and was issued in denominations of €100,000. The coupon is 4.625%, payable semiannually.

The bond had an original term of five years and five months and matures in September 2024. It is repayable at 100% of the nominal value. The terms of the bond include normal market provisions with regard to financial covenants and financial restrictions. The corporate bond is admitted to trading on the Open Market of the Frankfurt Stock Exchange.

As of December 31, 2021, the market value of the listed corporate bond was €254.9 million (previous year: €236.8 million).

Convertible bond
In September 2018, SGL Carbon SE issued an unsecured, unsubordinated convertible bond. The total nominal amount of the convertible bond upon issue was €159.3 million. The bond was issued in denominations of €100,000. The coupon is 3.00%, payable semiannually.

The convertible bond has an original term of five years and matures in September 2023. It is repayable at 100% of the nominal amount.

The terms of the convertible bond provide for protection against dilution for investors. This ensures that the conversion price is automatically adjusted, particularly 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 initial conversion price was set at €13.0220, representing a premium of 30% on the reference price of €10.0169. Based on the current conversion price, full conversion would result in the issue of 11.6 million shares. The fair value of the conversion rights was recognized in capital reserves upon issue and deducted from the bond liability.

In the reporting period, SGL Carbon made early repurchases of convertible bonds with a total nominal value of €8.0 million. The acquisition was made in two tranches of €5.0 million at a rate of 99.00% and €3.0 million at a rate of 99.25%, plus accrued interest in each case. The consideration paid for each purchase was allocated to the equity and liability components of the instrument at the time the transactions took place. The loss related to the liability components and the amount of the consideration related to the equity components were each €0.1 million.

The conversion price of the convertible bond developed as follows:

€	Conversion price as of Dec. 31, 21	Original conversion price per share	Change
Convertible bond 2018/2023	13.02	13.02	0.00

Summary of the convertible bond

€m	Volume of issue	Outstanding volume	Carrying amount as of Dec. 31, 21	Market price[1] as of Dec. 31, 21	Coupon % p.a.	Issue price
Convertible bond 2018/2023	159.3	151.3	145.4	150.7	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 cash-effective average interest rate for financial liabilities based on their nominal amounts was 3.9% p.a. in 2021 (previous year: 4.0% p.a.). Including the non-cash imputed interest cost on the convertible bond, the weighted average effective interest rate for 2021 was 4.5% p.a. (previous year: 4.6% p.a.). As of the balance sheet date, bank loans, overdrafts and other financial liabilities amounted to €25.9 million (previous year: €19.0 million). As in the previous year, these bore interest at fixed rates and were secured by a land charge.

Syndicated credit facility

The Company also has a syndicated credit facility totaling €175.0 million to be used for general corporate purposes. It has equal ranking with the corporate bond and was not utilized as of the reporting date. The facility was agreed with SGL Carbon's core banks and originally ran until January 2023, which was extended by one year to January 2024 in the reporting year. The syndicated credit line is available to SGL Carbon SE and SGL Carbon LLC as borrowers and can be drawn down in euros or US dollars.

The agreed credit margin varies depending on the Company's leverage ratio. The terms of the facility include financial covenants in respect of certain financial indicators and other financial restrictions.

Trade payables and contract liabilities

Trade payables and contract liabilities totaled €115.2 million as of December 31, 2021 (previous year: €77.6 million). As in 2020, they were primarily due to third parties and due for payment within one year. Trade payables include contract liabilities of €30.1 million (previous year: €23.9 million). These concern prepayments received from customers for decommissioning and waste disposal as well as the construction of plants for which revenue is recognized over a specific period.

Other liabilities

As of December 31, 2021, other financial liabilities include lease liabilities of €40.9 million (previous year: €37.9 million).

Miscellaneous other financial liabilities mainly include accrued interest of €4.5 million (previous year: €4.6 million) on the convertible bond and the corporate bond.

Miscellaneous other liabilities totaled €27.9 million as of December 31, 2021 (previous year: €31.8 million) and mainly included payroll and church tax liabilities of €8.3 million (previous year: €8.0 million), social security liabilities of €0.1 million (previous year: €0.2 million), other tax liabilities of €6.6 million (previous year: €7.3 million) and deferred income of €6.3 million (previous year: €9.4 million).

The table below shows all contractually agreed payments for the repayment of principal and interest on recognized financial liabilities, including derivative financial instruments, as of December 31, 2021.

€m	2022	2023	2024	2025	2026	More than five years
Non-derivative financial liabilities						
Corporate bond	11.6	11.6	258.7			
Convertible bond	4.5	154.6				
Liabilities due to banks	5.4	4.6	3.6	2.9	2.8	9.4
Lease liabilities	9.6	5.7	4.6	3.7	3.1	14.3
Trade payables	85.1					
Miscellaneous other financial liabilities	4.5					
Derivative financial liabilities	0.3					
Total	**121.0**	**176.5**	**266.9**	**6.6**	**5.9**	**23.7**

There has been no significant change in the details shown since 2020.

Financial liabilities were determined using undiscounted contractual cash flows for future fiscal years.

The table below shows the development of liabilities from financing activities:

€m	Balance as of Jan. 1, 21	Additions	Repayments	Effect of foreign exchange rate changes	Imputed interest/ amortisation	Balance as of Dec. 31, 21
Corporate bond	250.0					250.0
Convertible bond	159.3		−8.0			151.3
Bank loans, overdrafts and other financial liabilities	19.0	13.0	−6.1	0.0		25.9
Interest-bearing loans (nominal amount)	**428.3**	**13.0**	**−14.1**	**0.0**	**0.0**	**427.2**
Remaining imputed interest for the convertible bond	−8.0	0.2			3.0	−4.8
Refinancing costs	−5.7		−1.1		2.8	−4.0
Interest-bearing loans (carrying amount)	**414.6**	**13.2**	**−15.2**	**0.0**	**5.8**	**418.4**
Lease liabilities	37.9	11.5	−9.5	−0.6	1.6	40.9
Total liabilities from financing activities	**452.5**	**24.7**	**−24.7**	**−0.6**	**7.4**	**459.3**

25. Contingent liabilities and other financial obligations

Other financial obligations in connection with purchase orders for approved capital expenditure on property, plant and equipment amounted to €9.2 million as of December 31, 2021 (previous year: €4.3 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 €5.4 million as of December 31, 2021 (previous year: €5.1 million). Contingent liabilities of €10.0 million (previous year: €0.0 million) in respect of equity-accounted investments or other guarantee obligations existed vis-à-vis Fisigen S.A. (Portugal).

SGL Carbon secures the raw materials and energy required for production through procurement contracts 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 have also been signed with lenders in conjunction with the financial debt and credit lines. These agreements are restricted to share pledge agreements and/or corporate guarantees for a selected number of Group companies. The shares of the following companies serve as collateral: SGL Carbon GmbH, SGL Carbon Beteiligung GmbH, SGL Technologies GmbH, SGL Composites Materials Germany GmbH, SGL Composites LLC, USA, 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 €25.9 million (previous year: €19.0 million) was secured by a land charge as of December 31, 2021.

Various lawsuits, court proceedings and legal claims 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

26.Related party transactions

Joint ventures and associates

SKion GmbH, Bad Homburg, Germany, holds a share of approximately 28.55% in SGL Carbon SE according to notifications pursuant to the German Securities Trading Act (WpHG). No transactions for the sale of goods or 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 corporate bond.

In fiscal years 2021 and 2020, SGL Carbon maintained business relations within its normal course of business with a number of joint ventures and associates, related to sales of products and services and the reinvoicing of general and administrative expenses. The transactions took place at market conditions. Collateral is reported under other financial obligations, see Note 25. Please refer to Note 7 for information on joint ventures and associates.

The table below shows the volume of transactions with related companies:

2021

	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	20.1	14.7	0.0	0.0	3.6	0.0	0.1
Associates	0.1	0.4	73.3	1.0	0.0	0.0	4.0
Total	**20.2**	**15.1**	**73.3**	**1.0**	**3.6**	**0.0**	**4.1**

2020

	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	19.4	9.3	0.0	0.0	11.0	0.0	4.3
Associates	0.0	0.2	46.4	1.0	2.6	0.0	1.1
Total	**19.4**	**9.5**	**46.4**	**1.0**	**13.6**	**0.0**	**5.4**

Related persons

Related persons include the members of the Board of Management and the Supervisory Board.

For fiscal 2021, the total remuneration (excluding pension costs) of the members of SGL Carbon's Board of Management of SGL Carbon active during the year was €2.1 million (previous year: €3.1 million). In addition, pension expenses (service cost) in relation to defined benefit plans of €0.4 million in 2021 (previous year: €0.4 million) were considered to be components of the remuneration of the members of the Board of Management. The DBO of the pension commitments for active members as of December 31 was €0.5 million (previous year: €0.2 million).

As of December 31, 2021, net amounts of €1.5 million were outstanding to members of the Board of Management (previous year: €0.5 million). These consisted of provisions for annual bonuses. As of December 31, 2021, a total of 427.547 performance share units (PSUs) (previous year: 112,732) had been granted from the Long-Term Incentive Plan (LTI) to the members of the Board of Management who were active in fiscal year 2021. The allotment value at grant date for all outstanding LTI tranches was €1.7 million as of December 31, 2021 (previous year: €3.7 million). In 2021, 314,815 PSUs were newly granted to members of the Board of Management active during the fiscal year from the LTI tranche 2021-2024.

Former Board of Management members and their surviving dependents received total compensation within the meaning of Section 285 No. 9b HGB in the amount of €2.5 million (previous year: €2.6 million). As of December 31, 2021, the pension provisions (defined benefit obligation, DBO) recognized for former members of the Board of Management members amounted to €62.8 million (previous year: €70.9 million), of which €29.2 million (previous year: €29.5 million) are covered by reinsurance policies.

The remuneration of the members of the Supervisory Board comprised basic remuneration plus additional remuneration for committee work and totaled €0.6 million (previous year: €0.7 million), including attendance fees.

In addition, employee representatives on the Supervisory Board received remuneration of €350 thousand (previous year: €365 thousand) within the framework of their employment contracts.

Details of the remuneration system for the members of the Board of Management and the Supervisory Board and the disclosure of the individual levels of remuneration can be found in the 2021 Group Management Report in the "Remuneration report" section.

No members of the Board of Management or the Supervisory Board received any loans or advances from SGL Carbon.

27.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, 21	Net carrying amount as of Dec. 31, 20
Financial assets			
Cash and cash equivalents	1)	220.9	141.8
Trade receivables	1)	105.8	110.9
Trade receivables	2)	13.1	3.2
Marketable securities and similar investments	2)	5.6	4.9
Other financial assets	1)	0.0	0.0
Derivative financial assets			
Derivatives without hedging relationship	3)	1.3	0.7
Derivatives with a hedging relationship	n.a.	0.0	-
Financial liabilities			
Corporate bond	4)	250.0	250.0
Convertible bond	4)	146.5	151.3
Bank loans, overdrafts and other financial liabilities	4)	25.9	19.0
Refinancing costs	4)	–4.0	–5.7
Lease liabilities	n.a.	40.9	37.9
Trade payables	4)	85.1	53.7
Miscellaneous other financial liabilities	4)	4.5	4.6
Derivative financial liabilities			
Derivatives without hedging relationship	5)	0.1	-
Derivatives with a hedging relationship	n.a.	0.2	-
Thereof aggregated by measurement category in accordance with IFRS 9			
1) Financial assets measured at amortized costs		326.7	252.7
2) Financial assets measured at fair value through profit and loss		18.7	8.1
3) Other financial assets measured at fair value through profit and loss		1.3	0.7
4) Financial liabilities measured at amortized costs		508.0	472.9
5) Financial liabilities measured at fair value through profit and loss		0.1	-

n.a.= not applicable

The carrying amounts for cash and cash equivalents, trade receivables and contract assets, and trade payables are approximately equivalent to their fair value, given the short residual maturities of these items.

The carrying amounts of these financial assets, less valuation allowances recognized, approximate their fair values due to the fact that the residual maturity is largely short-term.

The fair value of trade receivables intended for sale under 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 marketable securities and similar investments. If no such market price exists, the fair value is determined using observable market data.

Please refer to Note 24 for disclosures on the market value of the corporate bonds and convertible bonds as of the balance sheet date.

Forward exchange contracts are measured on the basis of benchmark rates, taking account of forward premiums and discounts.

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 the market interest rates for similar financial liabilities with comparable residual maturities. The fair values largely correspond to the carrying amounts.

As of December 31, 2021 and 2020, the item “Derivative financial assets” included currency forwards as well as 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.

Offsetting

SGL Carbon enters into master netting agreements for derivative financial instruments. There were no potential effects from these netting agreements either in the reporting year or in the previous year, i.e., the gross amounts of forward exchange contracts recognized in the balance sheet correspond to their potential net amounts.

The table below 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, 2021 and 2020:

				Dec. 31, 21
	Level 1	Level 2	Level 3	Total
Marketable securities and similar investments	5.6			5.6
Trade receivables			13.1	13.1
Derivative financial assets		1.3		1.3
Derivative financial liabilities		0.3		0.3

				Dec. 31, 20
	Level 1	Level 2	Level 3	Total
Marketable securities and similar investments	4.9			4.9
Trade receivables			3.2	3.2
Derivative financial assets		0.7		0.7
Derivative financial liabilities				0.0

The table below shows the changes in level 3 trade receivables in the 2021 and 2020 reporting periods:

€m	2021	2020
Balance as of Jan. 1,	3.2	2.1
Additions	9.9	1.1
Gains/Losses recognized in profit and loss	0.0	0.0
Balance as of Dec 31	**13.1**	**3.2**

Net gains or losses on financial instruments by IFRS 9 measurement category were as follows:

Net gains/losses by measurement category

€m	2021	2020
Financial assets measured at amortized costs	3.1	–4.9
Financial assets measured at fair value through profit and loss	–0.3	0.3
Other financial assets and financial liabilities measured as fair value through profit and loss	0.4	0.3
Financial liabilities measured at amortized cost	–0.2	0.1

Net gains/losses for the "financial assets measured at amortized cost" measurement category mainly include loss allowances of trade receivables and contract assets, reversals of loss allowances and cash receipts in respect of trade receivables previously written off, together with exchange gains/losses from foreign currency valuation.

Net gains/losses for the "financial assets measured at fair value through profit or loss" measurement category primarily include results from the mark-to-market valuation. Net gains/losses for the "other financial assets and financial liabilities measured at fair value through profit or loss" measurement category mainly arise from the mark-to-market valuation of derivative currency instruments to which hedge is not applied or was discontinued when the operating hedged item was recognized profit or loss. In economic terms, the derivative financial assets and liabilities are always based on a hedged item.

The net gains or losses on "financial liabilities measured at amortized cost" include gains or losses on foreign currency valuation.

Interest income and expenses are not included in net gains and losses, as they are already recognized as described in Note 10. For changes in loss allowances of trade receivables and contract assets, please refer to Note 27 "Credit risk".

Financial instrument risks, financial risk management and hedging transactions

SGL Carbon monitors financial risk (liquidity risk, credit risk and market price risk) using tested control and management instruments. Group reporting enables the central Group Treasury function to record, analyze, measure and control financial risks on a regular basis. These activities include all relevant Group companies.

Liquidity risk

Liquidity risk is the risk that an entity might have difficulty in meeting payment obligations in connection with its financial liabilities. In order to ensure SGL Carbon's solvency and financial flexibility at all times, SGL Carbon carries out regular liquidity planning for day-to-day operations at frequent intervals. This is done in addition to financial planning, which normally covers five years. To ensure 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, bank loans and factoring).

In fiscal year 2021, a further Group company was included in the existing factoring agreement. The volume of receivables sold fell to €16.4 million (previous year: €27.7 million).

As of December 31, 2021, the Company had cash and cash equivalents totaling €220.9 million (previous year: €141.8 million). This amount represents a sufficient liquidity reserve for fiscal year 2022. Please refer to Note 24 for information on the maturity of financial liabilities.

Credit risk (counterparty default risk)

Credit risk (counterparty default risk) arises if customers do not meet their contractual obligations to pay the agreed purchase price, or do not meet them in due time.

By granting customers credit terms, the Company is exposed to normal market credit risks. For trade receivables and other financial assets, the maximum credit risk is equal to the carrying amount as of the balance sheet date. There were no significant individual defaults on customer receivables in the past year.

SGL Carbon has a credit management organization to manage customer credit risks. On the basis of a global guideline, the credit management organization initiates and supports all key processes, and it initiates and supports credit risk management action where required. After analyzing the individual and country risks, SGL Carbon insists - either in whole or in part - on cash in advance, documentary credits, letters of credit or guarantees in connection with certain customer transactions.

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 claims paid under the credit insurance policy and, in exceptional cases, by the bank or Group guarantees furnished by the customer. The compensation paid by the insurer is usually 90% of the loss and thus includes a deductible of 10%. When determining valuation allowances on receivables, existing cover commitments under the trade credit insurance are taken into account. In order to determine the credit risk, the credit management processes seek to evaluate the individual customer risks, taking into account the customer's balance sheet figures, payment experience and external credit rating. On the basis of this evaluation, counterparty risks are classified as low, medium or high.

The default risk for trade receivables and contract assets is broken down by risk class as of December 31, 2021 and 2020 as follows (in €m):

Risk classes	Equivalent to S&P Rating	Gross carrying amount as of Dec. 31, 21	Gross carrying amount as of Dec. 31, 20
Low risk	AAA to AA-	56.4	56.6
Medium risk	A+ to BBB-	95.7	93.3
High risk	BB+ to C	23.4	35.0
Total		**175.5**	**184.9**

The loss allowances for trade receivables and contract assets are determined using a simplified approach (see the loss allowance matrix below) since they do not contain any significant financing component. In this context, the customer receivables are classified according to the above credit risk classes (low, medium, and high risk) and the related past due status. A default on a receivable is deemed to have occurred when the contractually agreed cash flows are past due by more than 90 days or when the customer's credit quality has deteriorated to such an extent that payment can 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 (such as country ratings), if necessary.

With respect to loss allowances for cash and cash equivalents and time deposits (liquidity), SGL Carbon assumes that credit risk has not increased significantly. Cash and cash equivalents of €220.9 million are mainly held at banks and financial institutions with a high credit rating (S&P investment grade, i.e. AAA to BBB-). The loss allowance for cash and cash equivalents is calculated based on 12-month expected losses and therefore reflects the short maturities. A loss allowance of €0.1 million was recognized for cash and cash equivalents in 2021 (previous year: €0.0 million).

The following table provides information on default risk and expected credit losses for trade receivables and contract assets as of December 31, 2021 and 2020:

Dec. 31, 21 in €m	Gross carrying amount	Loss rate (weighted average)	Impairment losses	Restricted credit rating
Not overdue	154.8	0.5%	0.8	No
1- 29 days overdue	12.1	2.5%	0.3	No
30- 60 days overdue	2.1	9.5%	0.2	Yes
61- 90 days overdue	1.6	18.8%	0.3	Yes
more than 90 days overdue	4.9	89.8%	4.4	Yes
Total	**175.5**		**6.0**	

Dec. 31, 20 in €m	Gross carrying amount	Loss rate (weighted average)	Impairment losses	Restricted credit rating
Not overdue	157.9	0.5%	0.8	No
1- 29 days overdue	15.9	1.9%	0.3	No
30- 60 days overdue	5.6	5.4%	0.3	Yes
61- 90 days overdue	1.2	25.0%	0.3	Yes
more than 90 days overdue	4.3	100.0%	4.3	Yes
Total	**184.9**		**6.0**	

The table below shows the development of loss allowances on trade receivables and contract assets:

in €m	2021	2020
Balance as of Jan. 01	**6.0**	**5.6**
Additions	0.2	1.1
Reversals	–0.1	–0.4
Utilizations	–0.1	–0.3
Balance as of Dec. 31	**6.0**	**6.0**

No additional loss allowances were recognized for contract assets in fiscal year 2021 (previous year: €0.0 million).

Market price risks

As an international company, SGL Carbon is exposed to market price 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, primarily 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. A currency risk exists when fair values or future payments vary due to changes in foreign exchange rates. It arises when transactions are denominated in a currency other than the functional currency of the Group company concerned. In order to minimize such foreign currency risks, the Company endeavors to minimize currency risks through achieving a balance between receipts and payments, i.e. a so-called natural hedge.

Currency hedges are entered into for the remaining net foreign currency positions (less natural hedging). In accordance with its internal hedging policy, SGL Carbon hedges up to 80% of these net foreign currency positions, as and when required, over a time horizon of up to of two years. In terms of volume, the most significant currency risks from SGL Carbon's operating business result from potential exchange rate movements between the US dollar and the Japanese yen. However, this exposure is hedged against currency fluctuations through price escalation clauses and natural hedging. As of December 31, 2021, the Company was hedged against a weak USD at an average of EUR/USD 1.1404. The Company also holds forward contracts to hedge against a weak CNY at an average of EUR/CNY 7.3946 and against a weak EUR at an average of EUR/PLN 4.72.

Due to the hedges in place, SGL Carbon was not exposed to any material currency-related cash flow risks in its operating business as of the balance sheet date.

The residual term of the derivative financial instruments used to hedge currency risks as of the balance sheet date is currently one year at most.

There were no hedges in place in 2020.

Derivative financial instruments in hedge accounting

SGL Carbon generally uses currency forwards to hedge the currency risk from future net currency exposures. The derivatives used are accounted for as cash flow hedges (hedge accounting). The hedged transactions are highly probable future foreign currency revenues or purchases. The hedges designated as cash flow hedges (recorded in the hedging reserve in equity) amounted to a total of minus €0.2 million as of December 31, 2021 (previous year: €0.0 million – the Company held no derivatives at the end of 2020). As of December 31, 2021, the ineffective components of the derivative financial instruments designated as cash flow hedges resulted in net income of €0.0 million (previous year: €0.0 million).

The effectiveness of any designated hedges is determined prospectively using the critical terms match method in accordance with IFRS 9.

Under this effectiveness test method for hedging relationships, some important parameters (the "critical terms") are reviewed in order to check the matching of hedged items to hedging instruments. Where there is a match, an economic hedging relationship exists between the hedged item and the hedging transaction; therefore the hedging relationship is deemed effective. Ineffectiveness may occur due to an unexpected discontinuation of the hedged items, a mismatch in timing between the hedged item and hedging transaction, or a default by the counterparty.

Qualitative effectiveness tests are performed retrospectively using the dollar offset method using hypothetical derivates for the hedged items.

The table below shows the nominal amounts, the carrying amounts as of December 31, 2021 and the gains and losses from designated foreign currency derivatives in fiscal year 2021. The nominal amount is the functional currency equivalent of the foreign currency amounts bought or sold with external counterparties. SGL Carbon did not hold any currency forwards as of December 31, 2020.

	Nominal amounts			Carrying amounts				
€m	Purchase Dec. 31, 21	Sale Dec. 31, 21	Total Dec. 31, 21	Total Dec. 31, 21	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	Disclosure of the reclassified amount in profit and loss
Forward contracts	9.0	153.2	162.2	0.3	other receivables / other liabilities	−0.2	0.0	Sales revenues/cost of sales
Thereof:								
USD		126.1	126.1	0.5				
CNY		27.1	27.1	−0.2				
PLN	9.0		9.0					
Other								

The table below is a reconciliation of the accumulated other comprehensive income from cash flow hedges:

€m	Cash flow hedge	Cash flow hedge
	2021	2020
Balance as of January 1,	**0.0**	**0.0**
Changes of the year recognized in equity	−0.2	0.0
Reclassifications from equity to profit and loss because the transaction originally hedged occured	0.0	0.0
Balance as of December 31,	**−0.2**	**0.0**

In fiscal year 2021, hedging gains totaling €10.5 million (previous year: €18.9 million) were recognized in other comprehensive income (currency translation reserve) for the hedging of net investments in foreign operations. No gains/losses were reclassified from the currency translation reserve to profit or loss in the year under review or in the previous year.

IFRS 7 requires sensitivity analyses to be performed 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 its operating activities. Specifically, these include cash and cash equivalents of €15.0 million (previous year: €18.3 million), trade receivables of €58.6 million (previous year: €27.9 million) and trade payables of €39.9 million (previous year: €46.3 million). Foreign currency effects from internal lending activities, whether recognized in profit or loss or directly in equity, are also included. It is assumed that the portfolio 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 relevant SGL subsidiary are therefore generally considered to be exposed to currency risk. Changes in exchanges rate result in changes in fair value and impact either net profit or the hedging reserve, as well as SGL Carbon's total equity.

The following table provides a comparison between the amounts reported as of December 31, 2021 and December 31, 2020. The analysis is based on a hypothetical 10% increase in the value of the euro or the US dollar against all other currencies on the balance sheet date.

EUR	Hypothetical exchange rate		Change in fair value/equity		Thereof: change in net profit/loss		Thereof: change in hedging reserve	
€m	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20
USD	1.2459	1.3498	−12.5	−11.5	−2.6	0.1	−9.9	−11.6
PLN	5.0593	5.0763	−0.1	−0.6	−0.1	0.0	0.0	−0.6
GBP	0.9243	0.9889	−2.3	−1.2	−0.4	1.1	−1.9	−2.3
JPN	143.4180	139.1390	−0.9	−0.6	−0.9	−0.6	0.0	0.0
Other	-	-	−0.6	−0.2	−0.4	−0.2	−0.2	0.0

USD	Hypothetical exchange rate		Change in fair value/equity		Thereof: change in net profit/loss		Thereof: change in hedging reserve	
US$m	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20	Dec. 31, 21	Dec. 31, 20
EUR	0.9712	0.8964	14.0	14.2	2.5	0.0	11.5	14.2
CNY	7.0119	7.1938	−0.1	−0.7	−0.1	−0.7	0.0	0.0
JPN	126.6272	113.3885	0.3	0.4	0.3	0.4	0.0	0.0
Other	-	-	0.2	0.0	0.2	0.0	0.0	0.0

The approximate effect on SGL Carbon's equity, net profit and hedging reserve of a hypothetical 10% devaluation of the US dollar against all other currencies 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.

No interest rate risk existed as a result of variable-interest financing instruments as of December 31, 2021 or 2020. As of the balance sheet date, SGL Carbon had financial liabilities with a principal amount of €427.2 million (previous year: €428.3 million). These all bear interest at a fixed rate and are therefore not subject to interest rate risk.

Cash and cash equivalents totaled €220.9 million (previous year: €141.8 million). An increase in interest rates of 100 basis points would lead to a theoretical increase of €2.2 million in income from cash and cash equivalents (previous year: €1.4 million).

28.Segment reporting

Segment reporting corresponds to the internal organizational and reporting structure. At the beginning of 2021, SGL Carbon revised its organizational structure, streamlining management structures and strengthening the operational role of the business units. Since then, the Company has been managed by the four business units, which are also the reporting segments. The former Graphite Materials & Systems reporting segment (GMS) was separated into Graphite Solutions (GS) and Process Technology (PT). The former Composites – Fibers & Materials reporting segment (CFM) was divided into the Carbon Fibers (CF) and Composite Solutions (CS).

Based on established specialty graphites, the new GS (Graphite Solutions) business unit supplies customer-specific solutions for traditional and structurally growing customer industries from 14 plants in Europe, America and Asia. Tailor-made solutions are offered based on a differentiated product portfolio. The main growth drivers are the semiconductor and LED market and the fuel cell components business. The new PT (Process Technology) business unit focuses on the construction and repair of plant and equipment for the chemicals industry. The focus here is on the design and manufacture of graphite heat exchangers and syntheses that are exposed to corrosive media.

The new CF (Carbon Fibers) business unit pools the manufacturing activities for carbon fibers and carbon fiber semi-finished products. The business unit includes the carbon fiber plants in Moses Lake (US) and Muir of Ord (UK) and the plant in Lavradio (Portugal), which manufactures precursors for carbon fibers and textile fibers. The focus of the business unit is on the comparatively large-volume production of carbon fibers, especially for the wind and automotive industries. The business unit controls the entire value chain, starting with the polymerization of the main raw material, acrylonitrile, through the production of carbon fibers to the manufacture of fabrics. Brembo SGL, an equity-accounted joint venture for the production of carbon-ceramic brake discs, is linked to CF both via the supply chain and in terms of technology and is therefore also assigned to this business unit. The focus of the new CS (Composite Solutions) business unit is the production of customer-specific components and tailor-made applications made of composite materials based on glass and carbon fibers. The business unit includes, in particular, the production of automotive industry components at two locations in Austria, as well as two locations in the US which manufacture components and special solutions for the aerospace and automotive industries in particular.

The reporting segments presented below are derived directly from the new business units. In addition to the four operational reporting segments, there is a fifth reporting segment, Corporate, which comprises head office functions. Prior year figures have been adjusted for reasons of comparability.

Since the beginning of 2021, EBITDA adjusted for one-off effects and non-recurring items ("EBITDA pre") has been used as the central operating KPI for the business units. EBITDA pre is EBIT before depreciation, amortization, and reversals of impairment losses on property, plant and equipment and intangible assets, excluding one-off effects and non-recurring items. One-off effects and non-recurring items can include gains or losses on the sale of land and buildings, restructuring expenses, insurance compensations and other items that are not directly related to the operating performance of the segments.

External sales revenue relates almost exclusively to revenue from the supply of products. Trading or other sales revenue is only generated to a small extent. Intersegment transfer prices are set at standard market conditions. The functions of the "Corporate" business unit include providing services to the other segments.

Capital expenditure and depreciation and amortization relate to intangible assets (excluding goodwill) and property, plant and equipment. The consolidation adjustments relate to the elimination of intersegment sales of products and services.

Selected information on the segments of SGL Carbon is provided below:

€m	Graphite Solutions	Process Technology	Carbon Fibers	Composite Solutions	Corporate	Consoli-dation	SGL Carbon
2021							
External sales revenue	443.6	87.2	337.2	122.5	16.5		1,007.0
Intersegment sales revenue	5.3	1.4	9.2	0.8	34.9	–51.6	0.0
Total sales revenue	**448.9**	**88.6**	**346.4**	**123.3**	**51.4**	**–51.6**	**1,007.0**
Timing of revenue recognition							
Products transferred at point in time	450.5	87.5	335.1	124.0	16.5	0.0	1,013.6
Products and services transferred over time	–6.9	–0.3	2.1	–1.5	0.0	0.0	–6.6
Total sales revenue	**443.6**	**87.2**	**337.2**	**122.5**	**16.5**	**0.0**	**1,007.0**
Sales revenue by customer industry							
Mobility	54.4		139.9	112.4	9.3	0.0	316.0
Energy	96.0		74.6			0.0	170.6
Industrial Applications	143.0		51.4	10.1	7.2	0.0	211.7
Chemicals	25.3	87.2				0.0	112.5
Digitization	124.9					0.0	124.9
Textile Fibers			71.3			0.0	71.3
Total sales revenue	**443.6**	**87.2**	**337.2**	**122.5**	**16.5**	**0.0**	**1,007.0**
EBITDA pre	87.9	4.7	54.5	12.1	–19.2	0.0	140.0
Amortization/depreciation on intangible assets and property, plant and equipment	29.1	1.9	15.6	7.3	6.4	0.0	60.3
EBIT pre	58.8	2.8	38.9	4.8	–25.6		79.7
One-off effects/Non-recurring items	9.9	0.3	–8.0	0.0	28.5	0.0	30.7
EBIT	68.7	3.1	30.9	4.8	2.9	0.0	110.4
Capital expenditure [1]	31.5	0.4	7.7	8.2	2.2	0.0	50.0
Working capital (Dec. 31) [2]	197.7	26.5	115.1	34.4	–32.5	0.0	341.2
Capital employed (Dec. 31) [3]	461.6	38.3	332.8	100.3	63.6	0.0	996.6
Cash generation [4]	61.8	7.3	46.5	5.2	–20.3	0.0	100.5
Result from investments accounted for At-Equity			17.0			0.0	17.0
Sales of investments accounted for At-Equity [5]			282.3			0.0	282.3

€m	Graphite Solutions	Process Technology	Carbon Fibers	Composite Solutions	Corporate	Consolidation	SGL Carbon
2020							
External sales revenue	407.5	88.2	303.9	88.6	31.2	0.0	919.4
Intersegment sales revenue	4.3	2.2	6.4	0.4	37.3	–50.6	0.0
Total sales revenue	**411.8**	**90.4**	**310.3**	**89.0**	**68.5**	**–50.6**	**919.4**
Timing of revenue recognition							
Products transferred at point in time	428.7	81.5	304.0	85.2	31.2	0.0	930.6
Products and services transferred over time	–21.2	6.7	–0.1	3.4		0.0	–11.2
Total sales revenue	**407.5**	**88.2**	**303.9**	**88.6**	**31.2**	**0.0**	**919.4**
Sales revenue by customer industry							
Mobility	51.8		122.1	78.5	9.0	0.0	261.4
Energy	92.7		79.4			0.0	172.1
Industrial Applications	145.1		44.1	10.1	22.2	0.0	221.5
Chemicals	23.8	88.2				0.0	112.0
Digitization	94.1					0.0	94.1
Textile Fibers			58.3			0.0	58.3
Total sales revenue	**407.5**	**88.2**	**303.9**	**88.6**	**31.2**	**0.0**	**919.4**
EBITDA pre	63.1	3.4	41.4	–4.7	–10.4	0.0	92.8
Amortization/depreciation on intangible assets and property, plant and equipment	32.5	2.2	23.8	6.2	8.6	0.0	73.3
EBIT pre	30.6	1.2	17.6	–10.9	–19.0	0.0	19.5
One-off effects/Non-recurring items	4.6	–2.5	–118.5	1.6	1.6	0.0	–113.2
EBIT	35.2	–1.3	–100.9	–9.3	–17.4	0.0	–93.7
Capital expenditure [1]	32.5	0.4	8.4	7.2	7.3	0.0	55.8
Working capital (Dec. 31) [2]	203.2	29.5	114.8	35.8	–31.5	0.0	351.8
Capital employed (Dec. 31) [3]	454.0	41.8	332.5	95.8	75.6	0.0	999.7
Cash generation [4]	66.1	4.5	40.4	–12.7	–6.1	0.0	92.2
Result from investments accounted for At-Equity			11.5			0.0	11.5
Sales of investments accounted for At-Equity [5]			216.3		0.0	0.0	216.3

[1] Defined as total of capital expenditure in other intangible assets and property, plant and equipment
[2] Defined as sum of inventories and trade receivables and contract asset less trade payables and contract liabilities
[3] Defined as the sum of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital
[4] Defined at total of EBITDA pre plus change in working capital minus capital expenditure
[5] Aggregated, non-consolidated 100% values with third parties

One-off effects/non-recurring items comprise income from the restructuring of pension obligations amounting to €18.1 million (2020: €0.0 million), income from the sale of land and buildings of €19.7 million (2020: €7.9 million), insurance compensations of €3.0 million (2020: €4.6 million), and release of jubilee provisions of €2.8 million (2020: €0.0 million), write off of machine spare parts of €2.3 million (2020: €0.0 million), carryforward of the purchase price allocations of the SGL Composites companies of minus €10.2 million (2020: minus 10.2 million), restructuring expenses of €0.2 million (2020: minus €27.2 million), other material one-off effects of minus €0.6 million (2020: €18.2 million) and, additionally in 2020, impairment losses of minus €106.5 million.

Sales revenue with one customer of the CF reporting segment accounted for approximately €114 million of the Group's total sales revenues (2020: €100 million).

The following table presents selected items by geographic region:

€m	Germany	Europe excluding Germany	USA	China	Rest of Asia	Other[2]	SGL Carbon
2021							
Sales revenue (by destination)	308.3	193.0	156.8	165.5	133.5	49.9	1,007.0
Sales revenue (by company headquarters)	417.2	286.9	231.8	55.4	15.7		1,007.0
Capital expenditure	17.3	18.5	9.2	5.0			50.0
Non-current assets[1]	230.0	175.0	184.5	25.0	7.2		621.7
2020							
Sales revenue (by destination)	285.6	184.9	139.5	104.0	168.2	37.2	919.4
Sales revenue (by company headquarters)	401.1	236.5	213.8	47.5	20.5		919.4
Capital expenditure	33.0	12.7	8.0	2.1			55.8
Non-current assets[1]	249.2	171.4	178.6	20.4	7.9		627.5

[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)
[2] In particular Middle-/South America, Canada and Africa

29. Management and employee participation programs

SGL Carbon currently has three management and employee participation programs, comprising two active plans (Short-Term Incentive Plan and Long-Term Incentive Plan) and the Stock Appreciation Rights Plan, which is being phased out.

Short-Term Incentive Plan ("STI")

All tariff and non-tariff employees, as well as employees classified in one of the four internal SGL management groups (MG1-MG4), receive an annual bonus based on the achievement of short-term corporate and business unit targets. The reference value is the amount of the individual's fixed remuneration.

The aim is to incentivize all managers on the basis of the Company's short-term success, thereby giving individuals a strong incentive to contribute to the positive development of the business.

The maximum potential bonus a manager can achieve is based on targets for SGL Carbon as a whole and for the manager's business unit. The targets are based on EBITDA pre and accident frequency at Group level, and EBITDA pre at business unit level.

The bonus will be paid in March or April in the year after it is earned. The amount of the STI for the top three management levels is within a defined corridor (expressed as a percentage of basic salary) and reflect an appropriate contribution to the Company's success.

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. In order for a claim to a bonus to arise, the "threshold" (0%) must be exceeded. In addition, a "stretch" (200%) is set for the financial targets in order to reward outperformance.

A further critical review was performed in 2021 of the incentive approach for senior management. To align short-term incentives more closely with the Company's operational success, payment of the STI for managers in management groups MG1-MG3 will in future be contingent on positive free cash flow and positive net profit (after payment of the bonus). Personal targets will also be taken into account in the STI, so that incentivization more closely reflects personal performance. The structure of the targets has been adjusted by redefining and reweighting the underlying target categories and targets. The maximum achievable STI for MG1-MG3 will be reduced from 200% to 175% from fiscal year 2022.

As part of the global transformation program, the collectively agreed bonus program was reviewed and the corresponding general works agreement was terminated by the employer as of December 31, 2021. Employees at the German sites will cease to be entitled to a bonus after 2021. The bonus for 2021 will be paid out in spring 2022, depending on the business results. From January 1, 2022, employees covered by collective agreements will no longer be entitled to the bonus.

Long-Term Incentive Plan ("LTI")

The Long-Term Incentive Plan for senior management, i.e. the members of management groups MG1-MG3 ("SGL Performance Share Plan" or "PSP"), is the basis for a uniform scheme with a long-term incentive effect and a balanced risk/reward profile, under which remuneration is granted in the form of virtual shares ("Performance Share Units" or "PSUs"). As of April 2021, senior managers who are promoted to MG3 or join the company from outside no longer participate in the Long-Term Incentive Plan.

The internal assessment basis for the long-term remuneration component is in principle SGL Carbon's return on capital employed (ROCE). Prior to the start of individual PSP plan tranches, the Board of Management of SGL Carbon SE may decide to use the ROCE for individual SGL Carbon business units or one or more other performance indicators as the basis for the tranche in question, either in place of or in addition to Group ROCE. The long-term remuneration component also depends on the performance of the SGL Carbon SE share price at the end of the performance period.

The PSP is a cash-settled long-term incentive plan. It does not grant a right to receive actual SGL Carbon SE shares and payouts depend on the degree of target achievement. The objective of granting PSUs is to retain senior management (MG1-MG3) and to motivate them to ensure SGL Carbon's long-term success. In addition, the share price feature is intended to align the interests of senior management (MG1-MG3) with the interests of shareholders in SGL Carbon's long-term value growth.

Based on an allocation value in euros to be determined by the Board of Management of SGL Carbon SE 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 is then recalculated after the end of the performance period based on the actual degree of target achievement (the result of this performance-based 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.

As part of the revision of management incentives (MG1-MG3), the potential payout for upcoming LTI plan tranches will be reduced from 200% to 120%. The existing plan tranches, including the relevant targets, are presented below as of December 31, 2021:

Tranche	Allocation value[1]	Price[2]	PSU[3]	Performance	Fair value[4]
	€m	€	Number	0% - 150%	€m
LTI 2018-2021	4.6	11.34	350,728	8	0.2
LTI 2019-2022	4.8	7.17	550,058	0	0.0
LTI 2020-2023	4.7	4.62	833,445	109	7.0
LTI 2021-2024	4.7	3.78	1,023,564	150	7.7

1) Corresponds to the value at grant date
2) Fair value at grant date
3) Outstanding at Dec. 31, 21
4) PSU-number weighted with the performance and the average share price of 7.73€, calculated on the basis of the last 20 trading days prior to Dec 31, 21

Target indicators ROCE	Minimum	Target	Maximum
Plan 2018-2021	4.9%	7.4%	9.4%
Plan 2019-2022	6.2%	8.7%	10.7%
Plan 2020-2023	4.0%	7.0%	9.0%
Plan 2021-2024	5.0%	7.8%	9.0%

The provisions for the existing LTI plans for the selected executives as of December 31, 2021 amounted to €6.1 million (previous year: €1.1 million). In fiscal year 2021, €5.5 million (previous year: €0.6 million) was recognized as an expense.

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 on the SAR exercise date (exercise price), plus any dividends paid by the Company during this period, plus the value of subscription rights. They also 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 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 854,160 SARs remained outstanding. The range of exercise prices is €27.84–€37.77.

In 2021, no SARs were exercised from any of the superseded long-term incentive plans. The weighted average term to maturity for the SAR plan is 1.0 years.

30. Audit fees and services provided by the auditors

The fees for audit services of KPMG AG Wirtschaftsprüfungsgesellschaft mainly related to the audit of the consolidated financial statements and parent company financial statements of SGL Carbon SE. Other assurance services in 2021 related to the audit of the separate Group non-financial report, assurance services in connection with the exemption from energy taxes and the receipt of EU subsidies as well as access to raw data for a company valuation.

€m	2021	2020
Audit fees	0.7	0.6
Other assurance services	0.1	0.1
Other services	0.0	0.0
Total	**0.8**	**0.7**

31. List of shareholdings of SGL Carbon according to Section 313 [2] of the German Commercial Code [HGB]

A.	Consolidated Companies		Interest in %	held via
a]	**Germany**			
1	SGL Carbon SE	Wiesbaden		
2	SGL CARBON GmbH [1]	Meitingen	100	1
3	SGL Fuel Cell Components GmbH	Meitingen	100	1
4	Dr. Schnabel GmbH [1]	Limburg	100	2
5	SGL CARBON Beteiligung GmbH [1]	Wiesbaden	100	1
6	SGL TECHNOLOGIES GmbH [1]	Meitingen	100	1
7	SGL epo GmbH [1]	Willich	100	6
8	SGL TECHNOLOGIES Composites Holding GmbH [1]	Meitingen	100	6
9	SGL TECHNOLOGIES Zweite Beteiligung GmbH	Meitingen	100	6
10	SGL/A&R Immobiliengesellschaft Lemwerder mbH	Lemwerder	51	6
11	SGL/A&R Services Lemwerder GmbH	Lemwerder	100	10
12	SGL/A&R Real Estate Lemwerder GmbH & Co. KG	Lemwerder	100	11
13	SGL Carbon Asset GmbH [1]	Meitingen	100	5
14	SGL Composites Materials Germany GmbH [1]	Meitingen	100	6

[1] Exemption in accordance with section 264 [3] of the German Commercial Code [HGB]

A.	Consolidated Companies		Interest in %	held via
b]	**Other countries**			
15	SGL GELTER S.A.	Madrid, Spain	64.0	2
16	SGL CARBON S.p.A. in liquidazione [i.L.]	Milan, Italy	99.8	13
17	SGL Graphite Verdello s.r.l.	Verdello, Italy	100	2
18	SGL CARBON do Brasil Ltda.	Diadema, Brazil	100	2
19	SGL Composites GmbH	Ried im Innkreis, Austria	100	8
20	SGL CARBON FIBERS LTD.	Muir of Ord, United Kingdom	100	1
21	SGL Composites S.A.	Lavradio, Portugal	100	1
22	SGL BUSINESS SERVICES, UNIPESSOAL, LDA	Lavradio, Portugal	100	2
23	SGL Carbon Holdings B.V.	Rotterdam, Netherlands	100	5
24	SGL GRAPHITE SOLUTIONS POLSKA Sp. z o.o.	Nowy Sącz, Poland	100	23
25	SGL CARBON Holding S.A.S.	Paris, France	100	1.5
26	SGL CARBON S.A.S.	Passy [Chedde], France	100	25
27	SGL CARBON Technic S.A.S.	Saint-Martin d'Heres, France	100	25
28	SGL CARBON Ltd.	Alcester, United Kingdom	100	1
29	SGL CARBON LLC	Charlotte, NC, USA	100	5
30	SGL Technologies LLC	Charlotte, NC, USA	100	29
31	SGL COMPOSITES INC.	Gardena, CA, USA	100	30
32	SGL TECHNIC LLC	Valencia, CA, USA	100	29
33	SGL CARBON TECHNIC LLC	Strongsville, OH, USA	100	29
34	SGL Composites LLC	Moses Lake, WA, USA	100	30

A.	Consolidated Companies		Interest in %	held via
b)	**Other countries**			
35	SGL CARBON INDIA Pvt. Ltd.	Maharashtra, India	100	1
36	SGL CARBON Far East Ltd.	Shanghai, China	100	1
37	SGL CARBON Japan Ltd.	Tokyo, Japan	100	1
38	SGL CARBON Korea Ltd.	Seoul, South Korea	100	1
39	SGL CARBON ASIA-PACIFIC SDN BHD	Kuala Lumpur, Malaysia	100	1
40	SGL Quanhai Carbon (Shanxi) Co. Ltd.	Yangquan, China	89.1	5
41	SGL PROCESS TECHNOLOGY PTE. LTD.	Singapore	100	1
42	SGL CARBON Graphite Technic Co. Ltd.	Shanghai, China	100	41
43	SGL Carbon Technic Japan Ltd.	Yamanashi, Japan	100	41
44	SGL Graphite Solutions Taiwan Ltd.	Taipei City, Taiwan	100	2

B.	Equity investments over 20%			
	Other countries			
45	Brembo SGL Carbon Ceramic Brakes S.p.A.	Stezzano, Italy	50.0	6
46	MCC-SGL Precursor Co. Ltd.	Tokyo, Japan	33.3	6
47	Fisigen, S.A.	Lisbon, Portugal	49.0	21

32. Declaration of conformity with the German Corporate Governance Code

The annual declaration of conformity with the German Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG) was issued by the Board of Management and Supervisory Board of SGL Carbon SE on November 25, 2021 and has been published on the SGL Carbon SE website.

33. Subsequent events

On February 24, 2022, Russia commenced a large-scale invasion against Ukraine. In response, the EU, the U.S, and other countries have moved to impose broad-based sanctions targeting Russia. For further information, please refer to the Opportunities and Risks Report and the Outlook, which form part of the Group Management Report.

Wiesbaden, March 23, 2022

SGL Carbon SE

The Board of Management of SGL Carbon SE

Dr. Torsten Derr   Thomas Dippold

Additional Information

Independent Auditor's Report

Note: This is a translation of the German original. Solely the original text in German language is authoritative.

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 2021, and the consolidated statement of income, the consolidated statement of other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January 2021 to 31 December 2021, 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 inclusive of the remuneration report contained in Section "Remuneration Report" of the management report, including the related disclosures for the financial year from 1 January 2021 to 31 December 2021. In accordance with German legal requirements, we have not audited the content of those components of the management report specified in the "Other Information" section of our auditor's report.

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.

The group management report contains cross references marked as unaudited which are not required by law. In accordance with German legal requirements we have not audited the cross references and the information the cross references refer to.

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 2021, and of its financial performance for the financial year from 1 January 2021 to 31 December 2021, 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. The group management report contains cross references marked as unaudited which are not required by law. Our opinion on the group management report does not cover the cross references and the information the cross references referred to.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German

Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January 2021 to 31 January 2021. 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 goodwill Graphite Specialties

With respect to the accounting policies applied, we refer to Note 2 in the notes to the consolidated financial statements. The financial performance of the business units is described in the section "Financial performance of the reporting segments" 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

As at 31 December 2021, goodwill of Graphite Specialties totaled EUR 20.2 million thereby comprising 5.4% of the Group's equity and having a significant impact on the net asset.

Goodwill is tested for impairment annually at the level of the cash generating unit Graphite Specialties. If any impairment triggers are identified throughout the year, an event driven impairment test is carried out. The carrying amount is thereby compared with the recoverable amount of the respective cash generating unit. If the carrying amount exceeds the recoverable amount, an impairment is recorded. The recoverable amount is the higher of the fair value less the costs to sell and value in use of the cash generating unit. The impairment test was carried out as at 1 October 2021.

The goodwill impairment test is complex and is based on a number of judgmental assumptions. These include, among others, the expected business and earnings development for the upcoming five years, the assumed long-term growth rates and the discount rate used. As a result of the goodwill impairment test the entity has not identified an impairment. However, the Company's sensitivity analysis showed that a reasonably possible combined change in the discount rate and the long-term growth rate would cause a reduction to the recoverable amount.

There is a risk relating to the group financial statements, that the impairment charge was not recorded appropriately at period end. In addition, there is the risk that the disclosures in the notes associated herewith are not appropriate.

OUR AUDIT APPROACH

At first, we have obtained an understanding of the process of the entity for determining the recoverable amount of goodwill 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. In order to assess the methodologically and mathematically appropriate implementation of the valuation method, we have traced the valuation carried out by the company on the basis of our own calculations and analysed deviations.

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. 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.

To reflect the existing uncertainty with respect to forecasts as well as the earlier valuation date for the impairment test, we have assessed reasonably possible changes of the discount rate, the expected earnings, the long-term growth rate, respectively, on the recoverable amount (sensitivity analysis) by calculating alternative scenarios and comparing these with the Company's valuation results. Additionally, we have reconciled the book value of the cash generating unit and assessed the appropriateness of the allocation of corporate assets as well as the allocation of impairment charge to the respective assets.

Finally, we assessed whether the disclosures in the notes with respect to the recoverability of the carrying amount of the goodwill are appropriate. This also included an assessment as to the appropriateness of the disclosures in the notes pursuant to IAS 36.134(f) with respect to sensitivities resulting from reasonably possible changes of key assumptions underlying the valuation.

OUR OBSERVATIONS

The underlying valuation model used in the impairment test of goodwill is appropriate and consistent with the applicable accounting principles.

The Company's assumptions and parameters underlying the valuation are appropriate. The disclosures in the notes associated herewith are appropriate.

Introduction of a capital option for pension obligations in Germany

With respect to the accounting policies applied and assumptions made, we refer to Notes 2 and 22 in the notes to the consolidated financial statements.

THE FINANCIAL STATEMENT RISK

In the financial year 2021 management has decided to introduce a capital option for certain pension obligations in Germany. Active and previous employees with vested benefits now have been granted the possibility to select a capital payment, if requested in rates, rather than monthly pension payments. On level of SGL Group the introduction of the capital option results in a reduction of pension obligations in the amount of EUR 17.7 million recognized in profit and loss. The valuation of the obligations resulting from the capital option is based on judgmental assumptions regarding the estimated likelihood of future exercise of the capital option at start of the pension rights. Management has engaged an external expert to determine, based on a market study, the likelihood of exercise of the capital option. From this market study management has derived the likelihood which has been used for the valuation of pension obligations.

There is a risk relating to the group financial statements, that the estimate is not appropriate and thus the valuation of pension obligations is erroneous. In addition, there is the risk that the disclosures in the notes associated herewith are not appropriate.

OUR AUDIT APPROACH

Together with our actuarial specialists we have assessed management's assumption regarding the likelihood of the exercise of the capital option. We have assessed the competence, abilities and objectivities of management's expert and assessed the market study prepared by them.

Through inspection of the cases included in the market study we have assessed whether these are appropriate as basis for estimating the likelihood. Further, we have assessed whether the likelihood derived from the market study is appropriate.

Finally, we assessed whether the disclosures in the notes regarding the impact of the introduction of the capital option are appropriate.

OUR OBSERVATIONS

The likelihood of exercise of the capital option included in the valuation of pension obligations is appropriate. The disclosures in the notes associated herewith are appropriate.

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 group non-financial statement, which is referenced in the group management report and
- the group corporate governance statement, included in section „Corporate Governance Declaration, Corporate Governance and Compliance Report" of the group management report,
- 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 information audited for content 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 above-mentioned 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.

Furthermore, the management and the Supervisory Board are responsible for the preparation of the remuneration report contained in a separate section of the management report, including the related disclosures, in accordance with the requirements of Section 162 AktG. They are also responsible for such internal control as they have determined necessary to enable the preparation of the remuneration report that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (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

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Group Management Report Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We have performed assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the electronic file „SGL_Carbon_ESEF_Package.zip" (SHA256-Hash: 1045f8ea0e79951d93edb92fcc73e0e2d84eb0c7271af05c1ba6ef1888caf95e) / made available and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the electronic file made available, identified above and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from1 January 2021 to 31 December 2021 contained in the "Report on the Audit of the Consolidated Financial Statements and the Group Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the file made available and identified above in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (10.2021)). Our responsibility in accordance therewith is further described below. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's management is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the company's management is responsible for such internal control that they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The supervisory board is responsible for overseeing the process of preparing the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgement and maintain professional scepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.

- Evaluate the technical validity of the ESEF documents, i.e. whether the file made available containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815, as amended as at the reporting date, on the technical specification for this electronic file.

- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and the audited group management report.

- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, as amended as at the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 21 May 2021. We were engaged by the supervisory board on 24 November 2021. 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).

Other matter – Use of the Auditor's Report

Our auditor´s report must always be read together with the audited consolidated financial statements and the audited group management report as well as the examined ESEF documents. The consolidated financial statements and group management report converted to the ESEF format – including the versions to be published in the German Federal Gazette [Bundesanzeiger] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the examined ESEF documents made available in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dirk Janz.

Frankfurt / Main, 23 March 2022

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 23, 2022

SGL Carbon SE
The Board of Management of SGL Carbon

Dr. Torsten Derr Thomas Dippold

Corporate Bodies

Board of Management

(Status: December 31, 2021)

Dr. Torsten Derr

Chairman/Chief Executive Officer of SGL Carbon SE

Responsible for:

Human Resources & Management Development
Legal, Compliance & Internal Audit
Corporate Development / Strategy / Transformation Process
Corporate Communications
Sustainability & ESG
Purchasing
Production Technology Safety Environment (PTSE)
Global Engineering & Construction
BU Graphite Solutions
BU Composite Solutions
BU Carbon Fibers
BU Process Technology

Internal board memberships:
Brembo SGL Carbon Ceramic Brakes S.p. A., Stezzano, Italy [1]

Thomas Dippold

Chief Financial Officer of SGL Carbon SE

Responsible for:

Group Accounting
Group Controlling
Group Treasury
Financial Reporting
Group Taxes
Risk Management
Legal, Compliance, and Internal Audit
Investor Relations
Information Technology, Information Security & Digitization

BU Graphite Solutions
BU Composite Solutions
BU Carbon Fibers
BU Process Technology

Internal board memberships:
SGL CARBON LLC, Charlotte, USA
SGL Process Technology Pte. Ltd, Singapore (since June 8, 2021)

[1] Shareholder Committee
With memberships outside Germany, the respective country is mentioned

Supervisory Board

(Status: December 31, 2021)

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]
SprinD GmbH, Leipzig

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:
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

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

Associated companies
Associated companies are entities in which significant influence can be exercised over their operating and financial policies and which are not subsidiaries, joint ventures or joint operations. In general, this applies to companies in which SGL has an investment of between 20% and 50%.

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 less dividends.

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 effective part of 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.

Capital expenditures (capex)
Capex is defined as additions to other intangible assets and property, plant and equipment excluding additions from acquisitions and right-of-use assets arising from leases.

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.

CSR (Corporate Social Responsibility)
Refers to the social responsibility of companies for the impact of their activities on society and the environment and measures derived from this. Also known as sustainability concerns, which are explained in detail in the CSR Report.

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.

EBIT-margin
EBIT pre to sales revenue, also known as return on sales.

EBIT pre (adjusted)
EBIT adjusted for non-recurring items and one-time effects. Unlike EBIT, this indicator eliminates non-recurring items to establish a better baseline for forecasts. Non-recurring items mainly include restructuring costs and effects from purchase price allocation. Examples of one-off effects are land sales, insurance compensation, reversal of certain provisions.

EBITDA pre (adjusted)
Earnings before interest, taxes, depreciation and amortization. In the case of EBITDA, the focus is rather more on cash earnings potential. Unlike EBITDA, this indicator eliminates non-recurring items to establish a better baseline for forecasts. Non-recurring items mainly include restructuring costs and effects from purchase price allocation. Examples of one-off effects are land sales, insurance compensation, reversal of certain provisions.

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.

EURIBOR
Euro InterBank Offered Rate (EURIBOR) is an interest rate at which euro interbank term deposits are offered

ESG
Sustainability aspects based on environmental concerns (environmental, social and governance concerns).

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.

Global Reporting Initiative (GRI)
An initiative that publishes the GRI Standards. These contain specifications and indicators for sustainability reporting. The GRI Standards are internationally established as a framework for voluntary sustainability reporting.

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.

Leverage Ratio
Net financial debt to EBITDA. Key figure that compares debt to operating earnings before interest, taxes, depreciation and amortization. Due to the cash earnings potential of EBITDA, this key figure is often used by banks for granting loans.

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.

Net Financial Debt
Interest-bearing loans (nominal) less cash and cash equivalents less time deposits.

Non-recurring items and one-off effects
Non-recurring items mainly include restructuring costs and effects from the purchase price allocation. In contrast to non-recurring items, one-off effects include, among other things, the sale of real estate, insurance compensation and the reversal of certain provisions.

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.

UN Global Compact
World's largest initiative for responsible corporate governance. Member companies commit to implementing ten universal principles and regularly documenting their progress. These include human rights, labor standards, the environment and corruption prevention.

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).

Fuel cell
A fuel cell is an electrochemical cell that convert chemical energy of a continuously supplied fuel (e.g. hydrogen, methanol) and an oxidizing agent (e.g. oxygen) into electrical energy. Gas diffusion layers (GDL), which ensure homogenous gas distribution on the electrode, are an important component of a fuel cell. This component often consists of a special paper that is based on short-cut carbon fibers.

GHG Protocol
The GHG Protocol distinguishes greenhouse gas emissions into three categories according to their origin:
Scope 1 includes all emissions that result from energy consumption directly within the company, such as the consumption of natural gas or heating oil.
Scope 2 covers all indirect emissions resulting from the generation of energy that the company purchases from external sources, such as electricity and district heating.
Scope 3 applies to all other emissions that arise in the course of corporate value creation. This includes both indirect emissions within the company itself (e.g., from business travel, commuting) and emissions from upstream value creation (e.g., purchasing, logistics) as well as emissions from the downstream value chain (e.g., at the customer).

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. The anode material often consists of synthetic graphite (GAM: graphite anode material).

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 and is used as one of the raw materials for the production of synthetic graphite.

REACH (regulation for chemicals)
REACH stands for Registration, Evaluation, Authorization and Restriction of Chemicals.

Wide-bandgap semiconductor
Materials whose band gap 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 (Aktiengesetz)

C CFRP
Carbon Fiber Reinforced Plastic

D DAX
German Stock Index (large caps)

E EBIT
Earnings before Interest and Taxes

EBITDA
Earnings before Interest, Taxes, Depreciation and Amortization

EHSA
Environment, Health & Safety Affairs

EPS
Earnings per Share

H HGB
German Commercial Code

I IAS
International Accounting Standards

IASB
International Accounting Standards Board

IFRIC
International Financial Reporting Interpretations Committee

IFRS
International Financial Reporting Standards

IT
Information technology

L LTCI
Long Term Cash Incentive

LTI
Long Term Incentive

M MDAX
MidCap DAX

R REACH
Registration, Evaluation, Authorization and Restriction of Chemicals

ROCE
Return on Capital Employed

S SAR
Stock Appreciation Rights

SDAX
SmallCap DAX

V VorstAG
Act on Appropriateness of Management Board Remuneration

W WpHG
German Securities Trading Act

Financial Calendar

March 24, 2022

- Publication of the 2021 Annual Report
- Year-end press conference (conference call)
- Conference call for analysts and investors

May 5, 2022

- Report on the first quarter 2022
- Conference call for analysts and investors

May 17, 2022

- Annual General Meeting (virtual)

August 4, 2022

- Report on the first half of 2022
- Conference call for analysts and investors

November 3, 2022

- Report on the first nine months 2022
- Conference call for analysts and investors

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Five-year Financial Summary

€m	Footnote	2021	2020	2019	2018	2017
Financial performance						
Sales revenue		1,007.0	919.4	1,086.7	1,047.5	860.1
thereof outside Germany		69%	69%	69%	66%	74%
thereof in Germany		31%	31%	31%	34%	26%
EBITDA pre	1)	140.0	92.8	120.0	127.2	90.7
Operating profit/loss (EBIT)		110.4	−93.7	−34.3	80.9	49.0
Result from continuing operations before income taxes		82.1	−123.1	−73.2	51.3	−7.8
Consolidated net result (attributable to the shareholders of the parent company)		75.4	−132.2	−90.0	41.3	138.9
EBITDA pre margin	2)	13.9%	10.1%	11.0%	12.1%	10.5%
Return on capital employed (ROCE $_{\text{EBIT pre}}$)	3)	8.0%	1.8%	3.9%	5.4%	4.6%
Earnings per share, basic (in €)		0.62	−1.08	−0.74	0.34	1.14
Net assets						
Equity attributable to the shareholders of the parent company		371.5	220.7	418.6	531.6	457.0
Total assets		1,376.3	1,258.8	1,504.8	1,585.1	1,541.7
Net financial debt		206.3	286.5	288.5	242.2	139
Equity ratio	4)	27.0%	17.5%	27.8%	33.5%	29.6%
Leverage Ratio	5)	1.5	3.1	2.4	1.9	1.5
Headcount	6)	4,680	4,837	5,127	5,031	4,732
Financial position						
Payments to purchase intangible assets and property, plant and equipment		50.0	55.8	95.1	78.1	52.9
Depreciation/amortization expense		60.3	73.3	71.6	62.6	50.6
Working capital		341.2	351.8	406.8	419.1	318.5
Free cash flow	7) 8)	111.5	93.9	−17.3	−58.5	−144.7

1) Before one-off effects/non-recurring items of €30.7 million in 2021, minus €113.2 million in 2020, minus €82.7 million in 2019, €16.3 million in 2018 and €8.9 million in 2017
2) EBITDA pre to sales revenue
3) EBIT pre to average capital employed (total of goodwill, other intangible assets, property, plant and equipment, investments accounted for At-Equity and working capital)
4) Equity attributable to the shareholders of the parent company to total assets
5) Net debt to EBITDA pre
6) Including employees with fixed-term contracts
7) Cash flow from operating activities (continued operations) minus cash flow from investing activities (continued operations)
8) Until 2019 interest payments are inculuded in Free cash flow

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