

ANNUAL REPORT













2022

Thin-Film Coating and Surface Treatment

Table of Content Annual Report 2022

- » Report of the Supervisory Board
- » Report of the Executive Board
- » Compensation Report
- » Combined Status Report of the SINGULUS TECHNOLOGIES Group and the SINGULUS TECHNOLOGIES AG as well as Corporate Governance Report
- » Consolidated Financial Statements of the SINGULUS TECHNOLOGIES AG
- » Independent Auditor's Report
- » Individual Financial Statements

REPORT OF THE SUPERVISORY BOARD

To the shareholders of the SINGULUS TECHNOLOGIES AG

Dear Shareholders,

In this report, we mainly explain the events of fiscal year 2022 and provide an outlook for the current fiscal year 2023.

As the audit of the annual financial statements for fiscal years 2020 and 2021 by the responsible auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, Frankfurt, was not completed until April 6, 2023, the adoption of the annual financial statements by the Supervisory Board could not take place until April 11, 2023. Only after the audited financial statements for fiscal years 2020 and 2021 had been submitted could the new auditor for fiscal year 2022 be appointed by the court. By court order dated May 16, 2023, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf ("BakerTilly") was appointed as the new auditor for the financial year 2022.

The new auditor began its audit work in May and has quickly familiarized itself with the Company's concerns. Therefore, the certificate could be issued on October 29, 2023. Following that, the Supervisory adopted the financial statements for 2022 on October 30, 2023. Subsequently, the Annual General Meeting for fiscal year 2022 was convened without delay. Nevertheless, this Annual General Meeting is late, as the issuance of the previous attestations for fiscal years 2020 and 2021 had not been granted until April 11, 2023. We have reported in detail on the reasons in the last report of the Supervisory Board for the business year 2021 and during the Annual General Meeting on July 19, 2023.

Operationally, there have been improvements in fiscal 2022. Sales in the business year 2022 increased by more than 27 % compared with the prior year 2021. The operating result before interest and taxes (EBIT) is positive and amounts to € 5.9 million. The cooperation with the Chinese China National Building Materials Group, Beijing, (CNBM), which through its subsidiary Triumph Science and Technology Group Co. Ltd., Beijing (Triumph), is the largest shareholders in our Company, is still stable. Additional agreements were concluded with CNBM for the delivery of new production machines for the manufacturing of thin-film solar modules on the basis of CIGS and CdTe

technologies. In addition to these new agreements and contracts for production machines in the Solar division, in particular the business situation in the segment Life Science improved. In the case of production equipment for medical technology, we are working on the further development of machine and process technology with one of our main customers and a leading producer of contact lenses. Our coating machines POLYCOATER and DECOLINE II for the finishing of decorative products are continuing to establish themselves in Europe and the US. In the meantime, the coating machine POLYCOATER was also delivered to Korea several times.

The Executive Board and Supervisory Board are pursuing the goal of increasing the share of the business for Semiconductors, Decorative Coatings and Medical Technology and placing the Company on a broader basis by opening up new applications for its own proprietary coating technology. The cooperation with the Robert Bosch GmbH, Stuttgart, in its Manufacturing Solutions division in the area of hydrogen technology is an excellent example for this.

The SINGULUS TECHNOLOGIES AG has the potential to successfully generate new projects in these market segments.

For further details regarding the Company's development please refer to the Status Report 2022, which is presented in the Annual Report 2022 on pages 47 to 134 in detail.

ACTIVITIES OF THE SUPERVISORY BOARD IN THE BUSINESS YEAR 2022

In the past fiscal year 2022, the Supervisory Board performed all its duties in accordance with the statutory provisions, the Articles of Association, and the bylaws. In this function, the Supervisory Board assisted the Executive Board in an advisory capacity on the management of the Company and on all significant business matters. In this context, the Board diligently monitored the Executive Board's activities during the entire course of the business year 2022.

The Executive Board involved the Supervisory Board in all major decisions and processes at an early stage and kept it fully informed of all important proceedings. During the course of the year 2022 there were no complaints by the Supervisory Board with regards to the management of the Company by the Executive Board of the SINGULUS TECHNOLOGIES AG or the timely and exhaustive information

provided by the Executive Board to the Supervisory Board regarding the situation of the Company or new developments.

For the financial year 2022, the proof of sufficient financing of the operating business for the relevant forecast period remained a challenge as a prerequisite for a positive going concern forecast. During the course of the year a restructuring of the debt capital and a modification of the bond became necessary. The respective bondholder meetings took place in a period from August 26 – 30, 2022 as well as on September 20, 2022. During the meeting on September 20, the bondholders approved the proposals of the Company. After the issuance of the attestations on April 6, 2023, a further amendment of the bond's terms and conditions became necessary. The respective votes in the course of the bondholder meeting took place in May 2023, during which the bondholders adopted the proposals of the Company with an approval rate exceeding 98 %.

The situation in the business year 2022 was still impacted by the effects from the COVID-19 pandemic. The Company was adversely affected by the outbreak of the Ukraine conflict, which impacted its international supply chains. The entire development of the operating activities and the required restructuring of the debt capital were closely monitored by the Supervisory Board.

SUPERVISORY BOARD MATTERS

During the business year 2022 the Supervisory Board of the SINGULUS TECHNOLOGIES AG continued to be comprised of three members. The set-up of committees was not required due to the size of the Supervisory Board. The bylaws of the Supervisory Board are publicly available on the website of the SINGULUS TECHNOLOGIES AG and can be viewed under https://www.singulus.de/de/corporate-governance/.

Due to the still challenging situation for the Company, there were 21 Supervisory Board meetings in total in the business year 2022. In order to save costs for the Company, 19 meetings were held as video conferences and only two meetings were held in presence. The members of the Supervisory Board agreed on their meeting in presence on October 7, 2022, that the format of video calls had been proven and that due to a higher degree of flexibility and lower costs will be preferred over meetings in presence in the future. All members of the Supervisory Board appointed at the respective points in time participated in all of the Supervisory Board meetings held in the business year 2022.

Presence of the Supervisory Board in 2022

	DrIng. Wolfhard Leichnitz	Dr. rer. pol. Silke Landwehrmann	Dr. rer. nat. Rolf Blessing
February 10 Video conference	•	•	•
March 16 Video conference	•	•	•
March 24 Extraordinairy video conference	•	•	•
April 1 Video conference	•	•	•
April 27 Video conference	•	•	•
June 3 Video conference	•	•	•
June 10 Video conference	•	:•	•
June 20 Video conference	•	•	•
June 30 Video conference	•		•
July 14 Video conference	•		
July 25 Video conference	•	1•1	
August 4 Video conference Q2	• ,		•
August 10 Video conference	•	•	•
August 16 Extraordinairy video conference Supervisory Board only)	•	•	•
August 23 Video conference	•	•	•
September 19 Video conference	•	•	•
October 6 Presence Supervisory Board only)	•1	•	•
October 7 Presence	•	•	•
October 26 Video conference	•		•
November 8 Video conference Q3	•		•
December 15 /ideo conference	•	•	•
Total	21	21	21

The Supervisory Board attached great importance to regularly reviewing its working methods and effectiveness at meetings. Due to the difficult and challenging situation for the Company, it was particularly important for the Supervisory Board to be informed by the Executive Board in an extensive and timely manner. There were no complaints in this respect.

In accordance with Art. 95, 96 Para. 1, 101 Para. 1 of the German Stock Corporation Act (AktG) in conjunction with Art. 9 clause 9.1 of the Articles of Association, the Supervisory Board consists of three members. The Supervisory Board members Dr. Wolfhard Leichnitz and Dr. Rolf Blessing were appointed until the completion of the Annual General Meeting, resolving the discharge for the business year 2021. Since there was no ordinary Annual General Meeting for the business year 2021 during the business year 2022 due to the lack of attestations, the discharge of Dr. Leichnitz and Dr. Blessing could not be approved. To avoid problems with the maximum term of appointment and to ensure legal certainty, the appointment was extended until the next Annual General Meeting by court order of the Aschaffenburg Local Court on November 18, 2022. The terms of office of Dr. Blessing and Dr. Leichnitz ended at the close of the Annual General Meeting on July 19, 2023. Dr. Leichnitz stood for reelection and the Annual General Meeting confirmed the election. Dr. Blessing has stated that he wishes to leave the Supervisory Board at the end of his term of office. The Supervisory Board proposed Dr. Changfeng Tu as the successor of Dr. Blessing. Dr. Tu was appointed by the Annual General Meeting. During the course of its constituent meeting after the Annual General Meeting, the Supervisory Board elected Dr. Leichnitz as Chairman.

ADVISORY AND MONITORING OF EXECUTIVE BOARD BY THE SUPERVISORY BOARD

The Supervisory Board dealt intensively with the business development of the SINGULUS TECHNOLOGIES AG in 2022. In addition, the Chairman of the Supervisory Board was in contact with the Executive Board on an almost weekly basis to keep up-to-date of current developments, discuss current challenges, and keep the Supervisory Board informed accordingly.

The Executive Board continuously reported to the Supervisory Board on all of the important financial indicators, such as order intake, sales, earnings and liquidity including the relevant background information. The current course of business within the individual segments was explained in detail including the respective market conditions. Furthermore, the business relations with the shareholder and major customer CNBM as well as the order situation in the segment thin-film solar technology projects was presented transparently and discussed with the Supervisory Board. The Executive Board informed the Supervisory Board that CNBM intends to expand the activities for the production of cadmium telluride (CdTe) thin-film solar modules. Here, the SINGULUS TECHNOLOGIES AG also offers sublimation ovens in addition to cathode sputtering machines, which offers additional potential for further orders. Initial orders for both machine types were already received.

The continuing impacts of the COVID-19 pandemic as well as the Ukraine conflict on the business developments were detailed by the Executive Board and their effects on the course of business discussed. The Executive Board explained that investment decisions for the purchase of new machinery and equipment were slow to recover in 2022, which continued to have a negative impact on order intake, sales and the financial result. While no new order intake in the Solar division to a larger extent was recorded from CNBM/Triumph, an extensive order contract was signed with a European energy company for the delivery of wet-chemical production machines for crystalline solar cells. There were also new orders from the key existing customer in Medical Technology and several smaller orders in the Decorative Coatings division. The course of business in the year 2022 was compared with the targets of the respective corporate budgets. All deviations were documented and the respective measures for potential adjustments were discussed together with the Executive Board. The ongoing reporting was supplemented by further written and oral reports from the Executive Board, other employees, the auditors and external consultants.

A further focus of the Supervisory Board's activities was the monitoring of the restructuring of debt capital, which was a prerequisite for the positive going-concern forecast and the issuance of the audit certificate.

The second bondholders' meeting of the SINGULUS bondholders on September 2022 was quorate with a quorum of 33.8 % and with 98 % approved all proposals to amend

the bond's terms. Amongst others, these included the temporary waiver of the bondholders' potential termination rights due to the still pending publication of the audited financial results for 2020 and 2021 and allowed the Company more flexibility for financing options. The larger financing scope is particularly required for larger solar projects. Furthermore, the Mutual Representative proposed by the issuer, the Tauris Service GmbH, was appointed with 98.4 % of the votes. The additional bondholders' meeting of SINGULUS bondholders on May 30, 2023, which has been held in the meantime, also approved all proposed resolutions on further amendments to the bond's terms and conditions with 99.7 %. These included a waiver of potential termination rights, which are tied to a delayed presentation or publication of certified financial statements, for a period of 15 months as well as other amendments of the bond's terms and conditions, which are aimed to facilitate the refinancing of the bond at a later point in time.

A stable financing is very important for the positive going-concern assumption for SINGULUS TECHNOLOGIES and to prevent legal and economic consequences. The proof of through-financing of the operating business was also essential for the positive going-concern forecast as a basis for the audit opinion for the annual financial statements 2022. The Company was able to conclude an agreement with the largest single shareholder, Triumph Science and Technologies Ltd. Beijing, a subsidiary of the Chinese state-owned corporation CNBM Group, Beijing, (hereinafter simply CNBM for short) for the provision of liquid funds in the amount of €20.0 million with effect from February 3, 2023. In return for the granted loan, SINGULUS TECHNOLOGIES grants CNBM/Triumph the option for exclusive rights of use for specific thin-film technology in the Solar division. The total volume was received by the Company in two tranches in the amount of € 9.6 million in March 2023 and in the amount of € 10.4 million in early April 2023. Both tranches have a term to maturity of at least 18 months. However, the drawn funds must be repaid in full or in part only after the lender has requested it.

It is crucial for the economic stability of SINGULUS TECHNOLOGIES that CNBM/Triumph continues to award contracts, complies with the agreements made in financing matters and continues to support us financially in the future until the Company can actively participate in the capital market again under its own steam.

The development of the shareholders' equity of the SINGULUS TECHNOLOGIES Group (IFRS), the development of the shareholders' equity of the SINGULUS TECHNOLOGIES Aktiengesellschaft (HGB) as well as the liquidity situation within the Group were extensively monitored, reported by the Executive Board and discussed with the Supervisory Board. In particular, the reasons why the shareholders' equity pursuant to HGB and IFRS was negative during the entire business year 2022 were discussed. Originally, the negative shareholders' equity had resulted from differing realization of sales pursuant to HGB and IFRS. As a result, there are always interim losses under the German Commercial Code, which are offset once the project in question has been completed and revenue has been recognized in full. From the year 2020, the Corona crisis and subsequently the Ukraine conflict had an additional, substantially negative impact on the Company. The loss of the shareholders' equity deepened, because sales and earnings were not sufficient to cover the general operating expenses. However, the continuing major orders from CNBM/Triumph in the Solar segment and the prepayments for these orders had a positive effect on the liquidity situation. Increasing order intake is essential for the stabilization of the Company. The order intake was discussed in detailed in the course of the Supervisory Board meetings. There are many potential projects with new customers, but the final order placement is partially delayed due to the challenging economic environment. If this trend continues, it can turn into a severe threat for the continuation of the Company.

One of the focal points of the Supervisory Board's activities throughout the financial year was monitoring the going-concern forecast and the liquidity development. The Executive Board reported to the Supervisory Board in all of its meetings in the business year 2022 about the development of the liquidity situation and presented the respective projections for the future developments. The Supervisory Board reviewed the liquidity budgeting of the Company and had the development of the key financial results explained in an analysis. The Executive Board reported on the respective status of the expected payments. A working group headed by the Executive Board was set up to further develop the strategic alignment of the Company. It has regularly informed the Supervisory Board on the results of the working group. These results were reviewed with the Supervisory Board and their implementations were discussed regularly.

Another important topic was the continuation of activities at the Fürstenfeldbruck site, in particular in the field of wet-chemical processes. Various alternatives such as sale, relocation of the activities to the site in Kahl or shut-down were discussed at the beginning of 2022. In the course of 2022, it was decided to discontinue the activities at the Fürstenfeldbruck site, to relocate the production and commissioning of wet-chemical process plants to Kahl am Main, and to retain only a competence center for engineering in Puchheim near Munich. This is targeted to reduce the operating expenses by approximately € 4 million and thus to improve competitiveness.

Business activities that had to be approved or were required to be discussed by the Supervisory Board due to Company interests were discussed with the Executive Board and reviewed by the Supervisory Board. In addition to the restructuring of the corporate financing, this in particular included the issuance of new or restructuring of existing financing, the conclusion of major projects and transactions with CNBM, insofar as these transactions, as related party transactions, required the approval of the Supervisory Board in accordance with Art. 111b of the German Stock Corporation Act (AktG). The Supervisory Board was directly involved in all decisions, which were significant for the Company's course of business. The Supervisory Board has assured itself of the legitimacy, expediency and compliance of the presented business events under the particular consideration of the economic situation of the Company.

The Executive Board provided the Supervisory Board with the interim reports for the year 2022 as well as the half-year report for 2022 in a timely manner ahead of publication. The reports were presented by the Executive Board and important key indicators and statements explained in detail. In particular, the Supervisory Board had the profit-and-loss statements, the liquidity situation and the trend in shareholders' equity as well as other selected balance sheet positions explained in detail. The recommendations of the Supervisory Board with regards to individual interim reports as well as to the half-year report were implemented by the Executive Board.

CONFLICTS OF INTEREST

In the past business year there were no conflicts of interest of members of the Executive or Supervisory Boards, which have to be disclosed to the Supervisory Board immediately and which the Annual General Meeting has to be informed about.

SHAREHOLDINGS OF SUPERVISORY BOARD MEMBERS

The stock holdings of Supervisory Board members are published in this Annual Report as well as on the internet (for a detailed presentation, please refer to the annotations on 134 of this Annual Report 2022).

CORPORATE GOVERNANCE

The Supervisory Board regards good corporate governance as important. In the business year 2022, the Company complied with the recommendations of the German Corporate Governance Code with the exception of the deviations published in the "Declaration of Conformity 2021 with the German Corporate Governance Code" in June 2022. The key deviation is the delayed presentation of financial statements for the year 2020 and 2021. The declarations of conformity are publicly available on the website of the SINGULUS TECHNOLOGIES AG under https://www.singulus.de/de/corporate-governance/. A detailed presentation of corporate governance and the current Declaration of Conformity are included in the Corporate Governance Report within the Status Report on page 118 of the Annual Report 2022.

EXECUTIVE BOARD MATTERS

During its meeting on August 16, 2022, the Supervisory Board discussed the contract extension of Dr.-Ing. Stefan Rinck and resolved to extend the employment contract of Dr. Rinck until December 31, 2023.

In the course of the Supervisory Board meeting on October 6, 2022, the contract extension of Dr. Strahberger was discussed. The Supervisory Board unanimously agreed that a reduction of the Executive Board was appropriate due to the difficult situation of the Company. Accordingly, the Supervisory Board resolved to not extend the contract of Dr. Strahberger. Accordingly, Dr. Strahberger left the Executive Board as of October 31, 2022.

Pursuant to the respective employment contracts, the variable compensation for the members of the Executive Board of the SINGULUS TECHNOLOGIES AG is comprised of the granting of phantom stocks as long-term, variable remuneration and bonus payments, which are granted on the basis of target agreements.

Due to the difficult economic situation, no new target agreements were agreed for the year 2022. Accordingly, the determination of target achievements and the resulting bonus payment was no longer possible in the manner provided for in the contract. However, a variable component is contractually agreed. During the course of the business year 2022, the Executive Board has made great efforts to ensure the continuation of the Company. However, in view of the great commitment of the Executive Board to securing the continued existence of the Company in fiscal year 2022, the Supervisory Board has decided to grant a one-time lump-sum payment in lieu of the variable compensation contractually owed but no longer quantifiable under the terms of the employment contracts. Pursuant to the Supervisory Board's assessment, it was not appropriate to waive part of the agreed compensation altogether.

In the business year 2022, phantom stocks were also granted. The shares were not issued until February 27, 2023, but with retroactive effect to June 17, 2022, because preliminary results for the 2021 financial year were published on June 3, 2022, and the Supervisory Board therefore assumed that these results were adequately reflected in the share price on the issue date and thus automatically in the exercise price.

Due to his extraordinary efforts with respect to the continuation of the Company Mr. Ehret was awarded a one-off special payment.

Overall, the Supervisory Board assesses the performance of the Executive Board in the difficult fiscal year 2022 and its commitment to the continued existence of the Company very positively and would like to thank them for their dedication and commitment.

The compensation system was presented to the Annual General Meeting on July 19, 2023 and was approved. For additional details regarding the Executive Board's

remuneration, please refer to the Compensation Report, which is printed in the Annual Report on pages 22 to 40.

RISK MANAGEMENT

The SINGULUS TECHNOLOGIES AG has implemented an internal system to manage risks as required by applicable capital market and corporate regulations. This monitoring system is routinely adjusted to the current developments. The Supervisory Board reviewed the appropriateness and effectiveness of the Company's internal control system and risk management. During its meeting on October 7, 2022, the Supervisory Board was informed in detail about the risk management system and the main threats.

The main risks for the Company lie in financial risks, especially with regard to liquidity, project risks, such as miscalculations or delays in project implementation, and sales market risks, especially in the solar market. The Supervisory Board discussed the weighting of the risks with the Executive Board and discussed the monitoring system as well as potential measures to manage these risks. The Compliance Management System was also discussed and it was determined that no violations had been reported.

The Supervisory Board is of the opinion that the internal control and risk management systems of the SINGULUS TECHNOLOGIES AG are appropriate and sufficiently effective. The Board agrees with the Executive Board regarding all items of the risk assessment. For further information, please refer to the Risk Report on pages 78 to 99 of the Annual Report 2022.

ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS AS WELL AS STATUS REPORT

The auditor issued an unqualified opinion on the 2022 financial statements on October 29, 2023.

During the meeting on October 30, 2023, the Supervisory Board reviewed the annual financial statements of the SINGULUS TECHNOLOGIES AG according to the German Commercial Code (HGB) for the business year 2022 and the combined management report in the presence of the auditor. There were no objections raised. The annual financial statements of the SINGULUS TECHNOLOGIES AG according

to HGB for the business year 2022 prepared by the Executive Board and the combined management report were approved by the Supervisory Board. Accordingly, the financial statements have been adopted pursuant to Art. 172 Sent. 1 AktG. The consolidated financial statements and the combined management report with its individual sub-reports in accordance with International Financial Reporting Standards (IFRS) for the 2022 financial year were also reviewed by the Supervisory Board at the same meeting. There were no objections raised. The consolidated financial statements and the combined Group management report with its individual sub-reports in accordance with International Financial Reporting Standards (IFRS) were approved by the Supervisory Board.

At the same meeting, the Supervisory Board approved and adopted the Supervisory Board report for the business year 2022. The Corporate Governance Report and the Compensation Report were also approved and adopted. The resolutions of the Executive Board and the Supervisory Board are included in the report of the Supervisory Board to the Annual General Meeting pursuant to Art. 172 Sent. 2.

The two financial statements were thus adopted by the Supervisory Board at its meeting on October 30, 2023 and subsequently published on the Company's website at https://www.singulus.com/de/finanzberichte/.

The Supervisory Board would like to thank the Executive Board and all employees of the Company for their commitment and wishes everyone good health and much success for the future.

Kahl am Main, October 2023

Dr.-Ing. Wolfhard Leichnitz
Chairman of the Supervisory Board

Letter from the Executive Board to the Shareholders of the SINGULUS TECHNOLOGIES AG

Dear Shareholders

SINGULUS TECHNOLOGIES was able to achieve significant sales growth in 2022 and thus recovered from the distortions of the past years, which affected our company due to the pandemic and the war in Ukraine. Sales increased by more than 27% and amounted to € 87.9 million. Earnings before interest and taxes (EBIT) were positive at € 5.9 million. The order backlog as of December 31, 2022, was around € 84.8 million.

Our company has thus embarked on a good path to further growth, which we expect to be able to pursue step by step in the coming years. The starting point for the targeted and profitable growth is the investment we have made in recent years in key technologies and machine platforms. These form the basis of our business activities and, together with our workforce, which is then able to translate these into marketable equipment and services, will form the basis of our corporate success.

In the past few years, we were able to develop two proprietary plasma sources, which will allow us to serve customers with a clear competitive advantage around coatings. Furthermore, we have constructed platforms for horizontal and vertical cathode sputtering systems, which also allow for large-area coatings in a wide variety of applications and enable SINGULUS TECHNOLOGIES to compete with competitors in new market segments and industries with our innovative concepts. In addition, there are the technological competencies we have acquired around evaporation of several materials. This has enabled us to broaden the portfolio of our coating systems and address the concerns of our customers and their respective, specific requirements. These technologies enable our customers to apply the thinnest coatings precisely and uniformly on a wide variety of substrates. We also develop surface treatment solutions that ensure improved functionality and durability of surfaces. Our machines use these processes to clean, structure or modify surfaces to create specific properties for our customers' end products.

By expanding its technological competencies, SINGULUS TECHNOLOGIES has thus established an excellent position in international competition to successfully position itself among the leading machine manufacturers as a company in high-tech sectors such as the semiconductor industry, medical technology and in all fields of photovoltaics. We also serve customers in the automotive and consumer goods industries with resource- and environment-friendly production systems. In addition, despite the necessary concentration of activities at the Kahl am Main site, we can continue to fully develop and manufacture wet-chemical production equipment.

SINGULUS TECHNOLOGIES has thus reached a point from which many new customers and business areas can be served from the existing portfolio of technology competence and existing platforms. The Executive Board sees the opportunities for our company in the new technology fields. Hydrogen, for example, will be the energy carrier of the future and SINGULUS TECHNOLOGIES has developed the coating systems used in the electrolyzers or the fuel cell together with renowned customers. With the maturity of the hydrogen technology and its global application SINGULUS TECHNOLOGIES will be able to position itself as one of the leading suppliers.

Solar segment

Based on its coating expertise, SINGULUS TECHNOLOGIES can offer equipment for solar cell manufacturers, regardless of their technology requirements. We build large, customized production lines for the manufacturing of thin-film solar modules based on CIGS and CdTe. We also work in development partnerships for the new perovskite-based solar cells. For crystalline cells, we provide equipment for all common processes, but here we focus clearly on high-efficiency solar cells for HJT. For these different processes in photovoltaics, we have already delivered equipment to produce several GW to customers worldwide in recent years. In the 2022 reporting year, we received a groundbreaking order from a European energy group to build 3 GW of production capacity for HJT solar cells in Italy. The equipment is currently being commissioned at the customer's site and the customer plans to set up additional manufacturing in 2024, again using our equipment in the USA.

Life Science segment

In recent years we have worked intensively on diversifying SINGULUS TECHNOLOGIES and thus making its development more robust. Here, it was important

to strengthen the new areas and applications. In addition to our established segments, we focus on the Life Science segment and will further expand this area. In this segment, we combine our systems for applications in medical technology, decorative coatings, and data storage. We see medical technology and decorative coating as growth markets in which we would like to participate. Our product solutions offer all the prerequisites for making conventional product finishing of plastic, glass, and metal components more resource-efficient. There is growing international interest in such environmentally friendly and cost-effective solutions.

In medical technology, we focus on specialized machines and systems to produce contact lenses. Our manufacturing machines enable precise and efficient processes in contact lens production. By using state-of-the-art technologies and innovative solutions, we help to produce high-quality contact lenses that meet the increasing demands of consumers. The contact lens market is a rapidly growing sector in the medical technology industry. More people are choosing contact lenses as an alternative to glasses because of their greater freedom of movement and aesthetic benefits. We aim to drive the market for contact lens production equipment with our innovative solutions and technological advancements.

Semiconductor segment

So far, we have focused our semiconductor equipment on so-called spintronic applications such as MRAM or thin-film heads and have successfully expanded into the market for magnetic layer systems in recent years. In doing so, we have been able to establish ourselves as the market leader in the application of magnetic TMR/GMR sensors and supply several leading sensor manufacturers. Both sensors and inductors are important components in semiconductor technology and play a crucial role in many electronic systems. Semiconductor sensors are electronic components that convert physical or chemical signals into electrical signals. They are used in a variety of applications, such as automotive, medical, environmental monitoring, and industrial automation. Semiconductor sensors can measure temperature, pressure, humidity, motion, acceleration, or magnetic fields, for example.

We rely on an advanced equipment platform to meet our customers' requirements and provide them with innovative solutions. Our many years of experience and expertise in

the field of spintronics and magnetic layer systems enable us to occupy a strong position in this market.

Outlook

As part of our corporate strategy, we focus on markets where the use of our equipment enables us to differentiate ourselves from competitors and generate added value for our customers. As a company, we are striving to grow and open further markets. The area for hydrogen as an energy carrier is just one example. Through our focus on automated manufacturing processes and cooperation with leading manufacturers, we aim to offer our customers first-class products and solutions.

SINGULUS TECHNOLOGIES expects sales for the business year 2023 to be within a range of € 90 million to € 100 million and EBIT to be in the low single-digit million range. The achievement of these key financial figures assumes a scheduled development of business activities in all segments for the remainder of the business year 2023. The SINGULUS TECHNOLOGIES Group is highly dependent on the future development of the business activities with a few large customers regarding the achievement of the expected key financial figures as well as the further liquidity development. Sufficient liquidity of the Company and the Group in the coming months can only be maintained if the Company's planning can be implemented as expected in this period and the major customers meet their payment obligations. We elaborate on this in detail for all interested parties in the risk report on page 84.

At this point, the Board of Management would like to extend its special thanks to our loyal workforce, which has shown its commitment to our company in these difficult and exceptional times, identifying with our goals and demonstrating a high level of motivation.

Furthermore, we would of course like to thank our customers and suppliers for the often-long-standing cooperation as well as you, our shareholders, for your trust in SINGULUS TECHNOLOGIES.

The Executive Board and the employees will continue to work with all commitment to make SINGULUS TECHNOLOGIES a growing and profitable technology company in the coming years.

Yours sincerely

SINGULUS TECHNOLOGIES AG

The Executive Board

PHOTOVOLTAICS





Compensation Report 2022

The Executive and Supervisory Boards of the SINGULUS TECHNOLOGIES AG (the Company) have drawn up this compensation report pursuant to the requirements of Art. 162 German Stock Corporation Act ("AktG").

The report explains the main features of the compensation system for the Executive Board and Supervisory Board and provides individualized information on the compensation granted and owed to current and former members of the Executive Board and Supervisory Board in the fiscal year 2022.

For ease of reading, the masculine form is used in this report when referring to persons. It is representative of persons of any gender.

Due to rounding, it is possible that some numbers in this report do not add up precisely to the totals shown and that percentages presented do not accurately reflect the absolute values to which they relate.

This report has been formally audited by the Company's auditors in accordance with Art. 162 (3) of the German Stock Corporation Act (AktG); the corresponding audit certificate is included in this report.

Review of the past business year 2022

The composition of the Executive Board changed in the year under review. Following the expiry of his appointment and service contract, Dr. rer. nat. Christian Strahberger left the Executive Board on October 31, 2022.

A) Compensation of the Executive Board

I. Members of the Executive Board in the business year 2022

Dr.-Ing. Stefan Rinck

Chief Executive Officer; Executive Board member responsible for Marketing & Sales, Technology, Research & Development as well as Strategy and International (CEO)

Since November 1, 2022, he is also responsible for the divisions Production, Semiconductor and Set-up Production China.

Dipl.-Oec. Markus Ehret

Executive Board member responsible for Finance, Controlling, Investor Relations, Human Resources and ESG (CFO).

Since November 1, 2022 he is also responsible for the division Procurement.

Dr. rer. nat. Christian Strahberger

Executive Board member responsible for Procurement, Production, Semiconductor and Set-up Production China (COO).

Dr. rer. nat. Christian Strahberger left the Executive Board as of October 31, 2022.

II. Description of the compensation structure

1. Overview compensation structure

1.1. Design and goals of compensation structure

The compensation of the individual members of the Executive Board is determined and regularly analyzed by the Supervisory Board. It is the goal to appropriately remunerate the Executive Board members according to their functions and responsibilities and to consider the individual performance as well as the economic situation, the success and the future prospects of the company.

The compensation structure for the Executive Board of the Company is determined in accordance with the provisions of the Stock Corporation Act taking into account the recommendations of the German Corporate Governance Code and is geared towards a sustainable and long-term corporate development. The total compensation of the members of the Executive Board is comprised of a fixed and a variable component, divided into short-term and long-term components as well as benefits in kind. It is in line with its tasks and performance as well as with the size and situation of the Company. The compensation system ensures that both positive and negative developments are appropriately reflected in compensation (*Pay for Performance*). It takes into account both the performance of the Executive Board as a whole and the achievement of individual targets, thus remunerating the work performed by Executive Board members in a results-oriented and competitive manner and creating incentives for Executive Board members to increase the value of the Company. The compensation system is clearly structured and also easily comprehensible and transparent to shareholders.

To plan, manage and control its targets, the Company relies on the key performance indicators order intake, order backlog, sales, EBIT and liquidity. The financing of the operating activities is implemented via the capital market as well as loans from banks and investors.

Executive Board compensation is linked to these key performance indicators, the achievement of strategic goals and the share price via variable compensation. In this way, the compensation system makes a significant contribution to promoting the business strategy and the long-term and sustainable development of the Company. In particular the variable components (annual bonus due to agreed targets and share-based compensation) are aligned with the growth targets for the segments Solar, Semiconductor and Life Science.

The system aims to align the interests of the Executive Board with those of shareholders and other stakeholders. It is geared to providing effective incentives for strengthening the operational success of the Company and sustainably increasing its value. The structure of the long-term, variable component is designed to tie the members of the Executive Board to the Company in the long-term.

The fixed, non-performance-based part is composed of a fixed salary and benefits in kind. It is targeted to amount to 60 % of the target compensation. The high proportion of fixed compensation aims to prevent the Executive Board to enter unreasonably high risks to reach short-term targets.

The performance-related components are split in a variable bonus and a share-based compensation component (phantom stocks). The variable bonus is tied to achieving individual targets, which include financial, operating and strategic goals including sustainability goals. The phantom stock program is intended to create a long-term incentive and commitment effect by issuing virtual shares. After the lapse of a waiting period of two years the phantom stocks can be exercised in tranches of 25 % semi-annually if the share price of the company exceeds a specified minimum percentage level above the exercise price. The incentive effect is achieved through performance targets, vesting periods and staggered exercise. Effects from short-term share price increases, which are market-related and not company-related, are thus largely eliminated. The phantom stocks represent a compensation component with a multi-year assessment basis that links the compensation of the Executive Board members to the performance of the stock, thus creating an alignment of the interests of the Executive Board and the shareholders.

In its entirety the compensation frameworks takes into account the regulation of the Stock Corporation Act and the Corporate Governance Code.

1.2. Process to determine, implement and review the compensation

Pursuant to Art. 87a AktG, the Supervisory Board of the Company is responsible for the structure of the system as such, the determination as well as the regular review of the Executive Board compensation system and the total compensation of the individual Executive Board members. In order to assess whether the compensation of the individual members of the Executive Board is in line with market practices, the Supervisory Board bases its determination of the amount of the target compensation on the situation of the Company, the compensation paid by comparable companies to the members of their management (horizontal comparison) as well as the salary level of the first and second management levels within the Company (vertical comparison). The Supervisory Board also ensures that compensation remains competitive so that Executive Board members can be retained and new ones

recruited. A balance is achieved through the size of the Executive Board, which currently has the statutory minimum number of members.

The Supervisory Board regularly reviews the structure and appropriateness of the compensation in the course of its first Supervisory Board meeting of the year. In the review the Board takes into consideration the individual performance and the extent of the responsibilities assumed compared with the other members of the Executive Board as well as the economic situation of the company.

In case of material changes in the compensation system, however at least every four years, the compensation system is presented in the course of the Annual General Meeting for approval. The applicable compensation system for members of the Executive Board was approved by the Annual General Meeting by resolution of June 28, 2018, and again after the end of the reporting period at the Annual General Meeting on July 19, 2023. Pursuant to Art. 87a (2) AktG, the Supervisory Board may temporarily deviate from the compensation system if this is necessary in the interests of the long-term welfare of the Company. The Supervisory Board has made use of this reduction option in the past due to the difficult economic situation of the Company. However, a reduction of the compensation was not implemented in the business year 2022, since the commitment of the Executive Board to safeguard the continuation was very high in the period under review.

1.3. Composition of the compensation

The fixed, non-performance-based part is composed of a fixed annual salary and benefits in kind. The non-cash benefits include company cars and insurance.

The performance-based components are split in a variable bonus and phantom stocks. Furthermore, the contracts of the members of the Executive Board provide the Supervisory Board the possibility to grant one-off special payments for extraordinary performance in addition to the variable compensation components ("One-time Bonus").

The compensation covers the entire activities of the Executive Board members, and accordingly also other Group-internal functions and activities of the respective Executive Board members.

At the request of the Executive Board, the Company takes out a life insurance policy for the Executive Board member concerned as part of a salary conversion scheme.

1.3.1. Fixed salary

The fixed, non-performance based, annual salary of the members of the Executive Board is paid in twelve equal partial payments at the respective end of the months and for the last time for the full month during which the employment contract terminates. It is reviewed annually according to appropriateness and adjusted, if required. An adjustment can also be made by granting one-time bonus payments. There was no adjustment of the fixed salary during the year under review.

1.3.2. Variable bonus (target agreements)

The variable bonus is tied to the achievement of individually agreed targets. These targets are reset annually by the Supervisory Board and individually agreed with the members of the Executive Board following the adoption of the budget for the subsequent year. They are based on the respective strategic objectives for the Company, operating and financial key indicators as well as sustainability goals, which have been defined by the Supervisory Board in consultation with the Executive Board. Generally, the targets consist of 50 % financial, 30 % operating and 20 % strategic targets. Strategic objectives also include the achievement of sustainability goals (ESG), which are set by the Supervisory Board. They are intended to guide the behavior of the Executive Board towards the implementation of the defined strategy. The amount of the bonus is subject to the respective percentage achievement of the target. The assessment basis is the amount corresponding to 80% of the applicable fixed salary. A weighted average is formed from the individual percentages achieved for each individual annual target. This is applied to the assessment basis to determine the amount of the bonus. The variable bonus may not exceed 80% of the fixed salary. If the annual targets are exceeded by the respective member of the Executive Board, the Supervisory Board may increase the target achievement to up to 120 % on a case by case evaluation at its sole discretion. In case of an assumed 100 % achievement of the annual targets on average the bonus corresponds to 80 % of the fixed salary. If the targets are not achieved or only partially by less than 50 %, the Supervisory Board decides at its sole discretion if and to what extent a bonus will be paid.

1.3.3. Phantom stocks

The phantom stocks program is the second component of variable compensation and is intended to provide a long-term incentive and retention effect by linking compensation to the sustainable performance of the Company. The best indicator of performance is the share price.

The Supervisory Board determines the number of granted phantom stocks at its own discretion. Each individual phantom stock is designed as a virtual option and entitles after the lapse of a waiting period of two years and the achievement of a success target to receive a payment which corresponds to the difference at exercise between the respective exercise price and the reference price for a bearer share of the company with a nominal value of € 1.00 each. The exercise price corresponds to the simple average of the closing prices (or a relevant subsequent closing price) of the shares of the company on the Xetra platform (or a functionally equivalent subsequent system to the Xetra platform) at the Frankfurt Stock Exchange on the five trading days before the issue date. The reference price corresponds to the (non-weighted) simple average of the closing prices (or a relevant subsequent closing price) of the shares of the company on the Xetra platform (or a functionally equivalent subsequent system to the Xetra platform) at the Frankfurt Stock Exchange on the five trading days before the exercise date. The phantom stocks can be exercised for the first time after a vesting period of two years, which starts at the time of issuing the stocks.

After the end of the waiting period, the phantom stocks can be exercised each year within an exercise period. There are two exercise periods, the first begins after publication of the interim report for the first quarter, the second begins after publication of the interim report for the third quarter. During each exercise period only up to 25 % of the granted phantom stocks can be exercised. If an exercise tranche is not exercised during the exercise period, it can be additionally exercised during later exercise periods. Furthermore, the exercise of the phantom stocks is only possible upon reaching the success target, i.e. if the reference price at the time of the exercise is at least 15 % higher than the exercise price.

The term of the phantom stocks is five years each after the respective issue date. Phantom stocks, which are not exercised by the end of this term, expire without replacement and compensation.

1.4. Maximum compensation

Pursuant to Art. 87a Para. 1 Sent. 3 No. 1 AktG, the Supervisory Board has set the maximum compensation set out below:

The applicable Executive Board service agreements stipulate that the maximum compensation that the respective Executive Board member can receive in the course of a year (fixed and variable compensation including fringe benefits, a possible one-time bonus and pension contributions) is limited to 3.5 times the respective fixed salary.

In addition, separate maximum amounts are set for the variable compensation components. In the business year 2022, the maximum compensation level was not exceeded.

1.4.1. Variable remuneration

The variable annual bonus may not exceed 80 % of the fixed salary; this also holds true if the target achievement exceeds 100 %.

1.4.2. Phantom stocks

The granted cash compensation upon exercise of the phantom stocks is limited to three times the exercise price of each phantom stock. In addition, the granted cash compensation from the phantom stocks programs within a period of one year may not exceed the amount of the annual fixed salary. This also holds true if exercise tranches become due within one year, which result from phantom stock programs from different years.

1.4.3. One-off compensation

A potential extraordinary payment granted by the Supervisory Board may only amount to half of the fixed salary and is subject to the overall limit of the compensation, which the member of the Executive Board may receive during the course of one year.

2. Compensation for the business year 2022

The Company uses the vesting-oriented view for "compensation granted". Accordingly, compensation is (already) stated in the compensation report for the financial year in which the activity on which the compensation is based (one or more years) was fully performed. This view enables a meaningful comparison, as, for example, the variable short-term remuneration for the year 2022 is set against the earnings situation of the financial year 2022.

2.1. Fixed salary

The contractually agreed annual fixed compensation of the Executive Board members in the fiscal year 2022 was € 440 thousand for the Chairman of the Executive Board Dr.-Ing. Stefan Rinck, € 300 thousand for Mr. Markus Ehret and € 250 thousand pro-rata until October 31, 2022 for Dr. rer. nat. Christian Strahberger.

The amount of the fixed compensation depends on the function on the Executive Board and the length of service on the Executive Board.

2.2. Short-term variable compensation

In addition to the fixed salary, the company grants the members of the Executive Board an annually set variable gross compensation ("**Bonus**"). The respective amount is determined by the Supervisory Board for the respective business year on the basis of annually agreed targets.

Due to the economic situation, no new target agreements were agreed for the business year 2022. Accordingly, the determination of target achievement and the resulting bonus payment was no longer possible in the manner provided for in the contract. However, in view of the great commitment of the Executive Board to securing the continued existence of the Company in fiscal year 2022, the Supervisory Board has decided to grant a one-time lump-sum payment in lieu of the variable compensation contractually owed but no longer quantifiable under the terms of the employment contracts. Pursuant to the Supervisory Board's assessment, it was not appropriate to waive part of the agreed compensation altogether.

In line with the variable compensation system, the amount of the substitute payment was calculated on the basis of target achievement of around 25% (as already for the

2020 and 2021 financial years) with a maximum full target achievement of 80% of the respective fixed salary of the Executive Board members. For Dr. rer. nat. Strahberger, the compensation was on granted on a pro-rata basis due to his leaving as of October 31, 2022. This payment, which replaced the contractually agreed variable compensation, amounted to € 88 thousand for Dr.-Ing. Stefan Rinck, € 60 thousand for Markus Ehret and € 50 thousand for Dr. rer. nat. Christian Strahberger (pro rata temporis until October 31, 2022).

The activity on which the variable compensation is based was performed in full by the balance sheet date.

The variable compensation is therefore classified as granted for the 2022 financial year, even if payment is not made until after the completion of the 2022 financial year.

2.3. One-time Bonus

The Supervisory Board granted a one-time fixed bonus of € 100 thousand in recognition of Mr. Markus Ehret's special commitment to the financial stabilization of the Company, without which the Company would have had to file for insolvency. In the employment contracts and in the compensation system approved by the Annual General Meeting, the Supervisory Board has reserved the right to grant members of the Executive Board a one-time bonus at its discretion for exceptional performance.

2.4. Long-term variable compensation (phantom stocks)

The Company grants the members of the Executive Board each year phantom stocks pursuant to the phantom stock program resolved by the Supervisory Board.

During the business year 2022, no phantom stocks from the programs in previous years were exercised by the Executive Board.

Due to the delayed adoption of the annual financial statements for fiscal year 2022, the phantom stocks for fiscal year 2022 were not issued until February 27, 2023, but with effect from June 17, 2022, because preliminary results for fiscal year 2021 were published on June 3, 2022 and these results were therefore reflected in the prices used to determine the exercise price. Dr.-lng. Stefan Rinck was granted 150,000 phantom stocks and Markus Ehret 100,000 phantom stocks. Dr. rer. nat. Christian Strahberger had already left the Company at the time of granting these stocks.

Including the phantom stocks granted for fiscal year 2022, the members of the Executive Board held the phantom stocks described below at the end of fiscal year 2022:

Dr.-Ing. Stefan Rinck held 750,000 phantom stocks, which are composed as follows: (i) 150,000 phantom stocks granted under the 2017 program, (ii) 150,000 phantom stocks granted in fiscal 2018, (iii) 150,000 phantom stocks granted in fiscal 2019, (iv) 150,000 phantom stocks granted in fiscal 2020, and (v) 150,000 phantom stocks granted in fiscal 2022.

Markus Ehret held 500,000 phantom stocks, which are composed as follows: (i) 100,000 phantom stocks granted under the 2017 program, (ii) 100,000 phantom stocks granted in fiscal 2018, (iii) 100,000 phantom stocks granted in fiscal 2019, (iv) 100,000 phantom stocks granted in fiscal 2020, and (v) 100,000 phantom stocks granted in fiscal 2022.

At the time of his leaving the Company, Dr. rer. nat. Christian Strahberger held 100,000 phantom stocks, consisting of the 100,000 phantom stocks granted in the 2020 financial year, which expired without replacement upon his departure because the waiting period had not yet expired.

The accrued split of the attributable time value for the phantom stocks resulted in an income in the amount of € 432 thousand for the business year 2022. Auf die Phantom Stocks von Herrn Dr.-Ing. Stefan Rinck entfällt ein Ertrag in Höhe von 213 T€, auf die Phantom Stocks von Herrn Markus Ehret entfällt ein Ertrag in Höhe von 141 T€ und auf die Phantom Stocks von Herrn Dr. rer. nat. Christian Strahberger ein Aufwand von 78 T€.

The activity on which the long-term, variable compensation is based was performed in full by the balance sheet date. The long-term, variable compensation is therefore classified as granted for the 2022 financial year, even if issuance of the phantom stocks is not made until after the completion of the 2022 financial year.

2.5. Other compensation

In addition, the members of the Executive Board receive fringe benefits in kind, such as company cars or lump-sum compensation for use of private cars for professional purposes as well as casualty and personal liability insurances. Each individual Executive Board member has to pay taxes on these fringe benefits as part of the overall compensation.

The other compensation for the business year 2022 amounted to € 48 thousand for Dr.-Ing. Stefan Rinck, € 32 thousand for Mr. Markus Ehret and € 5 thousand for Dr. rer. nat. Christian Strahberger. The members of the Executive Board did not receive additional compensation in the business year 2022 for their activities as managing directors of subsidiaries. A lump-sum share in the amount of 15 % of the fixed salary and the annual variable compensation is deemed to be the compensation for these activities.

2.6. Application of malus and clawback during the reporting period

The Executive Board contracts in force in fiscal year 2022 do not provide for the possibility of withholding (malus) and reclaiming compensation already paid out (clawback) for any of the Executive Board members because they were concluded before the malus and clawback rules became mandatory by law.

2.7. Overview individual compensation

The following table presents the individual total compensation of the Executive Board members and the relative share of the respective compensation component in total compensation in accordance with Art. 162 AktG. The activity on which compensation is based was performed in full by the balance sheet date. Compensation for the Executive Board activities is therefore classified as granted for the 2022 financial year, even if payment is not made until after the 2022 financial year.

Gewährte und geschuldete Ve	ergütung für	das Gesch	näftsjahr 202	2								
			Feste Bestandteile		Variable Bestandteile Einjährige Mehrjährige							
									Anteil der	Anteil der		
Gegenwärtige		Letzte		Neben-		variable	variable	Sonder-		Gesamt-	festen	variablen
Vorstandmitglieder	Eintritt	Position	Festgehalt	leistungen	Summe	Vergütung	Vergütung	zahlungen	Summe	vergütung	Vergütung	Vergütung
			in T€	in T€	in T€	in T€	in T€	in T€	in T€	in T€	in %	in %
DrIng. Stefan Rinck	01.09.2009	CEO	440	48	488	88	226	0	314	802	61	39
Markus Ehret	19.04.2010	CFO	300	32	332	60	151	100	311	643	52	48
Dr. rer. nat. Christian Strahberger	01.11.2019	COO	250	5	255	50	0	0	50	305	84	16
Summe			990	85	1.075	198	377	100	675	1.750	61	39

3. Granted benefits after the regular termination of service on the Executive Board

The members of the Executive Board receive a company pension plan financed by the company in the form of defined contributions. The company pays the members of the Executive Board an annual pension contribution in the amount of a specific percentage of their gross fixed annual salary set out in the employment contracts. This percentage shall not exceed 35 % of pensionable income. This form of pension enables the company to reliably calculate the annual - and accordingly also the long-term - expenses. The amount of the pension payment was calculated as a percentage of the fixed salary on the basis of an approximately targeted pension level, a hypothetical tenure and the expected interest rate development according to actuarial principles. However, the actual pension level is not fixed for a defined-contribution pension, since it depends on the tenure as an Executive Board member and the interest rate development.

The pension benefits include pensions and surviving dependents' pensions. With respect to the pension it is determined that if a member of the Executive Board retires from the company after completion of the age of 63, a monthly pension or a lump sum will be paid. If a member of the Executive Board retires from the company before the age of 63 but after completion of the age of 60, as an early pension an early monthly pension or an early lump sum will be paid, if the member of the Executive Board asks for the payment of the early pension benefits at the time of leaving the

company. The amount of the (early) retirement benefit is based on actuarial principles. In case of death of a member of the Executive Board before claiming (early) pension benefits, the surviving spouse will receive a surviving dependents' lump sum. The amount of the surviving dependents' capital is determined when the insured event occurs and corresponds to the respective premium refund due in the event of death before the start of the pension.

In case of death after claiming the (early) pension benefits through monthly payments, but before the lapse of 20 years after retirement, the surviving spouse will receive a temporarily limited surviving dependent's pension until the lapse of this 20-year period. If there is no surviving spouse entitled for benefits, under certain conditions the surviving children will receive surviving dependents' payments in equal parts.

The pension plan is outsourced to Towers Watson Second e-Trust e.V. ("**Association**") and is not a charge to the Company's balance sheet. The Association concludes a corresponding liability insurance to insure the pension benefits.

If a member of the Executive Board leaves the Company before the pension benefits are due, the proportional claim for pension benefits remains, regardless whether at the time of leaving the legal vesting applies pursuant to the relevant regulations of the employers' retirement benefits law.

The annual pension contribution for Dr.-Ing. Stefan Rinck amounts to 59.97 % since January 2012, for Mr. Markus Ehret to 31.58 % since January 1, 2018 and for Dr. rer. nat. Christian Strahberger amounted to 35.00 % since November 1, 2019 of the annual fixed salary. The annual pension contributions for the company paid in the year 2022 amounted to approx. € 464 thousand, with approx. € 264 thousand attributable to Dr.-Ing. Stefan Rinck, approx. € 95 thousand attributable to Mr. Markus Ehret and approx. € 105 thousand to Dr. rer. nat. Christian Strahberger.

4. Severance policies

In case of an early termination of the employment contract through statutory notice of termination or in case of termination of appointment to the Executive Board, the members of the Executive Board receive a severance payment limited to two years' compensation (severance cap). The amount is set according to the fixed salary excluding benefits in kind and ancillary benefits in addition to a lump-sum variable compensation in the amount of 25 % of the respective fixed salary considering the pension benefits. If the remaining term of the respective Executive Board employment contract is less than two years, the severance payment is reduced pro rata temporis to the remaining term of the employment contract. In case of an extraordinary dismissal for cause by the Company, there is no right to a severance payment.

5. Claims in the event of death or permanent incapacity for work

In the event of death, the employment contracts of all current members of the Executive Board provide for the continued payment of the fixed remuneration to his widow and dependent children for the month in which the death occurred and for the following nine months, but no longer than until the end date of the respective employment contract.

In the event of permanent incapacity for work and receipt of sick pay, the employment contracts of all current members of the Executive Board provide for entitlement to the difference between the net fixed salary and the net sick pay for a further period of nine months, at the longest, however, until the end date of the respective employment contract.

6. Benefits by third parties

No benefits by third parties were granted or promised to members of the Executive Board with respect to their work as Executive Board members during the period under review

7. Change of control clauses

The employment contracts of the Company historically included a change of control clause. Accordingly, the members of the Executive Board of the Company have an extraordinary termination right, which entitles them to terminate their employment within a period of one year after the change in control at any time with a notice period of six months. A change in control exists in this meaning, if (i) a shareholder has gained control in the meaning of Art. 29 WpÜG, or (ii) a controlling agreement pursuant to Art. 291 AktG has been concluded and become effective with the company as dependent company, or (iii) the company is merged to a different non-Group entity pursuant to Art. 2 Umwandlungsgesetz (UmwG), provided that the value of the different entity amounts to less than 50 % of the value of the company according to the agreed exchange ratio, or (iv) the completion of a take over or mandatory offer in the meaning of the WpÜG.

If the extraordinary termination right is exercised, the member of the Executive Board is entitled to an extraordinary payment in the amount of the sum of (i) the last paid fixed salary for three years, (ii) the sum of the variable compensation (bonus payments), which were paid for the last three years as well as (iii) the addition to pension benefits for three years. The entitlement to a special payment only exists if the employment contract at the time of a change in control has a remaining term of more than nine months. The same holds true in case of a leave or the termination of the employment contract by the Company after a change in control.

The Company has concluded a new employment contract with Dr.-Ing. Stefan Rinck in August 2022. Pursuant to the recommendations of the GCGC, this new contract does not include provisions in case of a change of control.

Within the term of the phantom stocks programs the option rights from the phantom stocks can also be exercised ahead of schedule, i.e. outside of the respective exercise periods and before the completion of the waiting time, if for the shares of company (i) a takeover offer in the meaning of Art. 29 Para 1 WpÜG has been published or (ii) a person in the meaning of Art. 29 Para. 2 gains control. In these cases, all phantom stocks can be exercised irrespective of the achievement of the performance targets.

B) Compensation of the Supervisory Board

The system for the compensation of Supervisory Board members is based on the statutory requirements of the German Stock Corporation Act. The compensation for the Supervisory Board is set out in Art. 11 of the articles of incorporation of the Company. It is balanced overall and is based on the duties and responsibilities of the Supervisory Board members and on the situation of the Company, also taking into account the compensation arrangements of comparable companies. This enables the best possible monitoring and advice to be provided to the Executive Board, which in turn makes a significant contribution to a successful business strategy and the long-term success of the Company.

In addition to the reimbursement of expenses, the members of the Supervisory Board receive a fixed compensation in the amount of € 40 thousand for each full business year of being a member of the Supervisory Board, which is paid after completion of the business year. The Chairman of the Supervisory Board receives twice this amount, the Deputy Chairman one and a half times the fixed compensation.

Members of the Supervisory Board, who are only members of the Supervisory Board or who are Chairperson or Deputy Chairperson in the Supervisory Board for parts of the business year, receive a pro-rated fixed compensation. No performance-related compensation or financial or non-financial performance criteria are provided for. This best reflects the independent control and advisory function of the Supervisory Board, which is not geared towards short-term corporate success but to the long-term development of the Company.

The respective amount of the fixed compensation takes into account the specific function and responsibility of the members of the Supervisory Board. In particular, in accordance with Section G. 17 of the GCGC, the higher time demands of the Chairman and Vice Chairman is also taken into account through the correspondingly higher compensation. Attendance fees are not paid. There are no attendance fees. Compensation does not change even if the Supervisory Board meets frequently.

The Annual General Meeting shall determine the compensation of the members of the Supervisory Board in the Articles of Association at the proposal of the Executive Board and the Supervisory Board. The Annual General Meeting shall resolve on the compensation of the members of the Supervisory Board at least every four years. In this context, a resolution confirming the existing remuneration is also permissible. The remuneration of the Supervisory Board was once again approved by the Annual General Meeting on July 19, 2023 after the reporting period.

The contractually agreed total compensation of the Supervisory Board amounted to € 180 thousand in the business year 2022.

The following table presents the compensation granted and owed to members of the Supervisory Board in fiscal year 2022 in accordance with Art. 162 of the German Stock Corporation Act (AktG). The activity on which compensation is based was performed in full by the balance sheet date. Compensation for the Supervisory Board activities is therefore classified as granted for the 2022 financial year, even if payment of the Supervisory Board compensation pursuant to Art. 11 of the Articles of Association was not made until after the 2022 financial year.

			Fest	te Bestandtei	le	Varia	ble Bestandt	eile				
						Einjährige	Mehrjährige				Anteil der	Anteil der
Gegenwärtige		Letzte	Grund-	Sitzungs-		variable	variable	Sonder-		Gesamt-	festen	variablen
Aufsichtsratsmitglieder	Eintritt	Position	vergütung	gelder	Summe	Vergütung	Vergütung	zahlungen	Summe	vergütung	Vergütung	Vergütung
			in T€	in T€	in T€	in T€	in T€	in T€	in T€	in T€	in %	in %
DrIng. Wolfhard Leichnitz	29.05.2009	Vorsitzender Stv.	80	0	80	0	0	0	0	80	100	0
Silke Landwehrmann	11.08.2019	Vorsitzende	60	0	60	0	0	0	0	60	100	0
Dr. rer. nat. Rolf Blessing	31.05.2011	Mitglied	40	0	40	0	0	0	0	40	100	0
Summe			180	0	180	0	0	0	0	180	100	0

In the year under review, the members of the Supervisory Board did not receive any compensation or benefits for personally-performed services, in particular consulting or agency services.

C) Loans granted to the members of the Executive and Supervisory Board

The company did not grant any members of the Executive Board or the Supervisory Board advance payments or loans during the year under review.

D) Comparative presentation of the change in compensation

In accordance with Art. 162 Para. 11 Sent. 2 No. 2 AktG, the following table presents the development of the Company's earnings, the total annual compensation granted and owed to current and former members of the Executive Board and the Supervisory Board, and the annual change in the average compensation of employees considered over the last five financial years on a full-time equivalent basis. In the business year 2022, this averaged 294 persons. The compensation of all employees of the Company in Germany, including senior executives as defined in

Art. 5 (3) of the German Works Constitution Act (Betriebsverfassungsgesetz), was taken into account. In each case, all collectively agreed salary components or agreed fixed salaries, agreed bonuses and supplements, and any variable compensation components attributable to the 2022 financial year, such as bonuses or special payments, were included in the analysis. The components of the average employee compensation presented therefore correspond in principle to the compensation granted and owed to the members of the Executive Board and the Supervisory Board pursuant to Art. 162 Para. 1 Sent. 1 AktG.

	2017 [in T€]	2018 [in T€]	Jährliche Veränderung [in %]	2019 [in T€]	Jährliche Veränderung [in %]	2020 [in T€]	Jährliche Veränderung [in %]	2021 [in T€]	Jährliche Veränderung [in %]	2022 [in T€]	Jährliche Veränderung [in %]
Gegenwärtige Vorstandsmitglieder											
DrIng. Stefan Rinck (CEO)	1.143	1.618	42	1.429	-12	1.250	-13	562 ¹⁾	-55	802	43
(davon ausgegebene Phantom Stocks)	472	683		516		588		-		226	
Markus Ehret (CFO)	741	1.104	49	966	-12	835	-14	379 ¹⁾	-55	643	70
(davon ausgegebene Phantom Stocks)	315	455		344		392		-		151	
Dr. rer. nat. Christian Strahberger (COO) (01.11.2019 - 31.10.2022)	-	-	-	52	-	711	1.267	367 ¹⁾	-48	305	-17
(davon ausgegebene Phantom Stocks)				-		392		-		-	
Frühere Vorstandsmitglieder											
keine	-	-	-	-	-	-	-	-	-	-	-
Gegenwärtige Aufsichtsratsmitglieder											
DrIng. Wolfhard Leichnitz Dr. Silke Landwehrmann	80	80	0	80	0	76	-5	80	5	80	0
(seit 11.08.2019)	-	-	-	16	-	50	213	60	20	60	0
Dr. rer. nat. Rolf Blessing	40	40	0	40	0	38	-5	40	5	40	0
Ehemalige Aufsichtsratsmitglieder											
Christine Kreidl	60	60		36	-40						
(04.12.2012 - 10.08.2019) Durchschnittliche Vergütung der Arbeitnehmer	60	60	0	36	-40	-	-	-	-		-
Arbeitnehmer der SINGULUS TECHNOLOGIES AG	70	76	8	73	-3	58	-20	69	18	69	1
Ertragsentwicklung der Gesellschaft											
EBIT (IFRS) [in Mio. €] Jahresergebnis (HGB) [in Mio. €]	-1,2 -30,0	6,8 -30,7	667 -2	-8,2 -17,5	-221 43	-36,8 -34,6	349 98	-12,4 -21,8	66 37	5,9 -11,8	-148 -46

¹⁾ In 2021 erfolgte keine Ausgabe von Phantom Stocks, so dass hier keine Anrechnung von Ausgabewerten der Phantom Stocks erfolgte

REPORT OF THE INDEPENDENT AUDITOR ON THE AUDIT OF THE COMPENSATIONREPORT PURSUANT TO SECTION 162 PARA. 3 AKTG TO SINGULUS TECHNOLOGIES AG, KAHL AM MAIN, GERMANY

AUDIT OPINION

We have formally audited the remuneration report of Singulus Technologies AG for the financial year from January 1 to December 31, 2022, to determine whether the disclosures pursuant to Section 162 (1) and (2) AktG have been made in the remuneration report. In accordance with Section 162 (3) AktG, we have not audited the content of the compensation report.

In our opinion, the information required by § 162 (1) and (2) AktG has been disclosed in all material respects in the accompanying compensation report. Our audit opinion does not extend to the content of the compensation report.

Basis for the audit opinion

We conducted our audit of the compensation report in accordance with § 162 (3) AktG and IDW Auditing Standards: The Audit of the Compensation Report in Accordance with Section 162 (3) AktG (IDW PS 870 (08.2021)). Our responsibility under this regulation and this standard is fur-ther described in the Auditor's Responsibility section of our report. As an auditing practice, we have complied with the requirements of the IDW Quality Management Standard: Requirements for Quality Management in the Practice of Public Accountants (IDW QMS 1). We have complied with the professional duties pursuant to the Wirtschaftsprüferordnung (German Auditors' Code) and the professional statutes for auditors / certified public accountants, including the require-ments for independence.

Responsibility of the Management Board and Supervisory Board

The Board of Management and the Supervisory Board are responsible for the preparation of the compensation report, including the related disclosures, which complies with the requirements of § 162 AktG. They are also responsible for such internal control as they determine is necessary

to enable the preparation of a compensation report, including the related disclosures, that is free

from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our objective is to obtain reasonable assurance about whether the compensation report is free from material misstatement, whether due to fraud or error, in all material respects in accordance

with § 162 (1) and (2) AktG, and to express an opinion thereon in an auditor's report.

We planned and performed our audit to obtain evidence about the formal completeness of the

compensation report by comparing the disclosures made in the compensation report with the

disclosures required by Section 162 (1) and (2) AktG. In accordance with Section 162 (3) AktG,

we have not audited the accuracy of the disclosures, the completeness of the individual disclo-

sures or the fair presentation of the compensation report.

Limitation of liability

For the performance of the engagement and our responsibility and liability, also in relation to

third parties, the "General Engagement Terms for Auditors and Auditing Firms" in the version

dated January 1, 2017, issued by the Institut der Wirtschaftsprüfer (Institute of Public Auditors

in Germany) apply.

Düsseldorf, October 29, 2023

Baker Tilly GmbH & Co. KG

Wirtschaftsprüfungsgesellschaft

(Düsseldorf)

Christian P. Roos Wirtschaftsprüfer Thomas Gloth Wirtschaftsprüfer

43

SEMICONDUCTOR





Content

Preface	48	Takeover-relevant Disclosures	102
Basics of the Group	48	pursuant to Sections 289A S. 1, 315A S. 1 HGB and Explanatory Report	
Goals and Strategy	52	Financial Accounts pursuant to HGB	108
System for the Company's Management	55	Corporate Governance Declaration	114
Research, Development and Engineering	57	Declaration of the Executive Board	115
Headcount	59	pursuant to Art. 297 Para. 2 S. 4, Art. 315 Para. 1 S. 5 HGB	
Economic Report	60	Corporate Governance Declaration	118
Business Trends	64	pursuant to Art. 289F and Art. 315D HGB	
Status Report	66	as well as Corporate Governance Report of SINGULUS TECHNOLOGIES AG	
Outlook	75	Consolidated Financial Statements	138
Risks and Opportunities Report	78	of the SINGULUS TECHNOLOGIES AG	
Environment and Sustainability	100	Independent Auditor's Report	202
		Individual Financial Statements	218

Combined Status Report of the SINGULUS TECHNOLOGIES Group and the SINGULUS TECHNOLOGIES AG

Preface

SINGULUS TECHNOLOGIES did not receive the audit opinions for its 2020 and 2021 financial statements until April 2023, after the responsible auditor had satisfied itself sufficiently of the Company's positive going concern forecast. Subsequently, it was incumbent on the Company to appoint a new auditor for the audit of the annual financial statements 2022 in accordance with the statutory provisions. Due to these circumstances, the preparation period of the financial statements for the fiscal year 2022 was extended.

The risks and measures for the continuation of the company and the Group as a going concern are dealt with in detail in the risk report. The opportunity and risk report provides an up-to-date assessment of the business risks as of October, 2023. The financial risks in connection with the financing of the company are explained in more detail in the risk report.

The business year of the company corresponds to the calendar year and ended on December 31, 2022.

The Company exercised its right pursuant to Art 315 (5) German Commercial Code (Handelsgesetzbuch (HGB)) to prepare a combined status report for the SINGULUS TECHNOLOGIES Group and the SINGULUS TECHNOLOGIES AG. Since the course of business, the situation of the Company as well as the opportunities and risks of future developments of the SINGULUS TECHNOLOGIES AG and the SINGULUS TECHNOLOGIES Group broadly coincide, the following statements, in particular references to specific data, refer to the SINGULUS TECHNOLOGIES Group, if not stated otherwise. For information regarding the asset, financial and earnings situation of the SINGULUS TECHNOLOGIES AG please refer to the Status Report on pages 66.

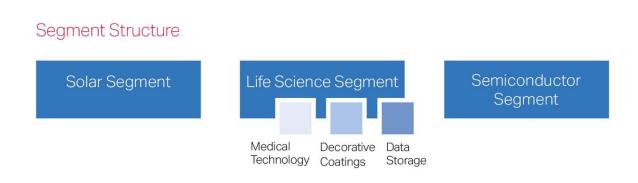
Basics of the Group

Business Model and Divisions of the SINGULUS TECHNOLOGIES Group

SINGULUS TECHNOLOGIES (in the following also the "Company") is a globally operating high-tech engineering company. The Company focuses its activities on the development, manufacturing and selling of machines, plants and systems in the area

of vacuum coating technology, surface technology, wet-chemical as well as thermal processing technology. The range of products and services includes machine sales as well as the service and replacement part activities.

The business operations of the Company are divided into three segments. These include:



Solar Segment

In the Solar segment SINGULUS TECHNOLOGIES focuses its activities on the processes and machines for the production of crystalline solar cells as well as thin-film solar cells on the basis of copper-indium-gallium-diselenide (CIGS) and cadmium-telluride (CdTe). The company offers vacuum coating equipment, thermal processing equipment and wet chemical treatment equipment, among other products. The work area of crystalline silicon solar cells also includes high-performance cell concepts such as HJT (Heterojunction), IBC (Interdigitated Back Contact) and TOPCon (Tunnel Oxide Passivated Contacts) solar cells as well as tandem solar cells such as perovskite tandem solar cells. Furthermore, SINGULUS TECHNOLOGIES offers complete production lines.

Life Science Segment

The Life Science segment comprises product solutions for medical technology, decorative coatings and the data storage work area. In the medical technology area, the company offers vacuum coating systems for surface finishing and various wetchemical cleaning systems for medical applications and the consumer goods sector. Production lines such as DECOLINE II and the inline vacuum cathode sputtering system POLYCOATER were developed for the consumer goods sector. In addition, SINGULUS TECHNOLOGIES markets the MEDLINE production machine, which is used for medical technology applications such as the production of contact lenses. In the Data Storage segment the activities are mainly focused on the spare parts and service business.

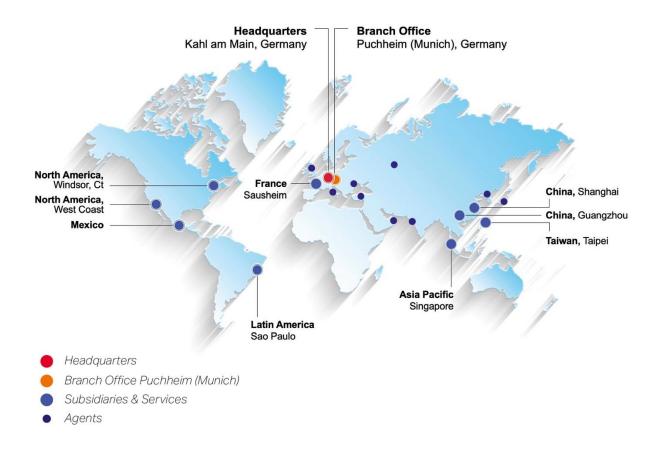
Semiconductor Segment

SINGULUS TECHNOLOGIES is active in the semiconductor market as a supplier of special-purpose machines and offers the modular machine platform TIMARIS. The vacuum coating machine has a modular built and can be equipped with various processing and ancillary modules. Based on the TIMARIS concept the company has developed and introduced to the market new processing machines for the coating of 300 mm wafers as well.

Corporate Structure

At the headquarter in Kahl am Main, the Group's management as well as departments Construction, Research & Development, Procurement and Marketing & Sales as well as the central functions of the Company are concentrated. In Kahl, machines and production lines for all segments are produced. Until the third quarter of 2022, production equipment for wet chemical processes was developed and manufactured at the site in Fürstenfeldbruck. Production was relocated to Kahl am Main in the fourth quarter of 2022, and at the same time a competence center for wet chemical processes with functions for mechanical and electrical design, development and process engineering was established at the site in Puchheim.

SINGULUS TECHNOLOGIES Subsidiaries & Agents Worldwide



The Company's operations involving equipment and machines are supplemented by global replacement part and service activities. The relevant sales and expenses are grouped to the respective segments. SINGULUS TECHNOLOGIES has a marketing & sales and service network in all important regions worldwide and provides consulting and service activities globally. Independent subsidiaries in key regions are complemented by a network of representations.

Goals and Strategy

Development of markets with promising growth potential

The Company focuses on markets where the employment of the offered machines enables a differentiation against competitors and value-added for the respective customers. In doing so, the company strives to open up markets with promising growth potential. In order to continuously expand the machine and equipment portfolio, SINGULUS TECHNOLOGIES relies on its own developments as well as on funded cooperations with customers and research institutes.

In addition to the introduction of new applications in the Solar and Life Science segments, the company entered the field of hydrogen with its coating technology in 2022.

Target markets for SINGULUS TECHNOLOGIES



Photovoltaics



Semiconductor



Medical Technology



Packaging Industry



Glass / Automotive



Battery / Hydrogen

Solar Segment

Focus on new cell concepts - Continued high importance of thin-film solar technology for the positive business performance

SINGULUS TECHNOLOGIES attaches great importance to the development of new machine concepts for solar cells such as HJT, TOPCon, IBC, PERC passivated contacts and tandem cells in order to successfully bring them into industrial mass production. The comprehensive portfolio of SINGULUS TECHNOLOGIES includes machines and equipment for:

- PVD vacuum thin film deposition (sputtering and evaporation).
- CVD vacuum thin film coating (PECVD)
- Wet chemical processes
- Specific thermal processes to optimize the coating properties
- A combination of vacuum, wet chemical and thermal process technologies for the production of tandem solar cells

Despite the focus on new cell concepts, thin-film solar technology remains of great importance to the company's positive business performance. In cooperation with the key customer China National Building Materials (CNBM) SINGULUS TECHNOLOGIES is working on the introduction of a new generation of CISARIS selenization equipment for the use of CIGS solar technology. Following the successful delivery of a prototype of the new generation, the first machine of the new type CISARIS CX3 has already been ordered. In addition, SINGULUS TECHNOLOGIES also offers new machines for thin-film solar cells according to the CdTe process, which work with the Close-Space Sublimation (CSS) technology.

Life Science Segment

Innovative use of existing core competencies

The medical technology sector is one of the most important growth markets in the long-term according to the Company's assessment. Therefore, SINGULUS TECHNOLOGIES works active on the further development of process equipment for the cleaning of medical products.

The company also plans to expand its portfolio of process and equipment solutions for further applications in the area of various coating technologies.

Furthermore, SINGULUS TECHNOLOGIES observes a growing interest in environmentally friendly and cost-efficient solutions for surface finishing in the automotive, consumer goods and packaging industries. In addition to the existing coating solutions, the company now also offers complete coating units for this market.

In the data storage segment, the company will mainly focus on the global spare parts and service business for the extensive installed equipment base in the coming years. In this way, SINGULUS TECHNOLOGIES intends to ensure support for its customers and guarantee optimal utilization of the existing equipment.

Semiconductor Segment

The focus is on production machines for semiconductor industry

SINGULUS TECHNOLOGIES currently focuses on the development of production equipment for various applications in the semiconductor technology, sensor technology and magnetic layers. In particular, the company is intensively engaged in the area of magnetic sensors, where ultra-thin metallic layer systems are used. In this regard, SINGULUS TECHNOLOGIES offers the TIMARIS platform, which enables customized manufacturing systems through the combination of various process modules. Based on the proven TIMARIS machine platform, SINGULUS TECHNOLOGIES introduced the enhanced TIMARIS III cluster tool, which meets the requirements of automated 300 mm wafer manufacturing in traditional semiconductor technology. A significant customer order acceptance already took place in early 2023 after the system was sold to an important customer. The company strives to win additional customers in the semiconductor market with this advanced machine platform. In this context, SINGULUS TECHNOLOGIES operates in a challenging competitive environment with international competitors within the semiconductor application area.

System for the Company's management

Reportable operating segments are defined for the internal management of the company. This segmentation enables management to monitor the performance of the Group using key financial indicators. The main key figures used for Group management are sales revenue and operating earnings before interest and taxes (EBIT) for each segment. These ratios serve as the basis for resource allocation and for determining earnings power.

The financing and liquidity of the company are monitored and managed at Group level. In addition to the IFRS indicators already mentioned, sales and earnings before taxes (net income/loss for the year less other taxes and expenses from income taxes) are used as management indicators under commercial law.

By using these management ratios, the company can assess its financial performance, make strategic decisions and ensure that its financial targets are met.

Essential features of the internal monitoring system and the risk management system of the SINGULUS TECHNOLOGIES AG Group with respect to accounting processes

Within the SINGULUS TECHNOLOGIES Group the internal control and risk management system is viewed as a holistic system. It includes the principles, procedures and measures implemented by the management of the Company for the organizational implementation of the decisions of the management.

Specifically, the internal control system includes:

- Ensuring the effectiveness and efficiency of business operations
- Ensuring proper and reliable internal and external financial reporting
- The compliance with the relevant regulations for the Company

The risk management system comprises all organizational regulations and measures for identifying and managing the identified risks of entrepreneurial activity. With respect to the accounting process and the consolidated accounting process the following specific structures and processes have been implemented within the SINGULUS TECHNOLOGIES Group.

Overall responsibility for the internal control system in the accounting process and Group accounting process lies with the Executive Board. All companies included in the consolidated financial statements are integrated via a clearly defined management and reporting structure. Features of the internal control and risk management system that have a material impact on the consolidated financial statements and the overall presentation of the consolidated financial statements, including the group management report, are considered important in the accounting and group accounting process.

These include in particular:

- Identifying material risk areas and controls that affect the Group-wide accounting process.
- Monitoring of the Group-wide accounting process and its results at Executive Board level
- Preventive control measures in the finance and accounting systems of the Group and its consolidated subsidiaries

In addition, the insights gained from the ongoing reporting process influence the further development of the internal monitoring system. In this context, the status of the internal control system was reviewed in the current fiscal year in accordance with IDW PS 982 and identified improvements were implemented.

Research, Development and Engineering

One focus of our research and development work is on crystalline high-performance cell technology. In close cooperation with renowned institutes, we develop high-performance cell concepts such as HJT (Heterojunction), IBC (Interdigitated Back Contact), TOPCon (Tunnel Oxide Passivated Contacts) solar cells and tandem solar cells, including perovskite tandem solar cells. Of particular note is our partnership with the prestigious Fraunhofer Institute for Solar Energy Systems ("Fraunhofer ISE"), which has been instrumental in developing innovative processes and layer systems for high-efficiency solar cells.

In our R&D department, we have developed advanced linear large plasma sources based on ICP and CCP technologies. These technologies are used in PECVD coating systems to improve processes for crystalline silicon solar cells with highest efficiencies. A special focus is on passivated emitter and rear side cells (PERC) as well as cells with passivated contacts such as TOPCon, POLO and HJT.

In the area of thin-film solar technology, we are focusing on building prototypes of next-generation manufacturing equipment. We have signed contracts to build CISARIS equipment for CIGS solar technology and CSS equipment for CdTe thin film solar technology. Together with our partner CNBM, we are pursuing the goal of developing new coating machines to further reduce production costs, improve cell performance, and increase production output.

In the Life Science segment SINGULUS TECHNOLOGIES continues to focus on the further development of existing machine concepts for the production of contact lenses as well as the research of new wet chemical processes and production equipment for innovative applications.

An important achievement is the continuous automation of the DECOLINE II production line, which includes the integrated POLYCOATER cathode sputtering system. Thanks to this further development, the line achieves a high capacity of up to 10,000 substrates per hour. In addition to coating plastic components, it is now also possible to coat glass and metal. In particular for the cosmetics industry, the DECOLINE II opens up the possibility to finish plastic and glass products in different colors due to its high flexibility. In addition, SINGULUS TECHNOLOGIES also offers

coating systems called PAINTLINE, which use environmentally friendly, water-based UV coatings and are used, for example, for the finishing of glass bottles.

For the Semiconductor segment SINGULUS TECHNOLOGIES has developed a production machine for the vacuum coating of 300 mm wafers, which was already successfully delivered. The machine has a modular built which specifically meets the requirements of wafer production and is equipped with new processing and ancillary modules. SINGULUS TECHNOLOGIES thus enables the ever increasing integration of components in the semiconductor production and the reduction of energy consumption.

Our ongoing investments in research and development are aimed at offering our customers state-of-the-art technologies and optimized production processes. We are committed to driving innovative solutions in the life science and semiconductor segments and further consolidating our position as a leading company in these industries.

The capitalization ratio (development expenses in proportion to additions of capitalized development costs) in the business year 2022 amounted to 13.0 % (previous year: 4.7 %). The scheduled depreciation on capitalized development expenses amounted to € 1.5 million (previous year: € 1.5 million). The non-capitalized development expenses in the Group amounted to € 10.2 million in 2022 (previous year: € 9.8 million).

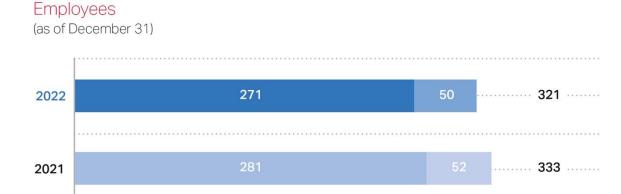
In the business year 2022, on average there were 91 full-time employees at SINGULUS TECHNOLOGIES employed in the divisions Research, Development and Construction (previous year: 92 employees).

Headcount

National

International

Despite the still difficult situation in the course of the business year 2022, SINGULUS TECHNOLOGIES was able to maintain the level of staff fluctuation at low levels and to stabilize the number of employees to a large extent. As of December 31, 2022, the headcount within the SINGULUS TECHNOLOGIES Group amounted to 321 full-time employees (previous year: 333 employees). In Germany, the number of employees as of the year-end amounted to 271 (previous year: 281 employees).



Economic Report

Overall Economic Conditions

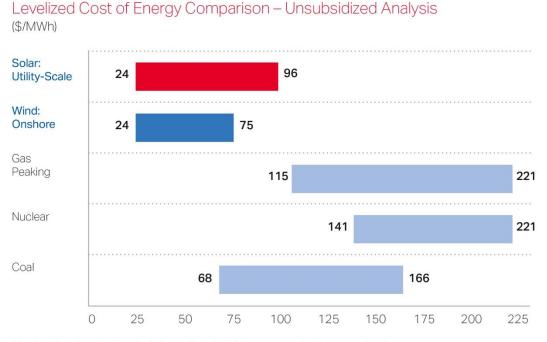
According to the International Monetary Fund (IMF), the year 2022 closed with global growth of 3.4 %. The United States recorded growth of just 2.0 %. In the euro zone, the growth rate was 3.5 %. China, on the other hand, reported a growth rate of 2.0 %.

The above figures illustrate that the global economy continues to face various uncertainties and challenges. Nevertheless, there are also positive signs that some economies are showing a degree of resilience and are holding their own despite the adverse environment.

Sector-specific Conditions

Solar Segment

The cost-efficient generation of energy with wind and solar energy offers the basis for a faster achievement of the climate targets



Unsubsidized levelized cost of alternative electricity compared with conventional energy sources Source: Lazard's Levelized Cost of Energy(LCOE) Plus, April 2023

The latest analysis by research firm Lazard, published in April 2023, compares the energy costs of different power generation technologies on a USD/MWh basis. The results reconfirm that solar and wind power are economic leaders. The report shows that the cost of electricity for solar PV and onshore wind power increased for the first time in 2023. The cost of solar PV ranges from \$24 to \$96 per megawatt-hour, while onshore wind has a cost of \$24 to \$75 per megawatt-hour. Excluding subsidies, fuel prices, or carbon prices, industrial-scale solar and wind have the lowest cost of electricity among all energy sources. Compared to nuclear, gas, and coal, renewables remain more economically attractive.

The importance of solar energy in building a secure and sustainable energy system is widely recognized. The energy scenarios developed by the EU as part of its 2050 climate targets see photovoltaic technology as a crucial component. In 2021, 239 gigawatts of photovoltaic capacity was installed worldwide. Roof-mounted photovoltaic systems accounted for just under half of this. Compared to the previous year, installation increased by 45 %. The market report also shows that more and more countries are reaching the gigawatt mark in annual photovoltaic installations. The number of these countries rose from 17 to 26 within one year, with Germany ranking sixth in the global rankings with its photovoltaic installation in 2022. China remains the undisputed leader in photovoltaic installations, followed by the U.S., India and Brazil. Spain is listed ahead of Germany in the current SolarPower Europe report.

SINGULUS TECHNOLOGIES' position in the solar market

In the market for production machines for thin-film solar modules (CIGS & CdTe) SINGULUS TECHNOLOGIES still regards itself being in a leading market position and offers the most important production machines for the processing steps relevant for cell efficiency. According to the Company's assessment there is currently no competitor in possession of the know-how comparable to SINGULUS TECHNOLOGIES' to offer combined machines for the complex production process as SINGULUS TECHNOLOGIES can offer it. SINGULUS TECHNOLOGIES' largest customer, the Chinese state-owned enterprise China National Building Materials (CNBM), Beijing, China, holds 16.75 % of the shares of the SINGULUS TECHNOLOGIES AG. CNBM plans to further expand its thin-film solar module

capacity for both CIGS and CdTe technologies. SINGULUS TECHNOLOGIES has signed contracts for the development and supply of production equipment for CIGS and CdTe thin-film solar modules. The company also expects increased demand for high-efficiency crystalline cells such as heterojunction technology (HJT) and is working in parallel to develop new cell systems such as IBC, HBC, TOPCon and Tandemsolar. SINGULUS TECHNOLOGIES is a member of the European Solar Manufacturing Council (ESMC) and supports initiatives to establish solar cell manufacturing facilities in Europe.

Life Science Segment

SINGULUS TECHNOLOGIES develops and produces specialized machinery and equipment for the production of contact lenses. The market for contact lenses is a growing sector in the medical technology industry. More and more people are opting for contact lenses as an alternative to glasses, as they offer greater freedom of movement and have aesthetic advantages. In addition, contact lenses are also used for medical purposes, for example in the treatment of eye diseases or for postoperative rehabilitation.

With the machines of the POLYCOATER and DECOLINE II type SINGULUS TECHNOLOGIES offers an innovative production method, which also enables the chrome (VI)-free coating of parts for various application areas. These innovative technologies open up a wide range of possible applications in various industries. One of the areas of application is in the cosmetics and automotive industries.

In the work area optical Data Storage the service and replacement part activities shadows the declining trend of optical storage media. The work area of optical data storage technology will remain a niche business.

Semiconductor Segment

Production machines for the semiconductor market

The World Semiconductor Trade Statistics (WSTS) released its latest semiconductor market forecast in early June 2023, which was issued in May 2023.

According to the report, the global semiconductor market will experience a 10.3 percent decline in 2023. However, this is expected to be followed by a robust recovery, with estimated growth of 11.8 percent in 2024.

Following modest growth of 3.3 percent in 2022, WSTS has adjusted its forecast to reflect a more significant, double-digit decline in the global semiconductor market in 2023. The estimated market size is \$ 515 billion, representing a 10.3 percent decline.

At the moment, with its products SINGULUS TECHNOLOGIES addressed the semiconductor market in special niches for example such as sensory technology or the application of ultra-thin metallic coating systems. The company is therefore largely independent of the investment cycles of the global semiconductor market. The company is nevertheless in a competitive environment with international competitors within the semiconductor applications offered.

Business Trends of the SINGULUS TECHNOLOGIES Group

Deviations from forecast for the business year 2022

For the year 2022, SINGULUS TECHNOLOGIES planned a significant increase in revenues and earnings figures in accordance with IFRS compared to the previous financial years 2020 and 2021, despite the continuing difficult environment, particularly in connection with disrupted supply chains as a result of the Russia-Ukraine war. In this context, revenues in the financial year 2022 should be within a range of € 105.0 million to € 115.0 million. EBIT should also develop positively and close in the lower double-digit million range.

The main sales and earnings impulse was expected to come from the Solar segment, and here from CdTe orders from CNBM. In addition, further orders for the Life Science segment, especially in the medical technology area, were expected in the course of the year. Follow-up orders with positive effects on sales and EBIT were also expected for the Semiconductor segment.

Delays in the supply chains as a result of the Russia-Ukraine war and the aftereffects of the COVID-19 pandemic also led to postponements in order intake in the course of fiscal 2022 and a shortfall in sales and operating profit targets.

	Forecast 2022	Actual result 2022
Consolidated sales	€ 105.0 to 115.0 million	€ 89.9 million
EBIT	low, double-digit million range	€ 5.9 million

In total, the company achieved in the fiscal year 2022 sales in the amount of € 87.9 million (previous year: € 68.8 million) and earnings before interest and taxes (EBIT) in the amount of € 5.9 million (previous year: € -12.4 million). The EBIT includes extraordinary income of € 12.1 million from the sale of the property at the Fürstenfeldbruck site. This was offset by one-time restructuring expenses of € 2.7 million in connection with the closure of production at the Fürstenfeldbruck site and the relocation of wet chemicals activities to Kahl am Main.

In the Solar segment, both the processing of existing CdTe orders and the CIGS orders for the Meishan and Xuzhou sites fell short of expectations due to the Chinese

COVID-19 restrictions. Contrary to planning, it was also not possible to generate any significant sales in the wet chemicals area due to the delayed start of a significant project. In the Semiconductor segment, too, not all planned customer orders materialized. However, in the Life Science segment the projections for sales and EBIT were significantly exceeded. This is mainly due to substantial orders for production machines in the area of Medical Technology.

In terms of sales for the **Solar** division, a considerable increase was expected for the business year 2022 compared with the prior year. The EBIT was also expected to improve substantially and come in at a positive level. The Solar segment could not achieve these growth targets. Within this segment sales amounted to € 30.0 million (previous year: € 35.6 million). The EBIT amounted to 0.1 € million (previous year: € -10.2 million). Accordingly, the sales and EBIT targets in the core segment Solar were missed in the business year 2022.

The work areas Medical Technology, Decorative Coatings and Data Storage are combined in the **Life Science** segment. In fiscal 2022, sales were forecast to nearly double compared to the previous year. The EBIT should improve significantly accordingly. The sales amounted to € 51.7 million (previous year: € 27.1 million) and the EBIT was at € 7.9 million (previous year: € -0.1 million) and therefore the forecast sales and earnings were achieved.

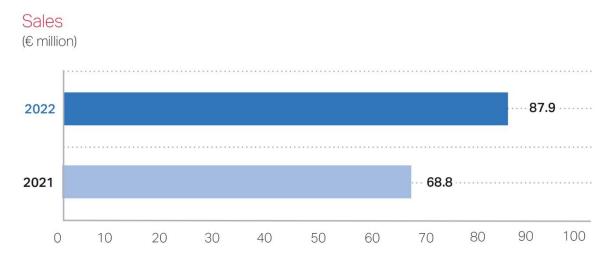
In the **Semiconductor** segment, a slight decrease in sales was expected in fiscal 2022 compared to 2021. EBIT was expected to be slightly negative. In the financial year 2022, the planning within this segment could be exceeded. However, compared with the prior year, sales in the amount of € 6.2 million (previous year: € 6.1 million) have remained constant and the EBIT was at the same level at € -2.1 million (previous year: € -2.1 million) as well.

Status Report

Earnings

Delays in supply chains due to the Russia-Ukraine war and the aftermath of the COVID-19 pandemic weighed on the company's order situation during fiscal 2022. However, gross sales in the amount of € 87.9 million during the reporting period were higher compared to the low sales level of the previous year of € 68.8 million. This corresponds to a rise in sales of 27.8 % compared with the prior-year level.

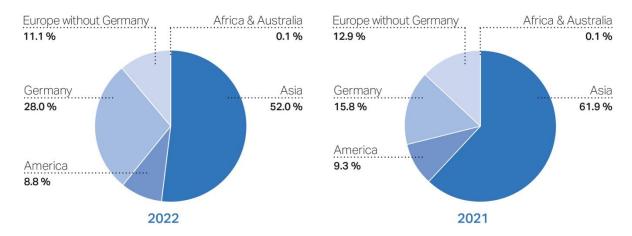
Specifically, sales in the business year 2022 are split into € 30.0 million in the Solar segment (previous year: € 35.6 million), Life Science at € 51.7 million (previous year: 27.1 million) and Semiconductor at € 6.2 million (previous year: € 6.1 million). Although sales in the previous year were impacted by low capacity utilization as a result of the COVID-19 pandemic, sales in the Life Science segment in particular increased significantly in the year under review despite a persistently difficult environment.



For the business year 2022 the percentage regional sales breakdown was as follows: Asia 52.0 % (previous year: 61.9 %), Europe 39.1 % (previous year: 28.7 %), North and South America 8.8 % (previous year: 9.3 %) as well as Africa and Australia 0.1 % (previous year: 0.1 %).

Sales Split by Region

(in %)



The gross profit margin for the period under year developed favorably due to the significantly increased utilization at the company's sites compared to the previous year and amounted to 28.7 % (previous year: 26.3 %).

The operating expenses in the business year 2022 in the amount of € 19.3 million were significantly below the prior-year level € 30.5 million due the sale of the property at the Fürstenfeldbruck site of € 12.1 million. This was offset by non-recurring restructuring expenses of € 2.7 million in connection with the closure of production at the Fürstenfeldbruck site and the relocation of the wet-chemical activities to Kahl am Main. Specifically, research and development expenditures amounted to € 7.1 million in the year under review (previous year: € 8.1 million) in connection with strategic projects of the Company within the segment Solar and Life Science. Sales and customer service expenses amounted to € 11.7 million in the reporting year (previous year: € 11.0 million), General and administrative expenses amounted to € 10.5 million (previous year: € 11.2 million). The decrease is mainly due to lower consulting costs.

The other operating expenses came to \in 0.5 million (previous year: \in 0.7 million), the other operating income stood at \in 1.1 million (previous year: \in 0.5 million). The expenses are mainly attributable to foreign currency effects. The higher income in the reporting year mainly related to reversals of provisions.

The earnings before interest and taxes (EBIT) in the year under review amounted to € 5.9 million (previous year: € -12.4 million). Adjusted for the special effects in connection with the closure of production at the Fürstenfeldbruck site and the relocation of wet chemicals activities to the Kahl am Main site, EBIT for fiscal 2022 is negative.

Key Financial Figures (€ million)

	2022	2021
EBIT	5.9	-12.4
EBITDA	9.4	-8.6
Net profit/loss	-0.1	-14.2
Financial result	-2.0	-0.8
Earnings per share in €	-0.01	-1.60

Specifically, the Solar segment recorded a negative EBIT in the amount of € 0.1 million in the year under review (previous year: € -10.2 million). The Life Science segment recorded an EBIT in the amount of € 7.9 million (previous year: € - 0.1 million). In the Semiconductor segment an EBIT in the amount of € - 2.1 million (previous year: € -2.1 million) was realized.

EBIT by Segments (€ million)

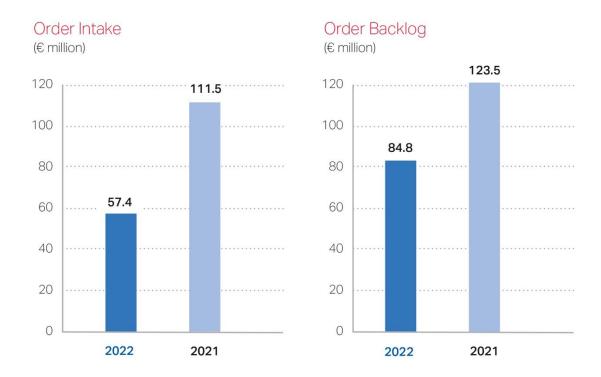
	2022	2021
Solar	0.1	-10.2
Life Science	7.9	-0.1
Semiconductor	-2.1	-2.1

The financial result in the business year 2022 amounted to € -2.0 million (previous year: € -0.8 million). This includes financing expenses. The expenses mainly resulted from financing expenses for the corporate bond as well as from the Company's other debt financing instruments. In the reporting year, tax expenses of € 4.0 million were recorded due to the measurement of deferred tax liabilities. In the previous year, tax

expenses of € 1.0 million were recorded. The net result in the business year 2022 amounted to € -0,1 million (previous year: € -14.2 million).

Order intake and order backlog

The order intake amounted to € 57.4 million (previous year: € 111.5 million) in the year under review. The order backlog amounted to € 84.4 million as of December 31, 2022 (previous year: € 123.2 million).



Assets

Assets and Capital Structure

(€ million)

	2022	2021
Cash and cash equivalents	18.7	15.0
Restricted financial assets	3.8	15.1
Accounts receivable and other assets (short-term)	22.8	17.9
Inventories	14.0	13.5
Long-term assets	18.5	21.8
Total assets	77.8	83.3
Short-term liabilities	83.7	92.0
Long-term liabilities	27.7	31.0
Shareholders' equity	-33.6	-39.7
Total liabilities and shareholders' equity	77.8	83.3

The balance sheet total decreased compared with the prior-year level and amounted to € 77.8 million as of December 31, 2022 (previous year: € 83.3 million).

As of the end of the period under review, the short-term assets amounted to € 59.3 million and are thus slightly below the prior-year level (previous year: € 61.5 million). The reason for this development is mainly due to the decrease in restricted cash to € 3.8 million (previous year: € 15.1 million) in the course of the execution of the ongoing major projects in the Solar and Life Science segments. The restricted cash is mainly cash that serves to secure guarantees for advance payments received. The increase in receivables from € 3.5 million in the previous year to € 10.4 million is due to the increased processing of customer orders in the Life Science segment. In addition, inventories increased slightly to € 14.0 million (previous year: € 13.5 million).

Non-current assets amounted to € 18.5 million at the end of the reporting year (previous year: € 21.8 million). The slight decrease is mainly due to scheduled depreciation of property, plant and equipment.

Current liabilities decreased compared with the end of 2021 and totaled € 83.9 million as of December 31, 2022 (previous year: €92.0 million). Liabilities from construction contracts decreased by €16.0 million and amounted to €34.8 million at the end of the financial year (previous year: €50.8 million). In contrast, liabilities from loans taken out in the amount of € 10.0 million were added as of the reporting year 2022.

Non-current liabilities of \in 27.7 million at the end of the reporting year were below the level of the previous year (previous year: \in 31.0 million). This was mainly due to the reversal of pension provisions by \in 4.0 million. Furthermore, non-current lease liabilities decreased by \in 2.5 million due to the closure of the production site in Fürstenfeldbruck.

The shareholders' equity within the Group amounts to € -33.6 million as of the end of the business year due to the losses incurred in previous years, which is fully attributable to the shareholders of the parent Company (previous year: € -39.7 million). However, the Company expects a significant improvement of the shareholders' equity in the coming years.

For the trends in shareholders' equity of the SINGULUS TECHNOLOGIES AG pursuant to HGB please refer to the information presented in the chapter "Financial Statements pursuant to HGB".

Financial Situation

Principles and goals of financial management

SINGULUS TECHNOLOGIES has a central financial management for the management of the liquidity. The goal of the financial management is securing liquidity to a sufficient extent. Excess liquidity at subsidiaries is pooled and monitored at the parent Company, if possible. Foreign exchange forwards are used to hedge foreign exchange risks. This predominantly includes foreign exchange forwards. The exclusive purpose of these derivatives is to hedge the currency risks stemming from the Group's business activities. Without the existence of a respective underlying business no derivative transactions are entered. To hedge the credit risk of accounts receivable, credit insurance or bank guarantees are used, if possible. For further information about the management of the specific financial risks please refer to Annotation 34 in the Annex of the consolidated financial statements.

Liquidity and capital management

The primary objective of capital management is to strengthen the capital structure in order to secure long-term corporate financing. In principle, the aim is to cover future financing requirements at appropriate conditions via the capital markets. In this context, the Company continuously reviews existing options with a view to achieving an optimal financing structure. In particular, the Company is currently validating the further development of equity on an ongoing basis.

Currently, the Company is mainly financed by advance payments from the contracted projects as well as various debt financing instruments.

As of December 31, 2022, guarantee lines in the amount of € 20.8 million were available to the corporate group. At the end of the fiscal year, € 3.5 million of these had been utilized. At the balance sheet date, these utilized guarantee lines were largely secured with 100 % cash deposits. The Company is currently negotiating the signing of further guarantee facilities with significantly reduced cash collateral. These are required for further down payments from various projects. Particularly within the solar business, an increased guarantee requirement may become necessary depending on project-specific requirements.

For further information on the financing components we refer to the explanations of the financial risks in the risk report.

SINGULUS TECHNOLOGIES invests surplus liquidity exclusively in overnight money or time deposits. Foreign currency risks from business activities in other countries are assessed in a risk analysis. A portion of the SINGULUS TECHNOLOGIES Group's sales is generally subject to currency risk, in particular U.S. dollar (USD) exchange rate risk. For this reason, derivative financial instruments are used to hedge against exchange rate risks. However, the share of sales in foreign currencies was insignificant in the year under review. Risks from foreign currencies are assessed on an ongoing basis as part of the risk management system, insofar as they are material.

Cash Flow

(€ million)

	2022	2021
Cash flow from operating activities	-22.7	24.1
Cash flow from investing activities	7.3	-0.9
Free cash flow	-15.4	23.2
Cash flow from financing activities	18.9	-18.3
Increase/decrease in cash and cash equivalents	3.5	4.9
Cash and cash equivalents at the beginning of the fiscal year	15.0	9.8
Impact of exchange rates translation differences	0.2	0.3
Cash and cash equivalents at the end of the fiscal year	18.7	15.0

The operating cash flow within the Group was negative at € 22.7 million in the business year 2022 (previous year: € 24.1 million). This is mainly due to the processing of customer orders for which advance payments were already received in prior periods. The cash flow from investing activities came to € 7.3 million (previous year: € -0.9 million). As a result of the one-off sale of the building in Fürstenfeldbruck, the company received cash and cash equivalents of € 9.3 million. Within the cash flow from investing activities in 2022, payments for investments in development expenses in the amount of € -1.5 million were recognized (previous year: € -0.5 million). The payments for investments in other intangible assets and fixed assets amounted to € -0.5 million (previous year: € -0.4 million). The cash flow from financing activities came to € 18.9 million overall (previous year: € -18.3 million) mainly due to the lower utilization of the guarantee facilities and the taking up of the working capital credit line in the amount of € 10.0 million.

In total, as of December 31, 2021, the level of cash and cash equivalents increased to € 15.0 million (previous year: € 9.8 million).

At the end of the business year 2022 undrawn guaranteed credit lines amounted to € 17.3 million.

Forecast Report

Overall Economic Conditions

The International Monetary Fund (IMF) expects the global economy to weather the consequences of the war in Ukraine and continued high inflation somewhat better than initially feared. The global economy is expected to grow by 2.9 %, i.e. 0.2 percentage points more than assumed in October 2022. Inflation is expected to fall significantly.

According to the IMF, the current forecast could represent a "turning point" and growth could bottom out, while inflation would decline. China's shift away from the zero-COVID strategy could pave the way for a recovery in the global economic situation, the report said. Economic growth forecast for 2023 is below the "historical average" compared with the past two decades. This also applies to the 3.1 % growth expected in 2024. In 2022, growth was still at 3.4 %, and in 2021 at 6.2 %. However, risks to the global economy remain - including an escalation in Russia's war against Ukraine or through higher inflation. Further corona infection waves in China could also worsen the situation, as could a sharp slowdown on the real estate market there. The inflation rate is expected to fall to 6.6 % in 2023 (2022: 8.8 %).

Regionally, the forecast shows clear differences. Within Europe, Germany is expected to perform weakly compared with other EU countries in 2023 - with an increase of 0.1 %. However, a small minus was still assumed in October. According to the IMF, France, Italy and Spain will grow more significantly. The German economy should then grow by 1.4 % next year. Half of the expected global growth is likely to be accounted for by the two major emerging economies India and China alone. The USA and the euro zone would only account for one-tenth of the total growth. According to the IMF, China's economy will grow by 5.2 % in 2023 and then by 4.5 % in 2024. India is expected to grow by 6.1 % and then 6.8 %. The USA, the world's largest economy, is expected to grow by 1.4 % in 2023 and 1.0 % in 2024.

Outlook for the business years 2023, 2024 und 2025

Outlook and deviations from forecast for the business year 2023

In April 2023 SINGULUS TECHNOLOGIES targeted a significant increase in sales and earnings compared with the pervious year 2022. Sales should come in at a range from € 140 to 150 million. The EBIT was targeted at a positive lower double-digit million range. As of January 1, 2023, SINGULUS TECHNOLOGIES had an order backlog of € 84.4 million.

The main growth driver for sales and earnings was expected to be the Solar segment, in particular through orders from the CIGS factories and their expansions for CNBM. Furthermore, additional orders for the Life Science segment were expected in the course of the year, especially in the area of medical technology. In the Semiconductor segment, mainly the processing of existing orders should contribute to a positive effect on sales and EBIT.

After receiving information from key customers in the solar segment regarding their investment plans, the Company determined on July 6, 2023, that the start of significant projects in this segment will be delayed. As these delays have an impact on the revenue recognition in the current year, SINGULUS TECHNOLOGIES adjusted the forecast for the business year 2023.

Sales are now expected to come in at a range from € 90 to 100 million instead of a previous range from € 140 to 150 million. The Company reduced the EBIT forecast from a previous low double-digit to a low single-digit amount in Euro.

	Forecast 2023	Adjusted forecast 2023
Consolidated sales	€ 140.0 to 150.0 million	€ 90.0 to 100.0 million
EBIT	low, double-digit million range	low, single-digit million range

The SINGULUS TECHNOLOGIES Group is highly dependent on the future development of the business activities with a few large customers with regard to the achievement of the expected financial ratios as well as the further liquidity development. Sufficient liquidity of the Company and the Group until the end of 2024 from preparation can only be maintained if the planning can be realized until the end of 2024 from preparation. A key prerequisite in the planning is that the partial payments to be made on the basis of the major orders already contracted with CNBM are actually made or not materially delayed. In addition, it is necessary to obtain further significant major orders until the end of 2024. Furthermore, the availability and maintenance of the committed € 20.0 million CNBM financing beyond October 2024 and the availability of the € 4.0 million super senior loan. Furthermore, the extension of the working capital credit line of €10.0 million must take place in March 2024 or alternatively be replaced by a shareholder loan from CNBM. In addition, CNBM guarantees to provide the Company with sufficient financial resources to enable the Company to meet its obligations.

In addition, we refer to the explanations of the financial risks in the risk report in connection with the Company's financing.

Outlook for the business years 2024 und 2025

For the year 2024, the company expects a significant increase in sales compared to 2023. The EBIT will also continue to increase, remaining in the low double-digit million range. In the 2025 financial year, the Company expects a significant further increase in sales and EBIT compared to 2024. The EBIT will grow significantly, but will remain in the low double-digit million range.

In order to achieve this forecast, a continuously growing solar market, the successful implementation of the planned major projects with CNBM in China and the conclusion of further significant orders are of crucial importance.

If the actual operating development in the coming months falls significantly short of these expectations, this would have a significant impact on the Company's financial position, including its net assets, financial position and results of operations, up to and including potentially jeopardizing the Company's existence. Detailed information on the business outlook for 2023, 2024 and 2025 and on the key financial figures for

fiscal 2022 according to the annual financial statements prepared in accordance with German GAAP can be found in the section "Annual financial statements prepared in accordance with German GAAP" within this management report.

Sector-specific Forecasts and Outlook for the Business Year 2023

Solar Segment

In terms of sales for the Solar division, a considerable increase is expected for the business year 2023 compared with the prior years. The EBIT is considerably negative due to the short-fall in sales in the years 2021 and 2022. However, in 2023, it should improve substantially and end in a positive, low, single-digit million range.

Life Science Segment

Compared with the prior-year, sales in the Life Science segment increased by around 50 % in the business year 2022. Based on this high level, a significant decline in sales and a break-even result compared with the previous year are therefore expected for the planning year 2023.

Semiconductor Segment

For the planning year 2023, a significant increase in sales is expected, exceeding the level of 2022. EBIT is expected to break even compared with the previous year.

Risks and Opportunities Report

The SINGULUS TECHNOLOGIES Group is subject to a multitude of risks arising from both internal and external factors and are associated with entrepreneurial activity in the operating segments. These risks represent potential threats that could prevent the Group or one of its segments from achieving its objectives.

At the same time, it is of great importance for the SINGULUS TECHNOLOGIES Group to identify and exploit opportunities in order to secure and expand the company's competitiveness. The identification and management of entrepreneurial risks and opportunities is the direct responsibility of the operating segments and departments. In this context, risks and opportunities are not offset against each other.

The following information applies to the parent Company SINGULUS TECHNOLOGIES AG as well as to the SINGULUS TECHNOLOGIES Group. The parent company plays a leading role in opportunity and risk management.

Goals and principles of the risk management

The risk management supports achieving the Company's goals by creating transparency about the risk situation of the Company as the basis for risk-aware decisions, the identification of potential threats to the assets, financial and earnings situation of the Company as well as prioritizing risks and the respective requirements to act. In addition, risk management safeguards the explicit management of risks by respective measures and their monitoring. Furthermore, the risks should be limited to an acceptable level as well as the costs of risks optimized.

Organization of the risk management

For the identification of new risks the risk environment is generally reviewed annually in the course of the Company's planning and new risks for the business development from the Company's perspective within all of SINGULUS TECHNOLOGIES' producing sites as well as sales subsidiaries are discussed. The last review of the risk matrix was performed in July 2023. Due to a weak independence of the subsidiaries their risks are generally directly included within the parent Company. The respective department heads are responsible for the subsequent formulation and implementation of measures to handle risks. The departments Controlling and

Finances support the department heads throughout the individual steps of the risk management process. The risk manager has the method and guideline competence within the Company and coordinates the reporting about the risks within the SINGULUS TECHNOLOGIES Group.

The risk management at SINGULUS TECHNOLOGIES is characterized by the following principles:

- The risk management is primarily implemented by the operating segments in the course of the management duties;
- The risk management must not be limited to financial risks, but must also include all risks associated with the business activities;
- The risk management has to be an integral part of the business processes;
- The precondition for an effective risk management is the clear and unambiguous assignment of tasks and responsibilities and a systematic risk management process;
- Support and active participation on part of the management team;
- Functionality and reliability of the risk management are to be supervised continuously and adjusted, if necessary;
- The risk management system has to be documented in a suitable manner, principles and guidelines of the risk management have to be in written form and communicated to the relevant people;
- Opportunities are not a component of the risk management.

In particular, risk management should make the following contributions:

- to improve the risk awareness and risk transparency;
- to identify, suitably manage and monitor all essential risks;
- to show accumulation of risks;
- to provide reliable management information about the risk situation of the Company.

The Executive Board has the overall responsibility for the implementation of an appropriate and functioning risk management, to safeguard the timely identification and mastering of trends threatening the continuation of the Company.

Risk management organization of the SINGULUS TECHNOLOGIES AG



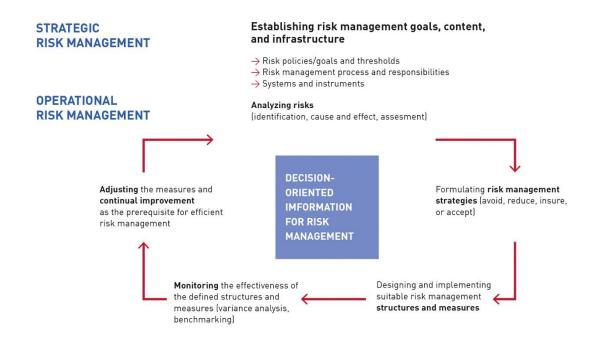
The risk management process in the SINGULUS TECHNOLOGIES Group

Overall, the risk management system is a continuous process according to the business risk management process:

Level 1: Identification of goals, extent and infrastructure

The basis of the strategic risk management process is formed by the alignment of risk policies (including targets and thresholds), the risk management processes and the definition of the required relevant systems and instruments. The original definitions are subsequently amended or modified in the course of a long-term control cycle.

Level 2: Analysis of risks



In a second step risks are initially identified and documented, afterwards analyzed from different perspectives and finally evaluated, if possible. To safeguard a complete risk inventory, a theoretical risk portfolio is applied. The analysis and update is generally performed in the course of the planning processes and for the past business year was performed in the second quarter 2022. On a quarterly basis, a risk reporting is established to document the essential risks.

The evaluation of risks is performed on an ordinal scale. The gross damage is evaluated. This assessment is renewed on a quarterly basis.



The gross damage is defined as the negative earnings impact on the Group's forecast EBIT. The probability of occurrence is the subjective assessment of the probability of the event occurring in the business year. Specifically, a low, medium or high probability is classified. The evaluation is performed on a "gross" basis, i.e. existing controls and measures are not taken into account. The relevant figures for the classification of the gross risk are defined in the following table. Here, the

assumptions with regards to the specific maximum damage (based on the Group's EBIT as well as on shareholders' equity) are derived from long-term historic analysis of the financial results. In addition, the short- and medium-term liquidity risk is continuously monitored.

Relevance	Characteristics	Maximum damage	
		from	to
1	Insignificant risks, not materially impacting EBIT.	€0	€ 0.2 million
2	Medium risks, with a significant impact on EBIT.	€ 0.2 million	€ 1.5 million
3	Significant risks, materially impacting the EBIT and significantly reducing the Company value.	€ 1.5 million	€ 5 million
4	Major risks resulting in a negative EBIT and materially reducing the Company value.	€ 5 million	€ 10 million
5	Continuation-threatening risks, which threaten the continuation of the Company.	> € 10 million	

Subsequently, the probability of occurrence (classification high, medium, low) is estimated for the individual risks.

Level 3: Formulating risk handling strategies

On the basis of risk handling, strategies, specific measures can be derived. The definition of these strategies is made with respect to the overall strategy and the risk preference of the Company. Basically, management has the following alternative for the handling of risks at its disposal:

Eliminate risks

The elimination of risks results in a complete elimination of the risk, e.g. by leaving a risky or unprofitable business.

Reduce risks

The goal of the reduction of risks is to lower the probability of occurrence and/or the impact on the EBIT or the Company's target to an acceptable level,

e.g. by improving the early detection of risks and thus the implementation of counter-measures.

Transfer (insure) risks In case of an insurance / cover the potential damage is transferred to a third party, e.g. with a respective insurance cover.

Bear (accept) risks With the acceptance of risks the direct form of risk financing is carried out by SINGULUS TECHNOLOGIES, e.g. through financial cover via the addition of provisions. The development of the risks is monitored by the involved employees without introducing specific measures for the handling of risks.

Level 4: Design and implementation of appropriate structures and measures

On the basis of the above-formulated risk handling strategy, subsequently the required structures and measures are derived and implemented.

Level 5: Monitoring of efficiency

The implemented measures are regularly monitored and reviewed with respect to their efficiency. In addition, the legal documentation requirements are met.

Level 6: Adjusting the measures and continuous improvement process

The dynamic nature of the environment demands the risk management to be understood as a continuous process. For this reason continuous adjustments of the risk management process to external and internal developments are essential. To enable this, intensive knowledge management is still necessary. The starting point for the risk management process of SINGULUS TECHNOLOGIES is the corporate strategy, on which the definition and communication of the business goals is based.

The review of the risk management systems is performed by impartials, i.e. people who are not directly involved in the management of risks. The Supervisory Board is responsible for the review of the efficiency of the risk management. For this, the Executive Board at least annually informs the Supervisory Board about the current state of the risk management.

Risk Report

Due to the long preparation period, the risk report reflects the assessment of business risks as of October 2023. With regard to the development of material risks, the comparative date of December 31, 2022 is used.

As an internationally operating Company, SINGULUS TECHNOLOGIES continuously monitors the latest developments and analyzes their economic impact. In particular, the current development on the main sales market, China, is closely monitored by management.

Moreover, substantial risks could emerge from the Russia-Ukraine war. The war could negatively impact the sales trend, production processes as well as the procurement and logistics processes, for example, due to interruption of the supply chains or shortages for components as well as raw materials and pre-products. From today's point of view, the increases of commodities and energy prices do not appear to have a major impact on the Company. A majority of the purchase prices are already fixed for ongoing customer projects, for current customer negotiations potential increases of materials can be passed on to the contractual partners to a large extent from today's point of view. So far, there have not been any significant, negative impacts on the Company's main sales markets.

In summary, as of October 2023, the following relevance indicators and probabilities of occurrence were identified for the individual material risk groups compared with December 31, 2022:

October 2023

December 2022

	Relevance*	Probability of occurence	Relevance*	Probability of occurence
Sales market risk in Solar segment	• • • • •	high	• • • •	high
Sales market risk in Life Science segment	• • • • •	high	• • • •	high
Project risks	• • • • •	medium	• • • •	medium
Technology risks	• • • •	medium	• • • •	medium
Financial risks	• • • • •	high	••••	high
Procurement market risks	• • • •	high	• • • •	high

^{*} Measured using relevance indicators from 1 through 5

The following paragraphs explain the risk areas and individual risks, which are able to materially affect the assets, the financial and the earnings position of the SINGULUS TECHNOLOGIES AG and of the Group from today's perspective, on the basis of the overall Group and which could result in a shortfall of the targets.

In addition, risks that are not known today or which are not assessed as being material, could impact the asset, financial and earnings situation of the Company.

Sales market risk

Risk description: The Company is generally subject to global economic cycles and geopolitical risks, which could impact the course of business. In particular, SINGULUS TECHNOLOGIES depends on the willingness of its international customers to invest into new production machines. Drops in demand or misjudgments in terms of the development of markets and products could have negative impacts on the Company's results.

Solar Segment

The market development for photovoltaic installations in the past couple of years relied to a large extent on the regulatory framework and global subsidies for investments in photovoltaic equipment. Even though the dependency of the competitiveness of photovoltaic installations from government subsidies is gradually decreasing due to the reduction in system costs for photovoltaic equipment, the

market for these installations depends on the implementation of national energy policies and on the continuation of public support programs in the future as well. This holds mainly true for the main markets China and the US. In particular due to the enormous importance of China as the driver of growth for the solar industry in the past couple of years, the further development of the regulatory framework conditions and the public subsidy programs in this country pose a substantial risk with respect to the main business activities of the Company. In case the Chinese government repositions its energy policy and with that shift in the solar section in the course of its subsidy programs to other technologies than CIGS, CdTe, HJT or towards other new production processes or no longer implements the expansion of the production capacities to the currently announced extent, this would have material negative effects on the sales of the Company.

Furthermore, investments in the photovoltaics sector could be refrained from in general or partially or to a significantly smaller extent than expected by SINGULUS TECHNOLOGIES, since the solar technology could become less accepted in competition with other methods of electricity generation from renewable energy source in the future or other technologies could develop more favorably than photovoltaics from a technical, economic, regulatory or other reasons.

In the Solar segment the Company is currently engaged in business with a small number of large customers. This holds particularly true with respect to the current large orders as well as the future business relationships with CNBM. The liquidity and earnings situation is accordingly volatile and also dependent on large-volume projects in the short-term. Due to the current customer and project concentration, singular delays, considerable reduction or even a break-up of the respective business activities could have a material impact on the asset, financing and earnings situation. In such a case it will be improbable that the Company will be successful in compensating for the lack of business volume by new customers in the short- or medium-term.

Moreover, the competitive intensity could further increase due to mergers or cooperation of individual competitors or the market entry of new competitors. Increasing competition could result in reduced prices for production machines of the Company or even to a material loss of market share.

Impact: Due to the high importance of this business segment, the market risk in the Solar segment is rated with a relevance score of 5 (December 31, 2022: 5). Management expects sustained high sales in the Solar segment in the next couple of years. Despite the entry into new business areas, this business segment will continue to provide the largest share of sales and earnings contributions in the current business year 2023.

In view of the significant decline in orders in previous years and the ongoing delays in the conclusion of deals for current projects, particularly in the CIGS and CdTe areas, the probability of occurrence was assessed as high (December 31, 2022: high) and the relevance as a going concern risk.

Measures: The Company monitors global market developments on an ongoing basis. This includes ongoing discussions with our customers as well as research institutes. In addition, future projects are continuously coordinated with CNBM. The Company is currently on further planned orders for CIGS and CdTe equipment in 2023 and 2024. Furthermore, the reduction of dependence on the Chinese solar market by diversifying into other markets and applications is targeted.

Life Science Segment

Besides the core segment Solar, the segment Life Science is gaining increasing importance for the further course of business in the next couple of years. The Company expects a significant expansion of the business operations within this segment.

Impact: Due to the further increasing importance of this segment for the key financial results for the Company, the sales market risk for Life Science is rated with a relevance score of 5 (December 31, 2022: 5) as well as with a high probability of occurrence (December 31, 2022: high). If the anticipated order intake in this segment will fall significantly short of expectations in the current business year and the Company will not be successful in winning equivalent alternative projects, this would threaten the continuation of the Company.

Measures: External data such as market research results but also close contacts with our customers as well as monthly reviews of actual and forecast results help to improve the evaluation of future trends at an early stage.

Semiconductor Segment

Due to the low volumes in terms of the realizable sales the Semiconductor segment is not yet viewed as being material.

Project risks

Risk description: According to our definition project risks include orders, which concern non-standardized machines with a sales price usually exceeding € 3.0 million. Specifically, the resulting risks are the exceeding of forecast costs as well as of the project schedule, the failure of acceptance criteria as well as order cancellations and the resulting non-acceptance of machines and the resulting contractual risks.

Impact: If risks materialize in connection with the order processing, they could have a material adverse impact on the business activities in particular in connection with the implementation of larger projects. In particular, the risk of missing the project schedule or project expenses as well as failing to meet the acceptance criteria is viewed as being material. In particular, the work as planned for the delivery of machines for the production of thin-film solar modules for CNBM is of great importance for the continuation of the Company. Following substantial delays, the respective machines in the factory in Bengbu, China, have achieved the final acceptance level. For further production sites the company expects the closure of the projects in close cooperation with the customer in the course of the fiscal year 2023. In addition, the scheduled fulfillment of agreements with a European energy supplier for the supply of wet-chemical equipment is of central importance.

However, we point out that the realization of project risks within these activities would have material negative impacts on the asset, financial and earnings situation of the Company and the group.

In summary, we assess the project risks unchanged with the relevance score of 5 (December 31, 2022: 5). The probability of occurrence is assessed as being medium (December 31, 2022: medium).

Measures: To manage the risks, already in the proposal stage project calculations, project schedules as well as project-specific risk assessments and liquidity forecasts are conducted. With a continuing monitoring of changes in the parameters alongside to the project's progress, potential project risks should be identified at an early stage and necessary measures initiated. To reduce the risk of cancellations, prepayments as well as partial payments according to project progress are routinely agreed.

Financial risks

Risk description:

The SINGULUS TECHNOLOGIES Group is exposed to financial risks in particular with respect to liquidity risks. This includes the default on receivables from customers and, in particular, the failure and delay to make advance payments for new order intake as well as partial payments in connection with the completion of major projects as well as the extension of various debt financing components.

In all segments additional financing agreements could become necessary subject to project-specific requirements. In particular, prepayments made by our customers are secured with guarantee pledges on a project-by-project basis. For this, according to agreements with creditors the Company has to deposit a high share of liquid funds as guarantees. This guarantee pledge is not at the Company's disposal for the financing of working capital and could result in liquidity squeezes subject to the course of the projects.

The SINGULUS TECHNOLOGIES Group is highly dependent on the future development of the business activities with a few large customers with regard to the achievement of the expected financial ratios as well as the further liquidity development. Sufficient liquidity of the Company and the Group until the end of 2024 from preparation can only be maintained if the planning can be realized until the end of 2024 from preparation. A key prerequisite in the planning is that the partial payments to be made on the basis of the major orders already contracted with CNBM are actually made or not materially delayed. In addition, it is necessary to obtain further significant major orders until the end of 2024. Furthermore, the availability and maintenance of the committed € 20.0 million CNBM financing beyond October 2024 and the availability of the € 4.0 million super senior loan must be guaranteed. Furthermore, the extension of the working capital credit line of €10.0 million must take place in March 2024 or alternatively be replaced by a shareholder loan from CNBM.

The Executive Board expects with a high degree of probability that the partial payments to be made will be received as scheduled and that further major orders will be signed. In the view of the Executive Board, it is largely probable that the company

will be financed through until the end of 2024 on the basis of the current corporate planning.

These events and circumstances indicate that there are material uncertainties, which can raise doubts as to the ability of the Company and the Group to continue to operate as a going concern within the meaning of Art. 322 Para. 2 Sent. 3 HGB. Accordingly, the SINGULUS TECHNOLOGIES Group might not be able to realize its assets as well as to cover its liabilities during the regular course of its operations.

Impact: Currently, we still rate the liquidity risk unchanged with a relevance score of 5 (December 31, 2022: 5) and the credit risk with a relevance score of 3 (December 31, 2022: 3). Despite the receipt of additional partial payments by the customer CNBM during the reporting and preparation period, the provision of liquid funds in the amount of € 20.0 million, the successful agreement over a working capital credit line in the amount of € 10.0 million, we rate the probability of occurrence of the liquidity risk as high (December 19, 2022: high). In particular, the timely receipt of contractually agreed payments by the customer CNBM as well as the assignment of additional large projects are required. Material delays in payments or credit losses within these major projects could not be compensated for.

We rate the probability of occurrence of the default risk as low (December 31, 2022: low).

Measures: In order to ensure the solvency as well as the financial flexibility of the SINGULUS TECHNOLOGIES Group at all times, a liquidity reserve in the form of cash is maintained. In order to identify liquidity risks at an early stage, liquidity plans are regularly prepared and compared with the actual development.

At present, the Company finances itself mainly through advance payments from the contracted projects as well as various debt financing instruments.

Until the end of fiscal year 2022, the Company received advance payments totaling € 121.0 million for large CIGS/CdTe projects of the customer CNBM. Furthermore, the granting of new surety bonds with significantly reduced security deposits is currently being negotiated.

Furthermore, the Company is currently making use of the following debt financing instruments:

Financing component	Nominal value	Maturity
Corporate bond	€ 12.0 million	July 22, 2026 (repayment date)
Super Senior Loan in accordance with the terms of the bond	€ 4.0 million	December 31, 2024 (Drawing of 1st tranche in the amount of € 2.0 million in June 2023)
Working capital facility	€ 10.0 million	April 2024
CNBM financing	€ 20.0 million	1 st tranche: August 2, 2024 2 nd tranche: October 3, 2024

In connection with the corporate bond with a nominal volume of €12.0 million, the second creditors' meeting was held as a face-to-face meeting of bondholders in Frankfurt am Main on May 6, 2021. With a quorum of 34.37 %, a resolution was passed to extend the term of the bond by a further five years to July 22, 2026 and to reduce the current interest rate from an average of 6.7 % to 4.5 %. The repayment amount was increased to 105.0 % in this connection. The increased repayment amount is also applicable in the event of early repayment. The new bond terms came into effect on July 13, 2021.

In addition, the creditors' meeting approved further amendments to the bond terms by more than 99.72 % by resolution on May 30, 2023. These include, among other things, a temporary waiver by the bondholders of possible cancellation rights due to the failure to publish the audited financial statements for 2022 for 15 months from publication of the resolutions (June 2, 2023).

In addition, a loan of € 4.0 million is available to the Company in accordance with the bond terms and conditions. The term of the loan ends December 31,2024. In May 2023, the Company drew down the first tranche of €2.0 million.

Since May 2022, the Company has had access to a working capital credit line in the amount of € 10.0 million. The repayment of the loan is guaranteed by CNBM. The term of the agreement was initially twelve months and was extended for an additional

twelve months to March 2024 effective April 2023. An extension of the working capital credit line until March 2025 is guaranteed by CNBM. In addition, the Chinese state-owned group guarantees to provide the Company with sufficient financial resources to enable it to meet its obligations.

To secure the continued existence of the Company and thus of the Group, the Company signed an agreement with to provide liquid funds in the amount of \in 20.0 million effective February 3, 2023. In return, the Company granted various options relating to rights in connection with know-how in the field of CdTe-technology. The total volume flowed to the Company in two tranches in March in the amount of \in 9.6 million and in early April 2023 in the amount of \in 10.4 million. Both tranches have a maturity of at least 18 months, but the disbursed funds have to be repaid in full or in part only upon request of the lender. The Company also has the option to repay the funds in part or in full at any time. However, they cannot be drawn down again.

In order to analyze the default risk, the receivables portfolios of the individual companies in the SINGULUS TECHNOLOGIES Group are examined at close intervals. We use export credit insurance as the main instrument to hedge against payment defaults by foreign customers. The creditworthiness and payment behavior of customers are constantly monitored and corresponding credit limits are set. In addition, risks are limited as far as possible in individual cases by credit insurance and bank guarantees.

Technology risk

Risk description: The SINGULUS TECHNOLOGIES Group is operating in competitive markets. If the further or new development of products leads to erroneous trends, this could result in substantial costs.

Impact: We are currently assessing the risk of faulty or delayed development with a relevance score of 4 (December 31, 2022: 4) and an unchanged medium probability of occurrence.

Measures: A key aspect of the review of the technology risks is the analysis of market requirements. We reduce the risk of faulty or delayed developments through the cooperation with partners, research institutes and a continuous evaluation process, which continuously reviews the efficiency, opportunities and general conditions of the development projects. An essential part of this is the monitoring of the planning of the different development projects. For all capitalized development expenses not deemed recoverable, the required write-offs are incurred. The analysis of success probabilities as well as the identification and seizing of these opportunities, which safeguards the competitiveness of the Company and increases it, is therefore an essential aspect of the strategic planning.

Procurement market risks

Risk description: The availability, unexpected price increases and inadequate quality of procured components pose a risk for SINGULUS TECHNOLOGIES. An additional risk is the build-up of excessive inventories.

Impact: We rate the inventory risk with respect to the level of inventories currently unchanged to the previous year with a relevance score of 3 (December 31, 2022: 3) und still assess the probability of occurrence as being low (previous year: low). From today's point of view, we overall expect this to sufficiently cover the inventory risks through the recognition of balance sheet write-offs. The risk with respect to availability, quality and price increase of procurement parts is assessed with a relevance score of 4 (December 31, 2022: 4) at the end of the business year, the probability of occurrence is assessed unchanged to be high. In the short- and medium term we anticipate price increases for stainless steel and plastics from

current contract negotiations and from the analysis of market expectations. Due to the global supply chain distortions, the average backlog rate and the number of quality complaints over the course of the year were mainly above the target range.

Measures: The deliverability as well as the fulfilling of our quality requirements for supplied parts is constantly monitored. The Company is constantly analyzing the impacts from the Russia-Ukraine war. A further part of the risk management is performed through inventory management. This area includes regular frequency and reach analyses of goods and procurement parts. To avoid unexpected price increases contracts either long-term contracts are concluded with suppliers or backup suppliers are established.

Compliance risks

Risk description: As on internationally operating Company the SINGULUS TECHNOLOGIES Group is exposed to a multitude of legal, tax and regulatory risks in addition to the operating and financial risks. In particular they include risks from the fields of product liability, patent rights and corporate laws. The outcome of legal disputes as well as legal proceedings could inflict substantial harm to the reputation and the business activities of the Company or could at least incur high expenses.

In addition, the disregard of laws, regulatory requirements and referenced guidelines could have serious negative impacts, such as for example reputation damage or punitive payments, for the Company. This includes, for example, risks in connection with corruption as well as violations of export regulations.

Impact: Compliance violations could result in legal proceedings. The outcome of legal proceedings is uncertain and can result in material economic consequences. These could possibly not be covered or not to the full extent be covered by insurances and will thus have an impact on our business operations as well as the corresponding financial results.

There are currently no material ongoing legal proceedings against the SINGULUS TECHNOLOGIES AG and no significant compliance violations are known. The impact of compliance violations is rated with a relevance score of 3 (December 31, 2022: 3), the probability of occurrence is still assessed as being low.

Measures: Legal risks are identified using a systematic approach and attended to with the help of external lawyers.

The SINGULUS TECHNOLOGIES Group has established a group-wide Code of Conduct and a whistleblower system to prevent possible violations of laws. This code is intended to provide employees with specific rules of conduct in various situations. An additional measure to prevent compliance violations are individual employee trainings with respect to specific issues of various legal regulations.

Opportunities Report

SINGULUS TECHNOLOGIES addresses the global market for machines and systems for the manufacturing of solar cells. In the area of thin-film solar technology (CIGS & CdTe) the focus is mainly on the further expansion plans of the Chinese company CNBM. CNBM plans to set up a production capacity of 6 GW in total for CIGS at several sites in China in the medium- and long-term. Also for the manufacturing of CdTe solar, SINGULUS TECHNOLOGIES is in project talks with CNBM regarding follow-up orders for additional production machines. The set-up of the CIGS factories in the cities Meishan and Xuzhou has been further delayed in the previous years due to the COVID-19 pandemic and is now scheduled for 2023 and 2024. The fourth site is intended to be in the city of Weihai according to information provided. It is expected to once again achieve rising sales and positive earnings in the Solar segment in the future with the machines for the thin-film solar technology.

In the market for HJT solar cells new projects were announced internationally, for which SINGULUS TECHNOLOGIES is in talks with the several potential customers. In various regions in Europe, such as Italy, France and in several Eastern European countries, the expansion and set-up of production capacities for HJT solar cells is also discussed. For this cell technology the Company expects that next to the production line SILEX II, also the GENERIS PVD will be marketable.

For the business year 2023 as well as for the coming years, SINGULUS TECHNOLOGIES sees good opportunities for the realization of new major projects in both segments: crystalline HJT and thin-film solar technology.

In the Life Science segment, in the future, in addition to machines from the wetchemical area also vacuum coating machines and complete production lines for the treatment of surfaces are expected to increase sales. The market opportunities in the work area Decorative Coatings are further supported by the environmental friendliness and the sustainability of the process as well as the advantage of potential cost savings in the production of the components. For the wet-chemical cleaning machines in Medical Technology, SINGULUS TECHNOLOGIES focuses mainly on the market for contact lenses and analyzes opportunities to develop new application areas in the future.

With the existing range of machines for the semiconductor technology, projects for the development of new applications are addressed. The Company sees good opportunities here to sell TIMARIS and ROTARIS machines. There is also the opportunity to win new customers on the basis of the machine for the manufacturing of 300 mm semiconductor wafers presented in 2020. Furthermore, SINGULUS TECHNOLOGIES intends to develop additional niche markets in the coming years, which can be addressed on the basis of the existing machine portfolio. The goal is to develop coating systems with leading customers, which enable new applications and to develop these markets for SINGULUS TECHNOLOGIES.

In addition to the established application areas for the existing machine platform, SINGULUS TECHNOLOGIES has extensively been reviewing opportunities offered by the coating of electrodes and bipolar plates. The mega-trend green hydrogen and its use by fuel cells will bring a great demand for innovative coatings and production equipment. Based on the existing product platforms, SINGULUS TECHNOLOGIES is addressing solutions with industry partners for serving the rapidly growing markets with corresponding production solutions.

Summary of risks and opportunities

The project and the sales market risks for the Solar and Life Science segments as well as the liquidity risk are the material risks within the Group from today's point of view.

The Solar division is expected to provide the largest proportion of sales and earnings contributions in the current business year. Against the background of establishing new business areas, the development of the solar market remains a critical criterion for the future continuation of the Company. In addition, the Company anticipates medium-term a significant increase in the business activities in the Life Science segment. If the forecast sales for these segments will not materialize in the coming years, this would have negative impacts on the financial and earnings situation of SINGULUS TECHNOLOGIES. Besides the core segment Solar, the segment Life Science is gaining increasing importance for the further course of business in the next couple of years.

If the risk of the order completion of current and future large projects materializes, this could have material negative impacts on the overall business operations of the Company.

The Executive Board expects with a high degree of probability that the partial payments to be made will be received as scheduled and that further major orders will be signed. In the view of the Executive Board, it is largely probable that the company will be fully financed by the end of 2024 on the basis of current corporate planning.

These events and circumstances indicate that there are material uncertainties, which can raise doubts as to the ability of the Company and the Group to continue to operate as a going concern within the meaning of Art. 322 Para. 2 Sent. 3 HGB. Accordingly, the SINGULUS TECHNOLOGIES Group might not be able to realize its assets as well as to cover its liabilities during the regular course of its operations.

Environment and Sustainability¹

Responsible and sustainable corporate governance is very important to the SINGULUS TECHNOLOGIES AG. The Executive Board and Supervisory Board attach great importance to the long-term management and control of the company. The principles of good corporate management, also known as corporate governance, ensure that the Executive Board and Supervisory Board work together in a targeted and efficient manner, respect the interests of shareholders and employees, deal appropriately with risks, act transparently and assume responsibility in all business decisions.

With its products for the solar technology SINGULUS TECHNOLOGIES actively works on the introduction and establishment of environmentally-friendly energy generation. The company is continuously working to improve its products to meet the principles of sustainability and reduce energy consumption during operation. Sustainable thinking is already in focus during the design of the equipment. In addition, the recycling of consumables is a matter of course in the company.

SINGULUS TECHNOLOGIES has installed an energy management system and follows certain rules:

- Energy consumption is systematically assessed.
- Energy flows are recorded and kept up to date.
- Measures to save energy are planned and implemented.
- Planned activities to improve energy efficiency are continuously updated.
- The Executive Board publishes the energy management targets.

To implement the energy policy, an energy management officer monitors and controls the development. All strategic and operational objectives as well as required measures are defined in an energy management manual to ensure corporate due diligence.

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¹ Unaudited statements

In 2022, total energy consummation at the sites in Kahl am Main and in Fürstenfeldbruck amounted to approximately 6.1 GWh and therefore at the same level as the year before. This number includes electricity and gas consumption. Part of the energy consumed was generated by the company's own photovoltaic system at the Fürstenfeldbruck site. At both sites, the hall and outdoor lighting was converted to modern and efficient LED lamps.

SINGULUS TECHNOLOGIES regards sustainability as an opportunity to position itself with innovative products that follow this spirit.

The focus is on the following areas:

- Environmental awareness
- Conservation of resources
- Avoidance of unnecessary CO₂ pollution

TAKEOVER-RELEVANT DISCLOSURES PURSUANT TO ARTICLES 289a Sent. 1, 315a Sent. 1 HGB AND EXPLANATORY REPORT

1. Composition of the subscribed capital

As of December 31, 2022 the nominal capital of the SINGULUS TECHNOLOGIES AG amounted to € 8,896,527.00, divided into 8,896,527 bearer shares with a nominal value of € 1.00 each. The nominal capital has been completely paid. There are not different types of shares; all shares are common shares. All shares entitle to the same rights and duties. Each share has one vote and the same share to profits. The rights and duties from the shares result from the legal regulations. A claim of the shareholders of physical delivery of the shares has been excluded pursuant to Art. 6.4 of the articles of incorporation of the Company. In case of a capital increase the profit sharing of new shares can be determined pursuant to Art. 6.5 of the articles of incorporation of the Company, dissenting from Art. 60 AktG.

2. Restrictions concerning the voting rights or transfer of shares

Generally there are not restrictions concerning the voting rights or the transferability of the shares of the Company. All shares of the Company are unrestricted to be traded pursuant to the legal regulation governing the bearer unit shares.

Direct or indirect ownership of the capital exceeding 10 % of the voting rights

Pursuant to the German Securities Trading Act (WpHG) investors are obligated to report to the Company any direct or indirect voting right thresholds gained through purchases, sales or in different manners pursuant to Art. 33 WpHG to a stock-listed Company.

As of the balance sheet date December 31, 2022, the Company was only informed that the Triumph Science and Technology Group Co., Ltd. ("Triumph") directly or directly held more than 10 % of the voting rights of the SINGULUS TECHNOLOGIES AG amounting to 16.75 % of the voting rights. The voting rights held by Triumph are attributed to the following notifying parties: People's Republic of China and China National Building Material Group Co., Ltd. ("CNBM"),

4. Shares with special rights granting controlling authority

There are no shares with special rights granting controlling authority.

5. Type of voting right monitoring if employees hold capital of the Company and do not directly exercise the monitoring rights

There are no investments of employees in the capital of the Company where the employees do not directly exercise their monitoring rights.

6. Appointment and dismissal of members of the Executive Board; changes in the articles of incorporation

The appointments and dismissals of members of the Executive Board are performed in adherence to the regulation of Art. 84, 85 AktG. Accordingly, members of the Executive Board are appointed by the Supervisory Board with a maximum term of five years. A repeated appointment or extension of the tenure is only authorized for a maximum of five years. Pursuant to Art. 7.1 of the articles of incorporation of the Company the Executive Board of the Company is comprised of at least two members. Furthermore, the Supervisory Board determines the number of members of the Executive Board. Pursuant to Art. 84 AktG and Art. 7.1 of the articles of incorporation of the Company, the Supervisory Board can appoint a Chairperson of the Executive Board as well as a Deputy Chairperson of the Executive Board. Pursuant to Art. 7.1. of the articles of incorporation, deputy members of the Executive Board can be appointed.

Pursuant to Art. 179 Para. 1 Sent. 1 AktG, the amendment of the articles of incorporation of the Company is effected by resolution of the Annual General Meeting. Pursuant to Art. 179 Para. 2 AktG, resolutions of the Annual General Meeting regarding changes of the bylaws require the capital majority representing at least three fourths of the nominal capital present at the resolution, if the articles of incorporation do no set out a different majority vote. Pursuant to Art. 15.2 of the articles of incorporation of the Company, in cases where the legal regulations require a majority of the nominal capital present during the time of the resolution and the law does not explicitly require a qualified majority, the simple majority of the nominal capital present is sufficient. Pursuant to Art. 5.2. and Art. 17.1, the Supervisory Board

is authorized to resolve changes of the bylaws only affecting amendments. This also holds true for the amendment of the bylaws due to a change in the nominal capital.

7. Authorization of the Executive Board to issue and buy-back shares

7.1. Authorized capital

By resolution of the Annual General Meeting on July 19, 2023, the Executive Board was authorized, with the approval of the Supervisory Board, to increase the Company's share capital on one or more occasions on or before July 18, 2028 by up to a total of €4,448,263.00 against cash and/or non-cash contributions by issuing up to 4,448,263 new bearer shares with a nominal value of €1.00 (Authorized Capital 2023/I). In principle, shareholders are to be granted subscription rights. At the same time, the existing Capital 2018/I was cancelled.

The new shares may also be underwritten by one or more banks with the obligation to offer them to the shareholders for subscription (indirect subscription right). However, the Executive Board is authorized, with the approval of the Supervisory Board, to exclude shareholders' subscription rights in whole or in part in the following cases:

(1) to the extent necessary to offset fractional amounts: (2) to the extent necessary to grant holders or creditors of option rights or convertible bonds or profit participation rights that have been or will be issued by SINGULUS TECHNOLOGIES AG or its subordinated consolidated companies, a conversion or subscription right for new shares to the extent, such as it would be due to them after exercising the option or conversion rights or after exercising stock delivery rights or after fulfilling conversion or option obligations; (3) for capital increases against contributions in kind, in particular for the acquisition of companies, parts of companies or investments in companies: (4) if the new shares are issued against cash contributions at an issue price that is not significantly lower than the stock exchange price of shares in the company within the meaning of Art. 186 Para. 3 Sent. 4 AktG and the proportionate amount of the shares issued according to Art. 186 Para. 3 Sent. 4 AktG with exclusion of subscription rights in the company's share capital of the Company's share capital does not exceed ten of a hundred (10 %) of the share capital at the time

this authorization is entered in the Commercial Register or - if this amount is lower - at the time the authorization is exercised;

(5) as far as it is necessary to avoid the obligation to publish a prospectus, that results from the issue of new shares against cash contributions, provided (i) the new shares are issued at an issue price that is not materially lower than the share price of the company within the meaning of Art. 186 Para. 3 Sent. 4 AktG, (ii) the proceeds from these new shares issued are used to redeem financial liabilities, e.g. the bond of SINGULUS TECHNOLOGIES Aktiengesellschaft with WKN A2AA5H (ISIN: DE000A2AA5H5), and (iii) the pro rata amount of the new shares in the company's share capital issued with the exclusion of subscription rights does not exceed twenty out of a hundred (20 %) of the share capital at the time this authorization is entered in the commercial register or - if this amount is lower - at the time when the authorization is exercised. The two aforementioned limitations of 10 % and 20 %, respectively, includes the shares, which have been issued by the company during the term of the authorization under exclusion of the subscription rights pursuant or corresponding to Art. 186 Para. 3 Sent. 4 AktG in the course of a cash capital increase or which have been sold after a buyback. Shares are also to offset against the 10 % or 20 % limit, with respect to those based on option or convertible bonds or profit participation rights, which during the term of this authorization under the exclusion of subscription rights pursuant to Art. 221 Para. 4 Sent. 2 in conjunction with Art. 186 Para. 3 Sent. 4 AktG have been issued by the Company or its subordinated consolidated companies, there is an option or conversion right, a conversions of option obligation or a stock delivery right in favor of the Company.

The Executive Board was also authorized, with the approval of the Supervisory Board, to determine the further details of the implementation of capital increases from the Authorized Capital 2023/I.

7.2. Conditional capital

The nominal capital of the Company is conditionally increased by up to € 4,448,263.00 through the issuance of up to 4,448,263 bearer shares with a nominal capital of € 1.00 each (Authorized Capital 2020/I). The conditional capital increase will only be performed if the bearers of option or conversion rights or the parties

obligated to convert or exercise options due to options or convertible bonds, which are issued or guaranteed pursuant to the authorization from the Annual General Meeting on May 20, 2020 under Agenda Item 5 by the SINGULUS TECHNOLOGIES AG or a Group Company of the SINGULUS TECHNOLOGIES AG in the meaning of Art. 18 AktG, which the SINGULUS TECHNOLOGIES AG directly or indirectly holds at least 90 %, or if the SINGULUS TECHNOLOGIES AG exercises a right to completely or partly issue common shares of the SINGULUS TECHNOLOGIES AG instead of the payment of the amount due. The conditional capital increase is not implemented if a cash compensation is granted or own shares or shares from authorized capital or of a different stock-listed Company are used for the payment.

7.3. Share buyback authorization

There are not authorizations for the Executive Board to buy back shares of the Company.

8. Material agreements of the Company subject to a change-in-control due to a takeover offer and resulting effects

Pursuant to the terms and conditions of the corporate bond issued by the SINGULUS TECHNOLOGIES AG in July 2016 with a total nominal value of € 12,000,000.00, in the case of a change in control, bondholders are entitled to terminate their bonds and request the immediate repayment or, subject to the Company's discretion, to request the purchase by the Company or a third party at a price of € 105.00 per bond in addition to accrued interest.

The bondholders have to exercise the put-option within a period of time ("put exercise period") of 30 days after the notification about the change in control was published. However, an exercise of the put only becomes effective, if, within the put exercise period, the Company receives put exercise declarations from bondholders with an overall amount of at least 25 % of the total nominal capital of at that time still outstanding bonds. A change in control is present if the following event take place: (i) the Company is notified that a party or cooperating parties in the meaning of Art. 2 Para 5 German Securities Acquisition and Takeover Act (WpÜG) is or are the legal or economic owner(s) (directly or indirectly) of more than 30 % of the voting rights of the Company; or (ii) the merger of the Company with a party or to a third party or the

merger of a third party with or to the Company, excluding in connection with legal actions, as a consequence the owner of 100% of the voting rights of the Company hold at least the majority of the voting rights of the surviving entity directly after such a merger.

9. Compensation agreement of the Company made with the members of the Executive Board or employees in case of a takeover offer

SINGULUS TECHNOLOGIES AG's Executive Board contracts historically contained a change of control clause. According to this clause, in the event of a change of control, members of the Company's Executive Board have a special right of termination, which entitles them to terminate their employment relationship for cause at any time within a period of one year after the change of control with six months' notice. If the special termination right is exercised, the Executive Board member is entitled to a special payment equal to the sum of (i) the last fixed salary paid for three years, (ii) the sum of the variable compensation (bonuses) paid for the last three years, and (iii) the addition to the pension plan for three years. An entitlement to special compensation only exists if the service contract still has a remaining term of more than nine months at the time of the change of control. The same applies in the event of leave of absence or termination of the service contract by the Company following a change of control.

The Company concluded a new employment contract with Dr.-Ing. Stefan Rinck August 2022. According to the recommendation of the GCGC this new contract does not include procedures in the case of a change-in-control. Accordingly, the abovementioned proceedings only apply to Dipl.-Oec. Markus Ehret, whose contract expires in March 2024.

The compensation system approved by the Annual General Meeting on July 19, 2023 stipulates that future Executive Board member contracts should not include any change-in-control provision anymore.

A detailed description is included in the Compensation Report 2022 which is available on the homepage of SINGULUS TECHNOLOIES AG.

Financial Accounts pursuant to HGB

The consumption of more than half of the nominal capital pursuant to HGB was incurred in the business year 2017 and was reported on September 21, 2017. The extraordinary shareholders' meeting was convened on November 29, 2017. In the course of the extraordinary general meetings on October 29, 2021 as well as July 19, 2023, pursuant to Art. 92 Para. 1 AktG the Executive Board again reported on the loss of the nominal capital pursuant to HGB of the parent Company. The background to the depletion of shareholders' equity was presented, which was mainly due to the timing of revenue recognition pursuant to HGB and IFRS and the operating losses resulting from the underutilization of the organization in recent years. As of December 31, 2022 the losses not covered by shareholders' equity amounted to € - 115.6 million (previous year: € -103.8 million).

The development of the shareholders' capital pursuant to commercial law depends in particular on the remaining acceptances for machines in the factory in Meishan, China, as well as the work and acceptances of additional, major projects in the segments Solar and Life Science. In addition, in the long-term, the planned development of further future major projects in the coming years is required. The delays in the commissioning of the first two CIGS factory of the customer CNBM as well as the postponement of additional, significant projects in the past business years materially contributed to the fact that a recovery in shareholders' equity has not yet been achieved. However, the Executive Board expects the shareholders' equity to return to a positive balance in the long-term. Moreover, the Executive Board is currently reviewing additional measures to strengthen the shareholders' equity.

For information on the risks and measures relating to the continued existence of the Company as a going concern, please refer to the Risk Report.

Asset, financial and earnings of the SINGULUS TECHNOLOGIES AG Financial Accounts pursuant to HGB (€ million)

	2022	2021
Sales	47.0	43.2
Total output	67.7	54.5
Cost of goods sold	-45.9	-34.1
Personnel expenses	-30.6	-26.5
Balance of operating income and expenses	1.0	-11.9
Net loss	-11.8	-21.8
Fixed assets	12.7	14.2
Current assets (excluding bank deposits)	5.2	4.0
Bank deposit thereof restricted	16.7 3.8	26.9 15.1
Loss exceeding shareholders' equity	-115.6	-103.8
Provisions	26.6	23.1
Bonds	12.6	12.6
Other liabilities	111.7	113.8

In the following, the effects with a material impact on the assets, liabilities, financial situation and the earnings in the previous business year are discussed.

Overall, the company achieved sales in the amount of € 47.0 million in the year under review (previous year: € 43.2 million). Sales in the Solar segment amounted to € 17.0 million compared with € 29.3 million in the previous year. In the Life Science division sales at € 28.2 million also remained below the prior-year level (previous year: € 11.1 million). Within the Semiconductor division sales amounted to € 1.8 million (previous year: € 2.6 million).

In contrast, the total output (sales plus changes in inventory and own work capitalized) increased slightly to € 67.6 million (previous year: € 54.5 million).

Other operating income of € 15.5 million (previous year: € 2.5 million) mainly includes the proceeds from the sale of the building in Fürstenfeldbruck amounting to € 9.3 million.

The material expenses increased from € 34.1 million to € 45.9 million. The cost of materials ratio (cost of materials / total output) was 67.8 % (previous year: 62.6 %). The slight increase in the cost of materials ratio is mainly due to lower margins on processed customer orders in connection with higher purchase prices.

Personnel expenses in the amount of € 30.6 million (previous year: € 26.5 million) were higher than the prior-year level. The previous year mainly included positive effects from the reimbursement of salaries in the course of the short-term labor program applied for on April 1, 2020. In the past business year the SINGULUS TECHNOLOGIES AG employed 312 permanent employees based on an annual average (previous year: 317).

At € 14.5 million, other operating expenses are on a par with the previous year (€ 14.4 million) and largely comprise legal, consulting and annual financial statement costs (€ 3.1 million, previous year: € 4.0 million), occupancy and building costs (€ 3.0 million, previous year: € 3.0 million), expenses for write-downs of receivables and sales commissions to affiliated companies (€ 1.9 million, previous year: € 1.7 million), transport and packaging costs (€ 1.4 million, previous year: € 1.7 million). €), expenses from write-downs of receivables and sales commissions to affiliated companies (€ 1.9 million, previous year: € 1.7 million), costs of transport and packaging (€ 1.4 million, previous year: € 1.2 million), travel expenses (€ 0.7 million, previous year: € 0.6 million) and other rental expenses (€ 0.3 million). Impairment losses on trade receivables amounted to € 0.0 million (previous year: € 0.0 million).

The net interest result was negative at € -2.3 million (previous year: € -2.7 million). Interest and similar expenses were slightly below the previous year's level at € -2.5 million (previous year: € -2.7 million). Specifically, the interest expenses from affiliated companies amounted to (€ 0.8 million, previous year: € 0.8 million), from bonds issued (€ 0.8 million, previous year: € 0.9 million) and from the working capital credit line (€ 0.1 million). Commitment fees of € 0.3 million were incurred for the

senior secured loan of € 4.0 million refinanced in 2022 (previous year: interest expenses of € 0.3 million).

Overall, a net loss of € -11.7 million (previous year: € -21.7 million) was achieved.

The balance sheet total of the Company came to € 150.9 million as of December 31, 2022, which is above the prior-year level (previous year: € 149.5 million).

The fixed assets accounted for 8.4 % of the balance sheet total and amounted to € 12.7 million as of the balance sheet date (previous year: € 14.2 million). The fixed assets amounted to € 5.1 million (previous year: € 6.7 million). During the year under review, the capitalized Blu-lines, which were rented out and included under rented assets, were sold.

The prepayments received amounting to € 216.5 million (previous year: € 203.5 million) exceeded inventories (€ 131.7 million, previous year: € 112.7 million) at the end of the reporting year. The excess amount is recognized as a liability under liabilities (€ 84.8 million, previous year: € 90.8 million). The advance payments received mainly result from orders in the Solar and Life Science segments.

Trade receivables, which all have a remaining term of up to one year, amount to € 1.3 million as of the balance sheet date and have increased slightly compared to the previous year (€ 1.0 million).

Cash and cash equivalents amounted to € 16.7 million as of December 31, 2022 (previous year: € 26.9 million). Thereof, in the course of collateral management, € 3.8 million overall were transferred to blocked accounts (previous year: € 15.1 million). As of the end of the year under review, the available liquid funds amounted to € 12.9 million (previous year: € 11.8 million).

The shareholders' equity further declined by € 11.8 million in the year under review. Accordingly, as of the end of the year under review the SINGULUS TECHNOLOGIES AG reports losses in the amount of € -115.6 million not covered by shareholders' equity (previous year: € -103.8 million). With regards to the assessment of the Company to the future development of the shareholders' equity

pursuant to HGB please refer to the information provided at the beginning of this chapter.

The debt amounted to € 150.9 million as of December 31, 2022 (previous year: € 149.5 million).

The provisions exceeded the prior-year level and stood at € 26.6 million as of the balance sheet date (previous year: € 23.1 million). The other provisions amounted to € 11.0 million as of December 31, 2022 (previous year: € 8.9 million). This item mainly includes provisions for personnel expenses (€ 6.5 million, previous year: € 4.2 million), provisions for outstanding invoices (€ 1.1 million, previous year: € 0.7 million) and provisions for warranties (€ 0.8 million, previous year: € 1.0 million).

At € 124.3 million, liabilities as of December 31, 2022 were down on the previous year (€ 126.4 million). This figure includes advance payments received. These were offset against inventories. The excess amount is recognized as a liability under liabilities (€ 84.8 million, previous year: € 90.8 million). The bond liability remains unchanged at € 12.6 million. Trade accounts payable decreased from € 13.3 million in the previous year to € 7.5 million as of December 31, 2022.

In addition, there are other liabilities from financing agreements amounting to € 10.0 million (previous year: € 1.3 million). These result in full from taking up the working capital credit line.

Forecast for the business years 2023, 2024 and 2025 of the SINGULUS TECHNOLOGIES AG pursuant to HGB

For the business year 2023 the company forecasts rising sales compared with the previous year. Overall, due to the upcoming final acceptances we project sales for the SINGULUS TECHNOLOGIES AG pursuant to HGB for the business year 2023 within a range from € 125.0 to 135.0 million. This mainly includes the delayed final acceptance of machines for CNBM's major projects. Earnings before taxes are expected to be in the low double-digit million range. Due to the delay of planned major projects and the resulting delay of final acceptances in the segments Solar and Life Science, we forecast a decline in sales for the business year 2024 compared with the business year 2023. The earnings before taxes are forecast to break-even. However, for the business year 2025, we once again project a sharp increase in

sales compared with 2024 due to the extraordinary high number of final acceptances. For the earnings before taxes for 2025 the company expects a significantly positive result in a low, double-digit million range.

Corporate Governance declaration pursuant to Art. 289f and Art. 315d HGB²

The corporate governance declaration pursuant to Art. 289f and Art. 315d HGB as well as the diversity concept with respect to the composition of the management and supervisory boards of the company is included in the corporate governance report and available on the company's website under www.singulus.de/de/investor-relations/corporate-governance.html.

Kahl am Main, October 25, 2023

SINGULUS TECHNOLOGIES AG

The Executive Board

Dr.-Ing. Stefan Rinck Dipl.-Oec. Markus Ehret

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² Unaudited statements

Declaration of the Executive Board pursuant to Art. 297 Para. 2 S. 4, Art. 315 Para. 1 S. 5 HGB

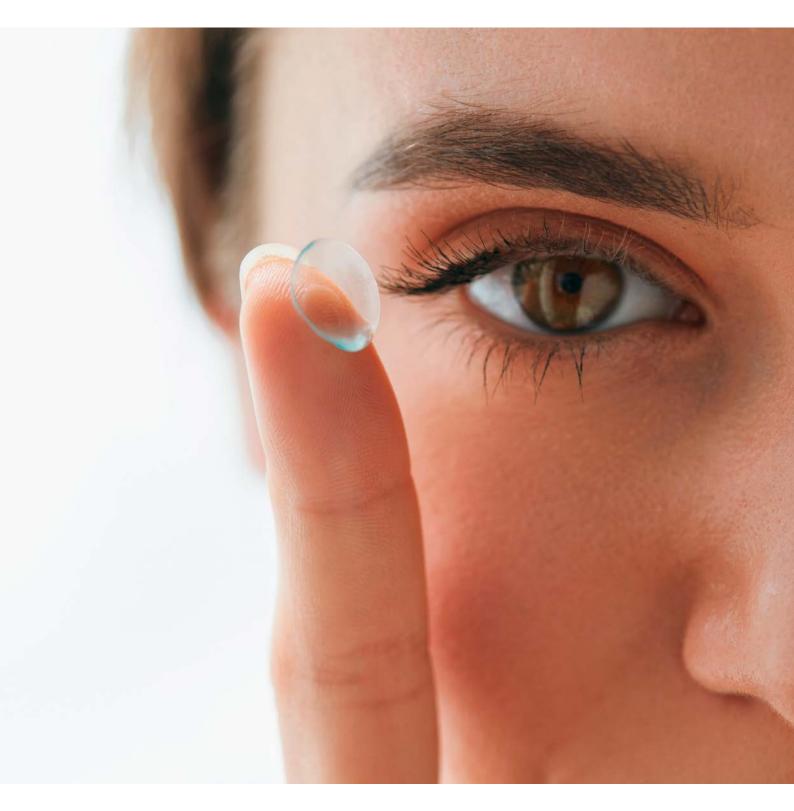
We assert to our best knowledge and belief that pursuant to the applied principles of correct consolidated reporting the consolidated financial accounts pursuant to IFRS reflect the true situation of the asset, financial and earnings situation of the SINGULUS TECHNOLOGIES Group, that the combined status report of the SINGULUS TECHNOLOGIES AG as well as of the SINGULUS TECHNOLOGIES Group depicts the course of business including the business events and the situation of the SINGULUS TECHNOLOGIES Group in a way reflecting the true situation and that the material opportunities and risks of the foreseeable development of the Group have been described.

Kahl am Main, October 25, 2023

SINGULUS TECHNOLOGIES AG

The Executive Board

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Declaration on Corporate Governance pursuant to Art. 289f and 315d HGB including Corporate Governance Report of the SINGULUS TECHNOLOGIES AG

The SINGULUS TECHNOLOGIES AG attaches great importance to a proper and responsible corporate management in compliance with the rules of good corporate governance. The Executive and Supervisory Boards understand this to mean the responsible management and control of the company with a focus on long-term success, which appropriately considers not only long-term economic goals but also ecological and social objectives. Corporate governance is intended to ensure targeted and efficient cooperation between the Executive Board and Supervisory Board, protection of the interests of shareholders and employees, appropriate handling of risks, transparency of opportunities, and responsible corporate decision-making. The Executive Board and Supervisory Board understand corporate governance to be a process integrated into the development of the company which is continuously developed.

For reasons of easier readability, the masculine form is used in this declaration when referring to persons. It stands for persons of any gender.

The corporate governance statement for the financial year 2022 is made in accordance with sections 289f and 315d of the German Commercial Code (HGB) and forms part of the management report. The declaration relates to the date of publication of the management report. Pursuant to Section 317 (2) Sentence 6 HGB, the auditor's review of the disclosures pursuant to Section 289f (2) and (5) HGB and Section 315d HGB is to be limited to whether the disclosures have been made. In accordance with Principles 22 and 23 of the German Corporate Governance Code as amended on April 28, 2022 (the "Code"), the corporate governance statement pursuant to sections 289f and 315d of the German Commercial Code (HGB) as part of the Group management report is the central instrument for informing shareholders about the corporate governance of the Company.

1. Declaration of Conformity for the Business Year 2022 of the SINGULUS TECHNOLOGIES AG to the German Corporate Governance Code pursuant to Art. 161 AktG

Since the submission of the last declaration of compliance in June 2022, the SINGULUS TECHNOLOGIES AG has complied with all recommendations of the German Corporate Governance Code in the version of December 16, 2019 with the exceptions mentioned below and will comply with all recommendations and principles of the German Corporate Governance Code in the version of April 28, 2022 in the future with the exception of recommendations B. 5, D.2, D.3, D.4, D.10 as well as principles 14 and 15.

The Executive and Supervisory Boards of the SINGULUS TECHNOLOGIES AG have adopted the following declaration pursuant to Art. 161 Para. 1 AktG, which was published on the company's website at https://www.singulus.com/de/corporate-governance/ in May 2023:

- 1. The last declaration of compliance was issued in June 2022. Since that date, SINGULUS TECHNOLOGIES AG (the "Company") has complied with the recommendations of the Government Commission on the German Corporate Governance Code in the Code version dated December 16, 2019 ("GCGC 2019") except for the following deviations:
 - a) According to Recommendation F.2, the consolidated financial statements and the group management report should be publicly accessible within 90 days of the end of the financial year. The consolidated financial statements and group management reports for the 2020 and 2021 financial years could not be published until April 20, 2023, because the auditor issued the audit certificate only after new financing agreements had been concluded and new contracts awarded due to doubts about the going concern forecast.
 - b) The consolidated financial statements and the group management report for the financial year 2022 will also not be submitted within the period of 90 days in accordance with recommendation F.2. The Company must change its auditor due to statutory rotation requirements. However, the new auditor can only begin its audit work after the consolidated financial statements for 2020 and 2021 have been audited and approved.
 - c) According to recommendation B.5, the Supervisory Board shall set an age limit for members of the Executive Board. The Supervisory Board has not provided for a general age limit but decides on a case-by-case basis when

- making appointments. In August 2022, the Supervisory Board extended the service contract of Dr. Rinck for one year beyond his 65th birthday because the Supervisory Board considered continuity in management to be crucial due to the difficult situation of the Company.
- d) According to recommendations D. 2, D. 3, D. 4, D. 5 GCGC, the Supervisory Board shall form professionally qualified committees. The Supervisory Board of the Company does not form any committees if there is a three-member Supervisory Board, since in the case of a three-member Supervisory Board the tasks of the Supervisory Board can be properly performed in plenary session. In this case, committees are not expected to increase efficiency, improve the handling of complex issues, or enable the Supervisory Board to perform its duties more efficiently or better in connection with accounting, risk management or auditing issues. Stock corporation law also stipulates that Supervisory Board committees with decision-making powers must be composed of at least three Supervisory Board members. Delegation of tasks is not expedient for this reason either.
- e) Recommendation D.11 requires the Audit Committee to regularly review the quality of the audit of the financial statements. The Company does not have an audit committee, but the Supervisory Board carries out the assessment as a whole.
- 2. Except for the deviations explained under section 1 c), d) and e) the SINGULUS TECHNOLOGIES AG will comply with the recommendations of the GCGC 2019 in the future. The Executive and Supervisory Boards expect that the consolidated financial statements and the group management report for the business year 2023 can be submitted within the 90-day period of recommendation F.2.

Kahl am Main, May 2023

Dr.-Ing. Wolfhard Leichnitz (Chairman of the Supervisory Board)

Dr. rer. pol. Silke Landwehrmann (Vice Chairwoman of the Supervisory Board)

Dr. rer. nat. Rolf Blessing (Member of the Supervisory Board)

Dr.-Ing. Stefan Rinck (Chairman of the Executive Board)

Dipl.-Oec. Markus Ehret (Member of the Executive Board)

2. Relevant disclosures on corporate governance practices

2.1 Management Structure

As a German stock corporation, the SINGULUS TECHNOLOGIES AG is subject to German stock corporation law and therefore has a two-tier management and control structure consisting of the Executive and Supervisory Boards. The Executive Board manages the business and is responsible for corporate strategy, accounting, finance, and planning. It is advised and monitored by the Supervisory Board.

The Supervisory Board discusses business development and planning, corporate strategy, and its implementation based on reports from the Executive Board. Major Executive Board decisions such as major acquisitions and financing measures are subject to the approval of the Supervisory Board in accordance with the Executive Board's Rules of Procedure. It commissions the auditor elected by the Annual General Meeting to carry out the audit and receives a report on the audit. Following its own review, the Supervisory Board approves the annual financial statements and the consolidated financial statements.

The Executive Board currently consists of two members and the Supervisory Board of three members. The SINGULUS TECHNOLOGIES AG is not subject to the German Co-Determination Act.

2.2 Risk management

SINGULUS TECHNOLOGIES AG considers efficient and forward-looking risk management to be an important and value-creating task. Risk management is one of the core functions of entrepreneurial activity and a crucial element for the success of our business activities.

Specifically, risk management supports the achievement of the Company's objectives by creating transparency about the Company's risk situation as a basis for risk-conscious decision-making, thus enabling potential threats to the Company's net assets, financial position, and results of operations to be identified and the necessary action to be taken. Risk management enables risks to be controlled and monitored in a targeted manner. In addition, the aim is to limit risks to an acceptable level and optimize risk costs.

The risk management is integrated into the existing organization of the SINGULUS TECHNOLOGIES AG. It does not form an independent structure. The risk management organization of the SINGULUS TECHNOLOGIES AG is supported by the respective department heads, who are assisted by the risk manager as well as the Chief Financial Officer. The Chief Financial Officer coordinates all activities in connection with the risk management of the SINGULUS TECHNOLOGIES AG with the other members of the Executive Board.

The Executive Board and the risk manager report to the Supervisory Board at least once a fiscal year on the status of risk management and planned improvements. The results of the audit of the risk management system by the auditor and the resulting measures are also discussed.

2.3 Code of Ethics

Integrity characterizes the interaction of the SINGULUS TECHNOLOGIES AG with its business partners, employees, shareholders and the public. Respectful, loyal, and fair dealings with each other and with our business partners are essential for the SINGULUS TECHNOLOGIES AG. This fundamental statement is the basis for the self-imposed code of ethics of the SINGULUS TECHNOLOGIES AG, which can be viewed at https://www.singulus.com/de/corporate-governance/. It contains binding internal rules based on high ethical and legal standards. The Code of Ethics focuses on integrity in dealing with business partners, employees, shareholders and the public and is a corporate governance practice applied company-wide. It was adopted by the Executive Board and Supervisory Board in spring 2015 and has since been implemented throughout the Group in several steps. The contents of the Code of Ethics are communicated to various employee groups at regular intervals as part of training programs, some of which are electronic.

The objective of the code of ethics is to inform the employees of the SINGULUS TECHNOLOGIES Group about the most important compliance topics (competition law, corruption, handling conflicts of interest, money laundering, embargo and trade control regulations, data protection, dealing with the media and the public, occupational safety). The Code of Ethics is flanked by an action guideline, which among other things contains rules for the giving and acceptance of gifts, and an action guideline for whistleblowers, which regulates details on the reporting of

misconduct and illegal, immoral, or inappropriate activities within the SINGULUS TECHNOLOGIES Group.

2.4 Compliance Management

For the Executive and Supervisory Boards of the SINGULUS TECHNOLOGIES AG the observance of a comprehensive compliance is an indispensable prerequisite for sustainable economic success. As part of the risk management, compliance risk issues are analyzed and controlled. In this context, quarterly reports are submitted to the Chief Financial Officer and once a year to the Supervisory Board. In addition, reports are submitted directly to the Chief Financial Officer in the event of exceptional circumstances.

In the business year 2022 the compliance guideline was further implemented. The employees of the SINGULUS TECHNOLOGIES AG were regularly trained regarding the Code of Ethics, export control and embargoes, information security, insider trading, trading with information and corruption prevention, among others.

In case of actual or suspected compliance violations, employees can contact their supervisor, the person responsible for compliance or the SINGULUS TECHNOLOGIES ombudsperson, anonymously if desired. There were no incidents in the business year 2022

3. Composition and working methods of the Executive Board and Supervisory Board

3.1 Close cooperation between the Management Board and the Supervisory Board

The Executive Board and Supervisory Board work closely together for the benefit of the Company. The Executive Board reports to the Supervisory Board regularly, promptly, and comprehensively on relevant issues of corporate planning and strategic development, as well as on the course of business and the situation of the Group.

In the business year 2022 the Supervisory Board intensively dealt with the business development of the SINGULUS TECHNOLOGIES AG due to the difficult financial situation. A total of 21 Supervisory Board meetings took place, most of them in the

presence of the Executive Board. In addition, the Chairman of the Supervisory Board was in contact with the Executive Board on an almost weekly basis in order to stay informed about new developments, to discuss current challenges and to keep the Supervisory Board up to date accordingly.

The basis for the Supervisory Board's information and monitoring activities is an ongoing reporting system. Additional written and oral reports by the Executive Board, other employees and the auditors supplement the reporting. In the case of important issues, the Supervisory Board also calls in external consultants to supplement the reporting by the Executive Board. The Chairman of the Supervisory Board also regularly discusses the situation of the Company and its further development with the Executive Board in individual meetings and subsequently reports to the other members of the Supervisory Board. The business situation and liquidity situation are discussed internally by the Supervisory Board and at each Supervisory Board meeting, in some cases also jointly with the Executive Board. The Supervisory Board's rules of procedure stipulate that significant business transactions are subject to approval by the Supervisory Board.

3.2 Composition and working methods of the Executive Board

The Executive Board of the SINGULUS TECHNOLOGIES AG consisted of three members in the business year 2022 until October 31, 2022. Dr. rer. nat. Strahberger resigned from the Executive Board with the expiration of his appointment and service contract. The Supervisory Board believed a reduction of the Executive Board was appropriate due to the difficult situation of the company.

The Executive Board is the management body of the Company. In managing the Company, the Executive Board is bound solely by the interests of the Company and is guided by the goal of sustainably increasing the value of the Company as well as the interests of the shareholders and employees. In addition to long-term economic goals, it also considers ecological and social goals.

The current members of the Executive Board are Dr. Stefan Rinck and Mr. Markus Ehret. Dr. Stefan Rinck has been Chairman of the Executive Board since April 1, 2010, Mr. Markus Ehret has been a member of the Executive Board of the SINGULUS TECHNOLOGIES AG since April 19, 2010. The service agreement and the appointment of Dr. Stefan Rinck was extended on August 16, 2022, until

December 31, 2023. The service agreement and appointment of Mr. Markus Ehret runs until March 20, 2024. Dr. Christian Strahberger was a member of the Executive Board from November 1, 2019, to October 31, 2022.

As Chairman of the Management Board, Dr. Stefan Rinck is responsible for Sales, Technology, Research and Development, Strategy and International Activities and, since the departure of Dr. Strahberger, for Production, Semiconductors and Set-up China Manufacturing. Mr. Markus Ehret is responsible for Finance, Controlling, Investor Relations, Human Resources, ESG and IT and, since the departure of Dr. Strahberger, Purchasing.

3.3 Composition and Functioning of the Supervisory Board

The Supervisory Board of the SINGULUS TECHNOLOGIES AG consists of three members. The Supervisory Board is not co-determined. The cooperation within the Supervisory Board was characterized by efficiency, professional competence, and trust.

The members of the Supervisory Board in the financial year 2022 were Dr. Wolfhard Leichnitz, Dr. Silke Landwehrmann and Dr. Rolf Blessing.

The terms of office of Dr. Leichnitz and Dr. Blessing expired at the end of the Annual General Meeting on July 19, 2023. Dr. Leichnitz stood for re-election and the Annual General Meeting on July 19, 2023, confirmed the election. Dr. Blessing is retiring from the Supervisory Board as planned on expiry of his term of office for reasons of age. Dr. Changfeng Tu was elected as his successor by the same Annual General Meeting. Dr. Tu is a Chinese citizen and currently lives in Düsseldorf. He works as an independent lawyer and investor. In particular, he advises German and Chinese companies on investments in China and Europe. The Supervisory Board expects that the Company will be able to benefit from Dr. Tu's expertise in "investments in China" in the important sales market of China.

In the Rules of Procedure of the Supervisory Board, which are available on the Company's website at www.singulus.de/de/investor-relations/corporate-governance, the Supervisory Board has specified in item 2.3 the expertise and experience that the Supervisory Board should cover in addition to knowledge of the business areas, the competitive situation and the customers of the Company as a whole.

The current members of the Supervisory Board cover the following areas:

		Business areas / Sales structures / Technology	international business experience	Finance / Capital Market / M&A	Risk Management / Compliance	Competence in sustainability issues
Composition of the Supervisor	y Board					
DrIng. Wolfhard Leichnitz (Ch	air)	++	++	++	+	+
Dr. Silke Landwehrmann (Depu	ıty)	0	++	++	++	+
Dr. Changfeng Tu		0	++	++	++	0
		ompeten				

The Supervisory Board has again refrained from forming an audit committee or other committees in the 2022 financial year because, in its opinion, they are unlikely to increase efficiency or improve the handling of complex issues or enable the Supervisory Board to perform its duties more efficiently or better in connection with accounting, risk management or auditing issues. Stock corporation law also stipulates that supervisory board committees with decision-making powers must be composed of at least three supervisory board members. Delegation of tasks is not appropriate for this reason either. In particular, the tasks assigned to the Audit Committee by the Code are performed by the Supervisory Board as a whole.

The Supervisory Board regularly conducts a self-assessment regarding the efficiency of its work and identifies improvements. The Supervisory Board follows the requirements of the Code and regularly assesses how effectively the Supervisory Board performs its duties.

A detailed account of the work of the Supervisory Board in fiscal year 2022 xx.

There were no consultancy or other service or work contracts between members of the Supervisory Board and the Company in the past financial year. Dr. Leichnitz has been a member of the Supervisory Board for more than 12 years and is therefore no longer considered independent of the Company pursuant to Section 12.7 of the Code. The two other members of the Supervisory Board are independent within the meaning of the Code.

According to the by-laws of the Supervisory Board, members of the Supervisory Board shall immediately disclose to the Chairman of the Supervisory Board any potential conflicts of interest, which may arise, for example, due to a consulting or board function with business customers, guarantors, lenders or other business partners of the SINGULUS TECHNOLOGIES AG. No conflicts of interest of Supervisory Board members arose during the reporting period.

3.4 Developments since December 31, 2022, in the composition of the Management Board and Supervisory Board

As already described in section 3.3, Dr. Tu has been a member of the Supervisory Board since the end of the Annual General Meeting on July 19, 2023. He succeeds Dr. Blessing, who stepped down from the Supervisory Board at the end of his term of office.

At its meeting on October 30, 2023, the Supervisory Board resolved to propose to the Annual General Meeting that the Supervisory Board be expanded to four members. The Executive Board and Supervisory Board are of the opinion that a Supervisory Board with four members can better represent the interests of the shareholders in accordance with the current shareholding ratios. The largest single shareholder Triumph Science & Technology Group Co., Ltd. Beijing ("Triumph"); which holds 16.75% of the share capital, is currently not represented on the Supervisory Board. In addition, a further Supervisory Board member will expand the competence profile of the Supervisory Board through his skills and expertise. The Supervisory Board proposes Mr. Denan Chu for election to the Supervisory Board at the Annual General Meeting. Mr. Chu is Board Secretary and General Counsel (Head of the Executive Secretariat and Legal Department) at Triumph.

At the same meeting, the Supervisory Board extended the appointment of Dr. Stefan Rinck to the Executive Board until December 31, 2024, and the appointment of Markus Ehret until December 31, 2028.

4. Targets for the proportion of women on the Board of Management and in the two management levels below the Board of Management

As a listed and non-co-determined stock corporation, the SINGULUS TECHNOLOGIES AG is obligated to resolve certain targets for the company with respect to the quota of women as well as to publish these in the management report for the business year. The targets for the Supervisory Board and the Executive Board are to be resolved by the Supervisory Board pursuant to Section 111 (5) AktG and the targets for the two management levels below the Executive Board are to be resolved by the Executive Board pursuant to Section 76 (4) AktG. The Supervisory Board and the Board of Management must set deadlines for determining the targets, which may not exceed five years in each case.

In February 2022, the Supervisory Board of the SINGULUS TECHNOLOGIES AG set the target for the percentage of women on the Supervisory Board at 33 % by December 31, 2023. At the time of the determination the Supervisory Board had and currently has three members, one of whom is a woman.

At the time of the determination of the target size by the Supervisory Board in February 2022 the Executive Board of the SINGULUS TECHNOLOGIES AG consisted of three members, as of December 31, 2022, the Executive Board consisted of two members. At both dates the Executive Board did not include a woman. The Supervisory Board does not currently intend to increase the size of the Executive Board. For any new appointments after Dr. Rinck's appointment expires on December 31, 2023, the Supervisory Board requires the greatest possible flexibility to find the most suitable candidate. The market for management personnel is very competitive. There are very few experienced female executives in the engineering industry. The Supervisory Board therefore does not want to be restricted by a women's quota when selecting a suitable candidate. The target for the proportion of women on the Executive Board is therefore to be set again at 0%.

On June 30, 2022, the Executive Board set the target for the proportion of women at the first management level below the Executive Board at 33% and at the second management level below the Executive Board at 17% by June 30, 2026. Both targets were achieved in the reporting year.

5. Diversity concept regarding the composition of the Executive Board and Supervisory Board as well as competence profile

The Supervisory Board has anchored the diversity concept and the competence profile on its composition regarding aspects such as age, gender, educational or professional background in its Rules of Procedure. The age limit for membership of the Supervisory Board is 72. Accordingly, the Supervisory Board shall not propose any persons for election to the Supervisory Board for a longer term of office than until they reach the age of 72. Candidates proposed to the Annual General Meeting for election to the Supervisory Board shall have the following expertise and experience (although not all criteria need to be met): (i) knowledge of the core business areas, in particular the competitive situation and the needs of customers, (ii) technical expertise regarding the technological challenges associated with the development of new machines, (iii) experience with complex development projects, (iv) international business experience, including outside Europe, (v) experience with national and international sales structures, (vi) expertise in capital markets and investor relations, and (vii) expertise in mergers & acquisitions. At least one member of the Supervisory Board must have special expertise in the fields of accounting and auditing. The members must be familiar with the sector in which the Company operates. The members shall have personality, integrity, professionalism, willingness to perform and independence. Nationality shall not play a role in the selection of a candidate. In addition, more than half of the Supervisory Board members shall be independent of the Company and the Executive Board. The Supervisory Board shall set a target quota for the proportion of women on the Supervisory Board (see above).

The Supervisory Board is convinced that it fulfills the competence profile and diversity concept described by the appointment of one woman and two men and due to their age, educational and professional background.

Specifications for the diversity concept regarding the Executive Board are also anchored in the Supervisory Board's Rules of Procedure. Accordingly, the Chairman of the Supervisory Board coordinates long-term succession planning for the Executive Board, whereby an age limit of 65 years is to be provided for Executive

Board members. When appointing members to the Executive Board, the Supervisory Board shall also pay attention to diversity. This is done on a case-by-case basis.

The Annual General Meeting on July 19, 2023, reappointed Dr. Leichnitz for the period until the end of the Annual General Meeting which resolves on the formal approval of the actions of the Supervisory Board for the fiscal year 2024. His term of office will therefore end after his 72nd birthday in December 2024. Although this is a formal breach of the Supervisory Board's Rules of Procedure, the Supervisory Board has decided to propose Dr. Leichnitz for reelection for this term because in this difficult situation his many years of knowledge of the Company and its business are very valuable and his expertise is of great value.

its business is very valuable, and his expertise would be lost. The exceeding of the age limit was announced in the invitation to the Annual Stockholders' Meeting for July 19, 2023, was presented to the shareholders. The Annual General Meeting has elected Dr. Leichnitz with a majority of 98.79%.

6. Further information on corporate governance

6.1 Transparency and communication

The Executive Board publishes potentially price-sensitive information concerning the SINGULUS TECHNOLOGIES AG without delay unless the company is exempt from this requirement in individual cases.

The SINGULUS TECHNOLOGIES AG takes care that the shareholders of the company can get a timely and comprehensive picture of the situation of the company via the information published on its website. The SINGULUS TECHNOLOGIES AG reports to its shareholders four times per business year about the business development as well as the financial and earnings situation. All financial reports, current company presentations, the corporate calendar as well as the notifications pursuant to Art. 17 MAR, the securities transactions (directors' dealings) to be reported pursuant to Art. 19 MAR and the voting rights notifications pursuant to Art. 33 et seq. German Securities Trading Act (WpHG) are published at www.singulus.de in the Investor Relations and Corporate News sections. In order to improve transparency and maintain the share price, the SINGULUS TECHNOLOGIES AG

held several analyst conferences and conducted numerous one-on-one meetings with investors.

All reports and documents on corporate governance and corporate management including the declaration of compliance with the Code, a reference to the full text of the Code available on the Internet as well as the company's Articles of Association can also be found under Investor Relations, keyword Corporate Governance. The invitations to the Annual General Meeting and voting results can be viewed on the SINGULUS TECHNOLOGIES website in the Investor Relations section.

6.2 Shareholders and Annual General Meeting

The shareholders of the SINGULUS TECHNOLOGIES AG exercise their rights at the Annual General Meeting of the company, where each share grants one vote. At the Annual General Meeting, the shareholders pass resolutions on the appropriation of the balance sheet profit, the discharge of the Executive and Supervisory Boards and the election of the auditor in accordance with the statutory requirements.

Amendments to the Articles of Association and capital measures are resolved by the Annual General Meeting and implemented by the Executive Board.

The Annual General Meeting of the SINGULUS TECHNOLOGIES AG usually takes place in the first half of the year. The Annual General Meeting of the SINGULUS TECHNOLOGIES AG for the business year 2022 could not yet take place because the annual financial statements 2022 could only be adopted by the Supervisory Board on October 30, 2023. The reason for the delay was the late adoption of the annual financial statements for the business years 2020 and 2021 as well as the change of the auditor, which was necessary due to legal requirements. The financial statements for 2020 and 2021 were not adopted until April 11, 2023. Only then could the audit work for the 2022 financial statements begin. By court order dated May 16, 2023, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, was appointed as the new auditor for fiscal 2022. The new auditor began its audit work in May 2023 and has quickly familiarized itself with the Company's affairs. He issued the audit certificate on October 29, 2023 . The Executive Board and Supervisory Board then convened the Annual General Meeting without delay. The Annual General Meetings for fiscal years 2020 and 2021 were held together and took place

during a single virtual meeting without physical presence. The Annual General Meeting for fiscal year 2022 is to be held in the same form on December 14, 2023. The Annual General Meeting on July 19, 2023, authorized the Executive Board to hold Annual General Meetings in virtual form by amending the Articles of Association.

The Executive Board and Supervisory Board consider this legally prescribed form of the Annual General Meeting to be the best solution in the current situation of the Company. It has cost advantages over attendance meetings. Shareholders' rights are not restricted. They can submit questions before the Annual General Meeting. The questions will be answered in writing and made available to shareholders attending the Annual General Meeting. The Executive Board's speech is published in advance so that shareholders can ask questions about the remarks. During the meeting, each shareholder has the right to speak via video communication. Follow-up questions may be asked on the answers given or on new matters. Every shareholder has the right to make statements at the meeting, even without having to ask further questions.

The Executive Board and Supervisory Board believe that bringing forward the right to ask questions offers great advantages because questions can be answered carefully and with sufficient time. The Company does not have the resources for a large back office to answer questions asked spontaneously during the meeting.

The virtual Annual General Meeting makes it easier for shareholders to attend because travel time and travel expenses are eliminated. Voting rights can be exercised by giving instructions to the proxy or at the virtual meeting.

6.3 Accounting and auditing of financial statements

The consolidated financial statements and the interim reports of the SINGULUS TECHNOLOGIES Group are prepared in accordance with IFRS as well as the applicable commercial law provisions pursuant to Art. 315e Para. 1 HGB. The separate financial statements of the SINGULUS TECHNOLOGIES AG are prepared in accordance with the provisions of the HGB and the AktG as well as supplementary provisions of the Articles of Association. The consolidated and annual financial statements for the business year 2022 prepared by the Executive Board were

audited by the auditing firm Baker Tilly GmbH & Co. KG, Frankfurt am Main. For its part, the Supervisory Board examined the financial statements and the results of the audit and adopted the separate financial statements for fiscal 2022 and approved the consolidated financial statements. The Supervisory Board discussed important aspects with the auditor.

Interim reports are made available to the public within 45 days of the end of the quarter. The annual financial statements and the consolidated financial statements are made available to the public within 90 days of the end of the financial year. In the past, the Company has always complied with these deadlines except for the annual financial statements for fiscal years 2020 and 2021, which could not be published until April 11, 2023. The auditor issued the audit opinion only after new financing agreements had been concluded and new contracts awarded. For the reasons stated above under item 6.2, the annual financial statements for the 2022 financial year could also not be made available until after the deadline.

The annual report for the business year 2022 and the interim reports can be viewed on the website of the SINGULUS TECHNOLOGIES AG.

6.4 Compensation of the Executive Board and Supervisory Board

As in the past years, the SINGULUS TECHNOLOGIES AG discloses both the fixed and the performance-based components of the compensation of the Executive Board members as well as the share-based compensation components with long-term incentive individually. In addition, the addition to the pension plan, which is based on a defined contribution system, is also disclosed individually. The disclosures can be found in the Compensation Report, which can be accessed at www.singulus.de/de/investor-relations/corporate-governance. In accordance with § 162 of the German Stock Corporation Act (AktG), the compensation report presents the compensation and compensation system of the Executive Board comprehensively and on an individualized basis, also addressing the structure of compensation components with a long-term incentive effect. In addition, the compensation of the members of the Supervisory Board is presented on an individualized basis.

SHAREHOLDINGS AND NOTIFIABLE SECURITIES TRANSACTIONS OF THE MANAGEMENT BOARD AND SUPERVISORY BOARD

1. shareholdings of the management board and supervisory board

No member of the Executive Board or Supervisory Board has a direct or indirect shareholding in the Company's capital stock exceeding 1%.

The following members of the Executive and Supervisory Boards directly or indirectly held shares in SINGULUS TECHNOLOGIES AG as of December 31, 2022:

Shareholdings of the Board of Management and Supervisory Board	December 31, 2022	December 31, 2021
Supervisory Board		
Dr. Wolfhard Leichnitz,	245	245
Chairman of the Supervisory		
Board		
Dr. Silke Landwehrmann	2.000	2.000
Dr. Rolf Blessing	0	0
Board of Directors		
Dr. Stefan Rinck, CEO	122	122
Markus Ehret, CFO	43	43
Dr. Christian Strahberger, COO*	n.a.	2.000

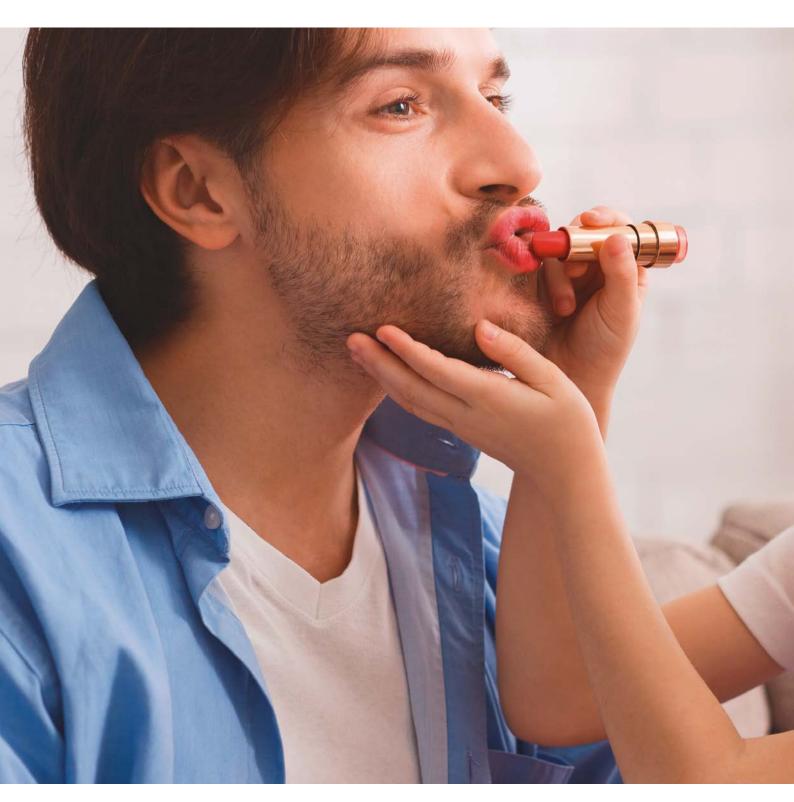
^{*} Retired as of October 31, 2022

The incumbent members of the Management Board and Supervisory Board held no subscription rights from stock options or convertible bonds as of December 31, 2022.

2. Directors' dealings

In the financial year 2022, members of the Executive Board and Supervisory Board or persons closely associated with them were required pursuant to Art. 19 MAR to report transactions in shares and debt instruments of the Company or related derivatives or other related financial instruments, insofar as the total volume of the transactions conducted within a calendar year exceeds the sum of €20,000. The Company was not notified of any such transactions in the financial year 2022.

PACKAGING





Consolidated Balance Sheet

as of December 31, 2022 and December 31, 2021

Assets		12/31/2022	12/31/2021
	Note	EUR million	EUR million
Cash and cash equivalents	(6)	18.7	15.0
Financial assets subject to restrictions on disposal	(7)	3.8	15.1
Trade receivables	(8)	2.8	2.8
Receivables from construction contracts	(8)	10.4	3.5
Other receivables and other assets	(9)	9.6	11.6
Total receivables and other assets		22.8	17.9
Raw materials, consumables and supplies		8.3	7.4
Work in process		5.7	6.1
Total inventories	(10)	14.0	13.5
Total current assets		59.3	61.5
Property, plant and equipment	(12)	6.7	10.0
Capitalized development costs	(11)	4.1	4.2
Goodwill	(11)	6.7	6.7
Other intangible assets	(11)	0.9	0.7
Deferred tax liabilities	(21)	0.1	0.2
Total assets		18.5	21.8

Total assets	77.8	83.3
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Equity and Liabilities		12/31/2022	12/31/2021
	Note	EUR million	EUR million
Trade payables		9.9	16.9
Prepayments received	(14)	8.0	5.6
Liabilities from construction contracts	(8)	34.8	50.8
Financing liabilities from the loan borrowed	(4)	10.0	0.0
Financial liabilities from the issuance of bonds	(16)	0.2	0.2
Current leasing liabilities		0.3	2.4
Other liabilities	(13)	9.9	8.2
Provisions for restructuring measures	(19)	2.1	0.2
Provisions for taxes		0.5	0.3
Other provisions	(18)	8.0	7.4
Total current liabilities		83.7	92.0
Financial liabilities from the issuance of bonds	(16)	11.1	10.8
Non-current leasing liabilities		0.4	2.9
Pension provisions	(17)	11.4	15.4
Deferred tax liabilities	(21)	4.8	1.9
Total non-current liabilities		27.7	31.0
Total liabilities		111.4	123.0
Subscribed capital	(20)	8.9	8.9
Capital reserves		19.8	19.8
Other reserves	(20)	3.0	-3.2
Retained earnings		-65.3	-65.2
Equity attributable to owners of the parent		-33.6	-39.7
Total equity		-33.6	-39.7
Total equity and liabilities		77.8	83.3

Consolidated Income Statement

for the period from January 1 to December 31, 2022 and 2021

1/1 - 12/31

		20	022	20	21
	Note	EUR million	in %	EUR million	in %
Revenue (gross)	(5)	87.9	100.1	68.8	100.1
Sales deductions and direct selling costs	(23)	-0.1	-0.1	-0.1	-0.1
Revenue (net)		87.8	100.0	68.7	100.0
Cost of sales		-62.6	-71.3	-50.6	-73.7
Gross profit on sales		25.2	28.7	18.1	26.3
Research and development	(25)	-7.1	-8.1	-8.1	-11.8
Sales and customer service		-11.7	-13.3	-11.0	-16.0
General administration	(27)	-10.5	-12.0	-11.2	-16.3
Other operating expenses	(29)	-0.5	-0.6	-0.7	-1.0
Other operating income	(29)	1.1	1.3	0.5	0.7
Expenses from restructuring	(30)	-2.7	-3.1	0.0	0.0
Income from the sale of property, plant and equipment	(31)	12.1	13.8	0.0	0.0
Total operating expenses		-19.3	-22.0	-30.5	-44.4
Operating result (EBIT)		5.9	6.7	-12.4	-18.0
Finance income	(32)	0.0	0.0	0.9	1.3
Finance costs	(32)	-2.0	-2.3	-1.7	-2.5
EBT		3.9	4.4	-13.2	-19.2
Tax expense/income	(21)	-4.0	-4.6	-1.0	-1.5
Profit or loss for the period		-0.1	-0.1	-14.2	-20.7
Thereof attributable to:					
Owners of the parent		-0.1		-14.2	
Non-controlling interests		0.0		0.0	
Basic earnings per share based on the profit for the period (in EUR) attributable to owners of the parent	(22)	-0.01		-1.60	
Diluted earnings per share based on the profit for the period (in EUR) attributable to owners of the parent	(22)	-0.01		-1.60	

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31, 2022 and 2021

	1/1 - 12/31		
		2022	2021
	Note	EUR million	EUR million
Profit or loss for the period		-0.1	-14.2
Items that will never be reclassified to profit and loss:			
Actuarial gains and losses from pension commitments	(17)	4.9	1.0
Items that may be reclassified to profit and loss:			
Exchange rate differences in the fiscal year	(21)	1.3	0.8
Total income and expense recognized directly in other comprehensive income		6.2	1.8
Total comprehensive income		6.1	-12.4
Thereof attributable to:			
Owners of the parent		6.1	-12.4

Consolidated Statement of Changes in Equity

for the period from January 1 to December 31, 2022 and 2021

Equity Attributable to Owners of the Parent

	Equity Attributable to Owners of the Parent				
			Other Reserves		
	Subscribed Capital	Capital Reserves	Currency Translation Reserves		
	EUR million	EUR million	EUR million		
Note	(21)	(21)	(21)		
As of January 1, 2021	8.9	19.8	3.3		
Profit or loss for the period	0.0	0.0	0.0		
Other comprehensive income	0.0	0.0	0.8		
Total comprehensive income	0.0	0.0	0.8		
As of December 31, 2021	8.9	19.8	4.1		
As of January 1, 2022	8.9	19.8	4.1		
Profit or loss for the period	0.0	0.0	0.0		
Other comprehensive income	0.0	0.0	1.3		
Total comprehensive income	0.0	0.0	1.3		
As of December 31, 2022	8.9	19.8	5.4		

Equity Attribut	Equity Attributable to Owners of the Parent			
Other Reserves	Retained Earnings			
Actual Gains and Losses from Pension Commitments	Other Retained Reserves	Total		
EUR million	EUR million	EUR million	EUR million	
(18)				
-8.3	-51.0	-27.3	-27.3	
0.0	-14.2	-14.2	-14.2	
1.0	0.0	1.8	1.8	
1.0	-14.2	-12.4	-12.4	
-7.3	-65.2	-39.7	-39.7	
-7.3	-65.2	-39.7	-39.7	
0.0	-0.1	-0.1	-0.1	
4.9	0.0	6.2	6.2	
4.9	-0.1	6.1	6.1	
-2.4	-65.3	-33.6	-33.6	

Consolidated Cash Flow Statement

for the period from January 1 to December 31, 2022 and 2021

	Note	2022 EUR million	2021 EUR million
Cash flows from operating activities		<u>, </u>	
Profit or loss for the period		-0	.1 -14.2
Adjustment to reconcile profit or loss for the period to net cash flow			
Amortization, depreciation and impairment of non-current assets	(11/12)	3.6	3.8
Contribution to the pension provisions	(17)	-3.7	-1.4
Profit/loss from disposal of non-current assets		-8.2	0.0
Other non-cash expenses/income		-0.5	-0.2
Net finance costs	(32)	2.0	0.8
Net tax expense	(21)	4.0	1.0
Change in trade receivables		0.5	0.4
Change in construction contracts		-23.0	29.7
Change in other receivables and other assets		3.6	-7.2
Change in inventories		1.3	-4.9
Change in trade payables		-5.8	10.7
Change in other liabilities		-0.8	1.6
Change in prepayments		3.4	3.1
Change in provisions from restructuring measures		1.9	0.0
Change in further provisions		0.3	1.0
Interest paid	(32)	0.0	-0.1
	(21)	-1.2 -22	0.0 38.2
Net cash from/used in operating activities		-22	2.7 24.1

	Note	2022 EUR million	2021 EUR million
Cash flows from investing activities			
Cash paid for investments in development projects	(11)	-1.5	-0.5
Cash paid for investments in other intangible assets and property, plant and equipment	(11/12)	-0.5	-0.4
Cash received from the disposal of assets and liabilities classified as held for sale		9.3	0.0
Net cash from/used in investing activities		7.3	-0.9
Cash flows from financing activities			
Cash used to pay bond interest	(16)	-0.5	-1.2
Cash received/used on the issuance of loans	(17)	10.0	-4.0
Cash used to pay loan interest		0.0	-0.2
Cash used to pay leasing liabilities		-2.0	-2.6
Cash received/used on financial assets subject to restrictions on disposal		11.4	-10.3
Net cash from/used in financing activities		18.9	-18.3
Increase/decrease in cash and cash equivalents		3.5	4.9
Effect of exchange rate changes		0.2	0.3
Changes in scope of consolidation		0.0	0.0
Cash and cash equivalents at the beginning of the reporting period		15.0	9.8
Cash and cash equivalents at the end of the reporting period		18.7	15.0

Cash and cash equivalents comprise monetary investments with a remaining maturity of up to three months at the time of acquisition.

Financial assets subject to restrictions on disposal are presented separately in the balance sheet. These financial assets relate to the Company's financing transactions and are included in the consolidated cash flow statement as cash flows from financing activities.

SINGULUS TECHNOLOGIES GROUP

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2021

Note 1 - General Information

The consolidated financial statements present the operations of SINGULUS TECHNOLOGIES AG, Hanauer Landstrasse 103, 63796 Kahl am Main (hereinafter also referred to as "SINGULUS TECHNOLOGIES AG") and its subsidiaries (hereinafter also referred to as "SINGULUS TECHNOLOGIES," the "Company" or the "Group").

The Company is registered under HRB 6649 in the commercial register at the local court (*Amtsgericht*) of Aschaffenburg.

The consolidated financial statements were prepared in Euro (€). Unless stated otherwise, all figures are presented in millions of Euro (million €). Due to presentation in million €, differences in rounding may occur.

The consolidated financial statements of SINGULUS TECHNOLOGIES AG were prepared in accordance with the International Financial Reporting Standards ("IFRSs") as adopted in the European Union ("EU") and the additional requirements of section 315e (1) of the German Commercial Code (*Handelsgesetzbuch*, "HGB").

The term "IFRS" includes all International Financial Reporting Standards and International Accounting Standards ("IAS") adopted by the EU with mandatory application as of the reporting date. All interpretations of the International Financial Reporting Standards Interpretations Committee ("IFRS IC") – formerly the Standing Interpretations Committee ("SIC") and the International Financial Reporting Interpretations Committee ("IFRIC") – that were mandatory for fiscal year 2022 were likewise applied.

In order to improve the clarity and meaningfulness of the consolidated financial statements, individual items are aggregated in the balance sheet and income statement and presented separately and in the notes to the financial statements.

The consumption of more than half of the nominal capital pursuant to HGB was incurred in the business year 2017 and was reported on September 21, 2017. The extraordinary shareholders' meeting was convened on November 29, 2017. In the course of the extraordinary general meeting on October 29, 2021, pursuant to Art. 92 Para. 1 AktG the Executive Board again reported on the loss of the nominal capital pursuant to HGB of the parent Company. The background to the depletion of shareholders' equity was presented, which was mainly due to the timing of revenue recognition pursuant to HGB and IFRS and the operating losses resulting from the underutilization of the organization in recent years.

However, from today's point of view, the group has sufficient available liquid funds to safeguard the course of business and therefore draws up the financial statement according to the going-concern assumptions.

In connection with the going concern of the Company and thus of the Group, we refer to the comments under note 4.

Note 2 - Business activities

SINGULUS TECHNOLOGIES develops and builds machines for economic and resource-efficient production processes. The application areas include vacuum thin-film and plasma coating for wet-chemical processes as well as thermal process technologies. For all machines, processes and applications SINGULUS TECHNOLOGIES draws upon its know-how in the areas of automation and process technology. Additional fields of activity are being tapped into aside from the Solar, Semiconductor, Data Storage (Optical Disc), Decorative Coatings and Medical Technology divisions. The complete machines program of the company is complemented by a global network for replacement parts and service activities.

For more information, please refer to the comments on segmental reporting in Note 5.

Note 3 - New accounting standards

The following pronouncements of the IASB, which have already been successfully adopted by the EU, are mandatory for fiscal years beginning on or after January 1, 2022 and, where applicable, have been applied by SINGULUS TECHNOLOGIES for the first time in fiscal year 2022. These new accounting standards have no impact on the presentation of the net assets, financial position and results of operations or on earnings per share:

- Amendments to IFRS 3 Business Combinations: Reference to the Framework
- Amendments to IAS 16 Property, Plant and Equipment: Revenue before Reaching Operational Status
- Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets: Scope of settlement costs for onerous contracts
- Annual improvements to IFRSs 2018-2020 cycle

The IASB has issued the following amendments to standards as well as a new standard, the application of which, however, is not yet mandatory for fiscal year 2022 and the IFRS endorsement of which by the EU has not yet been completed in some cases.

As a result, the following accounting standards have not yet been applied by SINGULUS TECHNOLOGIES:

- Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current, required to be applied for the first time from Jan. 1, 2024.
- Amendments to IAS 1 Presentation of Financial Statements and IFRS
 Guidance Document 2: Disclosure of Accounting Policies, required to be
 applied for the first time as of Jan. 1, 2023
- Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates, first-time application required as of Jan. 1, 2023
- Amendments to IAS 12 Income Taxes: Deferred Taxes Relating to Assets and Liabilities Arising from a Single Transaction, first-time application required as of Jan. 1, 2023
- Insurance contracts: First-time application of IFRS 17 and IFRS 9 Comparative information, first-time application required as of Jan. 1, 2023.

From today's perspective, these new accounting standards will have no impact on the presentation of the Group's financial position, financial performance or earnings per share.

Early adoption of standards and interpretations that are not yet mandatory is not currently planned.

Note 4 - Significant accounting principles

The company draws up financial statements under going concern premise and points out the following events and circumstances:

The SINGULUS TECHNOLOGIES Group is highly dependent on the future development of its business activities with a small number of large customers, both in terms of the achievement of the expected financial ratios and the further development of liquidity. Sufficient liquidity of the company and the Group can only be maintained until the end of 2024 from the date of preparation if the planning can be realized until the end of 2024 from the date of preparation. A key prerequisite in the planning is that the partial payments to be made on the basis of the major orders already contracted with CNBM are actually made or are not materially delayed. In addition, it is necessary to secure further major orders by the end of 2024. Furthermore, the availability and maintenance of the committed € 20.0 million CNBM financing beyond October 2024 and the availability of the super senior loan in the amount of €4.0 million must be ensured. In addition, the extension of the working capital credit line of €10.0 million must take place in March 2024 or alternatively be replaced by a shareholder loan from CNBM.

The Executive Board expects with a high degree of probability that the partial payments to be made will be received as scheduled and that further major orders will be signed. In the view of the Executive Board, it is largely probable that the company will be financed through to the end of 2024 on the basis of current corporate planning.

These events and circumstances indicate the existence of a material uncertainty, which may cast significant doubt on the ability of the Company and the Group to continue as a going concern and represent a going concern risk within the meaning of Art. 322 Para. 2 Sentence 3 HGB. The SINGULUS TECHNOLOGIES Group may therefore not be able to realize its assets and settle its liabilities in the ordinary course of business.

In order to ensure the solvency and financial flexibility of the SINGULUS TECHNOLOGIES Group at all times, the Group currently makes use of the following debt financing instruments:

Financing component	Nominal Value	Maturity
Corporate bond	€ 12.0 million	July 22, 2026 (repayment date)
Super Senior Loan in accordance with the terms of the bond	€ 4.0 million	December 31, 2024 (Drawing 1st tranche in the amount of € 2.0million € June 2023)
Working capital facility	€ 10.0 million	April 2024
CNBM financing	€ 20.0 million	1 st tranche: September 2, 2024 2 nd tranche: October 3, 2024

In connection with the corporate bond with a nominal volume of €12.0 million, The 2nd creditors' meeting was held in Frankfurt am Main on May 6, 2021 as an attendance event for bondholders. With a quorum of 34.37%, a resolution was passed to extend the term of the bond by a further five years to July 22, 2026 and to reduce the current interest rate from an average of 6.7% to 4.5%. The repayment amount was increased to 105% in this connection. The increased repayment amount is also applicable in the event of early repayment. The new bond terms came into effect on July 13, 2021.

In addition, the creditors' meeting approved further amendments to the bond terms by more than 99.72 % by resolution on May 30, 2023. These include, among other things, a temporary waiver by the bondholders of possible cancellation rights due to the failure to publish the audited financial statement for 2022 for 15 months from publication of the resolutions (June 2, 2023).

In addition, a loan of € 4.0 million is available to the Company in accordance with the bond terms and conditions. The term of the loan ends on December 31, 2024. In June 2023, the Company drew down the first tranche of € 2.0 million.

Since May 2022, the Company has had access to a working capital credit line in the amount of €10.0 million. The repayment of the loan is guaranteed by the

Chinese main shareholder CNBM. The term of the agreement was initially twelve months and was extended by an amendment dated January 31, 2023, effective April 2023, for a further twelve months to March 2024. An extension of the working capital credit line until March 2025 is guaranteed by the main shareholder CNBM. In addition, CNBM guarantees to financially equip the Company to meet its obligations.

To secure the continued existence of the Company and thus of the Group, the Company signed an agreement with the major shareholder CNBM to provide liquid funds in the amount of \in 20.0 million effective February 3, 2023. In return, the Company granted various options relating to rights in connection with knowhow in the field of solar technology. The total volume was received by the Company in two tranches in March in the amount of \in 9.6 million and in early April 2023 in the amount of \in 10.4 million. Both tranches have a maturity of at least 18 months, but the disbursed funds have to be repaid in full or in part only upon request of the lender. The Company also has the option to repay the funds in part or in full at any time. However, they cannot be drawn down again.

4.1 Consolidation principles and scope of consolidation

The consolidated financial statements include the financial statements of the SINGULUS TECHNOLOGIES AG and its subsidiaries as of December 31 of a given fiscal year. Subsidiaries are fully consolidated from the date of acquisition, i.e. from the date on which the Group obtains control. The consolidation is terminated when the control by the parent company ceases to exist. The financial statements of the subsidiaries are prepared as of the same balance sheet date as that of the parent, using consistent accounting policies. All intragroup balances, income and expenses and gains and losses resulting from intragroup transactions are eliminated in full.

In addition to the SINGULUS TECHNOLOGIES AG, the consolidated financial statements include all companies, which are controlled by the company. The companies are included on the basis of ownership of all voting rights.

The following subsidiaries are included in the consolidated financial statements:

- SINGULUS TECHNOLOGIES Inc., Windsor, USA
- SINGULUS TECHNOLOGIES MOCVD Inc., Windsor, USA
- SINGULUS TECHNOLOGIES ASIA PACIFIC Pte. Ltd., Singapore
- SINGULUS TECHNOLOGIES LATIN AMERICA Ltda., São Paulo, Brazil
- SINGULUS TECHNOLOGIES FRANCE s.a.r.l., Sausheim, France
- SINGULUS TECHNOLOGIES TAIWAN Limited, Taipei, Taiwan
- SINGULUS TECHNOLOGIES SHANGHAI Co. Ltd., Shanghai, China
- HamaTech USA Inc., Austin, USA
- STEAG HamaTech Asia Ltd., Hong Kong, China
- SINGULUS CIS Solar Tec GmbH, Kahl am Main, Germany
- SINGULUS New Heterojunction Technologies GmbH, Kahl am Main, Germany

For further details, please refer to Note 36.

4.2 Foreign currency translation

The financial statements of the foreign subsidiaries are prepared in the currency in which the majority of transactions are concluded (functional currency). The functional currency is the relevant local currency. For inclusion of the foreign financial statements in the Group's reporting currency, the balance sheet items are translated using the closing rate on the balance sheet date and income statement items are translated using the average rate for the fiscal year. The equity of equity investments is translated using the historical rate. Currency translation differences arising from the application of different exchange rates are recognized in other comprehensive income.

Foreign currency monetary items are translated using the closing rate. Exchange differences are recognized as income or expenses in the period in which they occur.

4.3 Management's use of judgment and main sources of estimating uncertainties

The preparation of consolidated financial statements in accordance with IFRS requires the use of estimates and assumptions by management which have an effect on the amounts of the assets, liabilities, income, expenses and contingent liabilities reported. Assumptions and estimates generally relate to the uniform determination of useful lives of assets within the Group, impairment of assets, the measurement of provisions, the collectability of receivables, the recognition of realizable residual values for inventories and the probability of future tax benefits. The actual values can differ from the assumptions and estimates made on a case by case basis. Any changes are recognized as profit and loss at the time of the knowledge gained. Within the Group, the use of judgment and estimating uncertainties affect the following areas in particular:

4.3.1 Impairment of assets

The Group determines whether goodwill is impaired at least once a year. Moreover, if there is any indication that an asset may be impaired, that asset is tested for impairment by estimating its recoverable amount of the asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group determines the recoverable amount of the cash-generating unit to which the asset is allocated. This requires an estimate of the recoverable amount of the assets or cash-generating units to which the goodwill or asset is allocated. Please also refer to the comments under 4.14 "Impairment of non-financial assets".

4.3.2 Deferred tax assets

Deferred tax assets are recognized for all temporary differences and for all unused tax loss carryforwards to the extent that it is probable that taxable profit will be available against which the tax assets can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the probable timing and level of future taxable profits together with future tax planning strategies. Please also refer to the comments in Note 20.

4.3.3 Share-based compensation

The Group measures the cost of granting equity-based instruments to employees by reference to the fair value of the equity instruments at the date on which they are granted. In order to estimate fair value, an appropriate measurement approach must be determined for grants of equity instruments. This approach depends on the terms and conditions of the grant. Furthermore, the appropriate data to be used in this

measurement approach, including the anticipated option maturity, volatility, dividend yield and the corresponding assumptions, must be determined. The assumptions and approaches used are disclosed in Note 15.

4.3.4 Pension obligations

The cost of defined benefit pension plans is determined using actuarial calculations. The actuarial valuation involves making assumptions about discount rates, future salary increases, mortality rates and future pension increases. As these plans are of a long-term nature, such estimates are highly uncertain. Please also refer to the comments in Note 17.

4.3.5 Development costs

Development costs are capitalized in accordance with the accounting policies described under "Research and development costs". In order to test for impairment, the management must make assumptions regarding the amount of estimated future cash flows from assets, the discount rates to be applied, and the timing of the future cash flows expected to be generated by the assets. Please also refer to the comments in Note 11.

4.3.6 Leases

The Group has entered into lease agreements. The term of such agreements may be extended at the Group's discretion. Please refer to the comments below under Note 4.3.6 and Note 33.

4.3.7 Construction contracts

In order to evaluate the stage of completion of customer-specific construction contracts, the costs to complete the order must be estimated. Please refer to 4.4 Revenue recognition below and to Note 8.

4.3.8 Provisions

Estimating future expenses is fraught with uncertainty. This is especially the case with provisions for warranties.

4.4 Revenue recognition

The Group generates revenue solely from contracts with customers. There are no sources of other revenue in accordance with IFRS 15.113. For the disaggregation of revenue in accordance with IFRS 15.114, please refer to Note 5.

The Group recognizes revenue when it satisfies a performance obligation by transferring a specified asset to a customer. An asset is deemed to have been transferred once the customer obtains control over that asset. Depending on the transfer of control, revenue is recognized either at a point in time or over time in the amount that reflects the consideration to which the Company expects to be entitled.

Revenue relating to the sale of equipment for manufacturing optical data storage devices in the Life Science operating segment is recognized when a contract has come into effect, the delivery has been made, and, if required, the equipment has been installed for and accepted by the customer and payment is reasonably certain. Revenue relating to services is recognized when the service has been rendered, a price has been negotiated and is determinable and payment thereof is probable. Revenue from the sale of individual components of equipment or replacement parts is recognized at a point in time when control is transferred (generally at the time of shipping) in accordance with the underlying agreements.

Given that the Solar, Life Science and Semiconductor segments do not manufacture the equipment in serial batches but rather to individual customer order for which the Company has no alternative use, revenue for the majority of the equipment is recognized over time. The claim for payment of the service rendered is reviewed at the same time (IFRS 15.35(c)).

The relevant stage of completion is calculated using the input-oriented cost-to-cost method. The selected method enables the Company to make the most precise estimate of the percentage of completion because the Company uses an IT-based project controlling system that reliably estimates the budgeted costs and continuously monitors the total costs. The costs incurred to date are calculated as a proportion of the estimated total costs.

In addition, the company recognizes provisions for warranties on a time-apportioned basis using the percentage of completion method. However, this does not take into account the warranty expense to determine the stage of completion. For the determination of provisions for warranties please refer to Note 4.18.

Contracts are recognized on the balance sheet either as receivables from construction contracts (assets) or as liabilities from construction contracts if the prepayments received exceed the cumulative work performed. Once the final invoice has been issued, the closing balance is reclassified as trade receivables. If it is probable that the total contract costs exceed the total contract revenue, the expected loss is immediately expensed.

Whether the requirements for recognizing revenue over time are met in accordance with IFRS 15.35(c) is reviewed on an individual basis at the start of a customer order.

Revenue is recognized net of VAT, returns, sales deductions, credits and direct selling costs. Potential contractual penalties are assessed on a case-by-case basis.

The typical payment terms for the sale of equipment provide for a significant down payment at the commencement of production. Further payment terms are contractually defined and depend on the degree of completion, calling for a final payment upon transfer of the specified equipment. No material financing components exist. Typically, payment targets of between 30- and 60-days net are agreed for the replacement parts and service business. In addition, customer-specific advance payments are also agreed.

4.5 Goodwill

In all business combinations, the goodwill acquired was initially measured at cost, this being the excess of the cost of the business combination over the acquirer's interest in the fair value of the identifiable assets acquired and the liabilities and contingent liabilities assumed (partial goodwill method). In accordance with IFRS 3 and IAS 27, there is an option to recognize the total amount of the goodwill acquired, including goodwill attributable to non-controlling interests, in the case of business combinations (full goodwill method). After initial recognition, goodwill is measured at cost less any accumulated impairment losses.

The recognized goodwill is not amortized. It is tested for impairment annually or whenever there are indications of impairment. Impairment testing takes place at the cash-generating unit level. These groups of cash generating units correspond to the business segment according to IFRS 8 (c. Note 5). If the recoverable amount of the relevant business segment has fallen below the carrying amount of the unit, an impairment loss is recognized in accordance with IAS 36. Reversals of impairment losses are prohibited.

4.6 Research and development costs

Research costs are expensed in the period in which they are incurred. Pursuant to IAS 38, development costs are recognized as intangible assets at cost, provided that the conditions of IAS 38.57 are fulfilled. In addition to the technical feasibility of completing the intangible asset, this includes the generation of probable future economic benefits from the intangible asset (IAS 38.57(d)) and the ability to measure reliably the expenditure attributable to the intangible asset during its development (IAS 38.57(f)). Cost comprises all costs directly attributable to the development process as well as appropriate shares of development-related overheads.

Profitability calculations (project calculations) are used to demonstrate the condition under IAS 38.57(d). The respective net present value of the development project is calculated on the basis of specific budgeted results for revenue/contribution margins attributable to the project, applying the company-specific discount rate.

From the point at which they can be used, the developed products are amortized on a straight-line basis over a term of five years.

At each balance sheet date, it must be reviewed whether there are any indications of impairment. If this is the case, the asset must be tested for impairment and, if necessary, an impairment charge recognized. Prior-period impairment charges must be reviewed annually to determine whether there are any indications that the impairment can be reversed.

Updated project calculations are used for the impairment tests and to calculate the recoverable amount of the capitalized development costs. Furthermore, an additional impairment test is performed at a higher level for own work capitalized allocated to the Solar operating segment as part of the goodwill impairment testing for the Solar operating segment.

Government subsidies received for research and development projects are offset against the research and development costs in the income statement. Repayment of subsidies becomes obligatory in the event of premature economic utilization by the Company of subsidy projects that are still in progress.

4.7 Other intangible assets

Intangible assets acquired separately are recognized at cost. Intangible assets acquired in the course of a business combination are recognized at fair value as of the date of acquisition. Internally generated intangible assets are recognized, if the criteria for recognition are met. If the criteria are not met, the costs related to such intangible assets are recognized as expenses in the period in which they are incurred. Intangible assets with finite useful lives are amortized over their useful lives. Intangible assets with indefinite useful lives are not amortized, and are instead tested for impairment at least once a year. No intangible assets with indefinite useful lives were recognized in the reporting period.

The useful lives of intangible assets with finite useful lives are:

Software 3 yearsPatents 8 yearsTechnology 5 to 8 years

4.8 Cash and cash equivalents

Cash and cash equivalents comprise monetary investments with a remaining maturity of up to three months at the time of acquisition as well as bills of exchange with an original maturity of up to three months.

Financial assets subject to restrictions on disposal are presented separately in the balance sheet. These financial assets relate to the Company's financing transactions and are included in the consolidated cash flow statement as cash flows from financing activities.

4.9 Inventories

Inventories are carried at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale. Raw materials, consumables and supplies including spare parts are measured using the weighted average cost formula. In the case of manufactured products, the cost includes an appropriate share of the production overheads based on normal operating capacity. Appropriate allowances are made for potential losses due to obsolete or slow moving inventories.

The five existing impairment classes by mobility, which are derived from experience, range from 0% to a maximum of 100% of amortized cost. The five existing impairment classes by range also range from 0% to a maximum of 100% of amortized cost.

In addition, inventories are individually tested for impairment and, if necessary, written down to their net realizable value.

4.10 Financial assets and liabilities

Recognition and subsequent measurement

Financial assets and financial liabilities are recognized in the balance sheet when an entity becomes party to the contractual provisions of the instrument. All financial assets and financial liabilities are initially recognized at fair value (with the exception of trade receivables, which are recognized at transaction price).

Financial assets are measured at amortized cost if they are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.

I. Trade invoices are issued mainly in euros and are recognized as receivables at the fair value of the goods supplied or services rendered.

If there is an objective indication that receivables carried at amortized cost are impaired, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows

(excluding expected future credit losses that have not yet been incurred) discounted at the financial asset's original effective interest rate (i.e., the effective interest rate determined on initial recognition). The carrying amount of the asset is reduced through the use of an allowance account. The impairment loss is recognized directly in profit or loss. For trade receivables, if there are objective indications that not all due amounts will be collected pursuant to the original payment terms (such as probability of insolvency or significant financial difficulties of the debtor), an impairment loss is charged. This only applies where there is no collateral (e.g., credit insurance policies, etc.). Receivables are derecognized when they are classified as uncollectible.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed, with the amount of the reversal recognized in profit or loss. However, the reversal must not result in the carrying amount of the asset exceeding what the amortized cost would have been at the date the impairment is reversed if the impairment had not been recognized.

Under the expected credit loss model set out in IFRS 9, portfolio loss allowances are recognized for trade receivables for which no individual loss allowance is recognized; the portfolio loss allowances are recognized based on the assets' statistical probability of default.

For details on the recognition of foreign currency receivables and the related hedging transactions, please refer to the comments under 4.11 "Hedge accounting" and 4.2 "Foreign currency translation".

II. The expected write-down on *cash and cash equivalents* and *financial assets subject to restrictions on disposal* was calculated on the basis of expected losses within the respective maturity bands. Due to the availability of demand deposits at short notice and the outstanding creditworthiness of the credit institutions, it is assumed that cash and cash equivalents are exposed to low risk of default. The Finance department monitors changes in the default risk through quarterly observation of published external credit ratings. To the extent that the potential impairment losses remain small, the Company will opt not to recognize a write-down.

Financial assets held for trading are measured at fair value through profit or loss. Financial assets classified as "hold and sell" are measured at fair value through other comprehensive income.

The Group has not classified any financial assets as measured at fair value through profit or loss or fair value through other comprehensive income.

Financial liabilities include liabilities from bond issues, liabilities from loans, trade payables and other liabilities. The Group initially recognizes financial liabilities at the date they arise. These liabilities are measured at amortized cost.

Derecognition

Financial assets are derecognized if one of the following conditions is met:

The rights to receive cash flows from the asset have expired.

The Group has transferred its rights to receive cash flows from the asset or has
assumed an obligation to pay the received cash flows in full without delay to
athird party under an agreement that meets the conditions in IFRS 9.3.2
("passthrough"arrangement); and either (a) the Group has transferred
substantially all the risks and rewards of the asset, or (b) the Group has neither
transferred nor retained substantially all the risks and rewards of the asset, but
has transferred control of the asset.

Financial liabilities are derecognized when the contractual obligations have been settled, canceled or have expired.

4.11 Hedge accounting

Changes in the fair value of derivatives designated as a hedging instrument in a fair value hedge are recognized in profit or loss. The hedged item attributable to the hedged risk is also recognized at fair value, with the hedge expected to be highly effective in offsetting the changes in the fair value of the hedged item.

The derivative designated as a hedge in a cash flow hedge is carried in the balance sheet at fair value. However, changes in the value of the derivative are recorded in other comprehensive income if, and to the extent that, the hedging relationship is effective. The non-effective portion of the change in fair value continues to be recognized in profit or loss. The change in fair value recorded in equity is derecognized and recorded in profit or loss as soon as the hedged item has an effect on the income statement, or, if the hedged item is reversed, as soon as the hedged item ceases to exist.

In accordance with IFRS 9, effectiveness is tested on the basis of qualitative methods. The qualitative test must evaluate the economic relationship between the hedging instrument and the hedged item and ensure that the effects of a change in the credit risk is not so significant as to dominate the value changes of the changes in hedging instrument and the hedged item.

The Company primarily concludes forward exchange contracts to hedge foreign currency risks from trade receivables. In the case of hedges for existing receivables, the hedging transaction and the risk portion of the hedged item are carried at fair value. Changes in value are recognized in profit or loss.

In the case of cash flow hedges, the hedging instruments are likewise carried at fair value. Forward exchange contracts are valued using the ECB reference rates for spot currency and the valid forward exchange rates of the respective commercial bank for forward currency. Changes in value, provided that the hedges are deemed to be effective, are initially disclosed in other comprehensive income, taking into account any deferred taxes, and only recognized in profit or loss when the cash flow is realized.

4.12 Property, plant and equipment

Property, plant and equipment are carried at cost plus directly allocable costs, less depreciation and impairments. Finance costs relating to qualifying assets are recognized as part of the cost if the criteria set out in IAS 23 are met. Depreciation is charged on a straight-line basis over the economic lives of the assets. The economic life and depreciation method are reviewed periodically to ensure that the method and period of depreciation are consistent with the expected pattern of economic benefits from items of property, plant and equipment.

The economic lives are estimated as follows:

Buildings 25 to 30 years
Plant and machinery 2 to 10 years
Other assets 1 to 4 years

Depreciation and impairment of property, plant and equipment are recognized in the functional area to which the respective assets are allocated.

4.13 Leases

The Company is a lessee of property, plant and equipment, primarily relating to two administration and production buildings in Kahl am Main and Fürstenfeldbruck. The Company has also entered into leases for motor vehicles and forklifts. These leases are accounted for in accordance with the criteria defined in IFRS 16 and recognized as right-of-use assets under property, plant and equipment and lease liabilities. The Group also leases IT equipment; these leases are either short-term leases or their underlying assets are of low value. The Group has opted to not recognize any right-of-use assets or lease liabilities for these leases.

For further details, please refer to Note 33.

4.14 Impairment of non-financial assets

At each reporting date, the Company assesses whether there is any indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is mandatory, the Group makes an estimate of the asset's recoverable amount. This essentially only affects the Solar segment.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset/cash-generating unit exceeds its recoverable amount, the asset/cash-generating unit is considered impaired and is written down through profit and loss to the recoverable amount.

If a cash-generating unit is impaired, the assets in the unit are depreciated as follows:

- a) First, the carrying amount of goodwill allocated to the cash-generating unit;and
- b) then, the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit.

In assessing the recoverable amount, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. These estimates are based on a five-year plan prepared by the Company. This plan is derived from the three-year plan approved by the Supervisory Board and extrapolated a further two years in order to determine the recoverable amount. The perpetual annuity is determined on the basis of the fifth planning year.

For purposes of impairment testing, the goodwill acquired in business combinations is allocated to the cash-generating units, which correspond to the Group's three operating segments. The goodwill recognized reflects the current and future business activities in the Solar segment and is tested for impairment on this basis.

4.14.1 Key assumptions used in the recoverable amount calculation

The recoverable amount of the cash-generating units was determined based on a value-in-use calculation, using cash flow projections based on financial budgets prepared by senior management covering a five-year period. Due to the assets recognized, the impairment test essentially only applies to the Solar segment.

The following parameters of the assumptions used in the value-in-use calculation of cash-generating units leave room for estimating uncertainties:

- · Development of revenue and future EBIT margins,
- · Discount rates,
- Development of the relevant sales markets,
- Growth rates used to extrapolate cash flow projections beyond the forecast period.

The EBIT margins are based on the revenue expectations of management, which are in turn validated using market research forecasts for the industry. The corporate planning for planning years 2023 to 2024 (budget period) factors in both the order backlog in the Solar segment and revenue estimated on the basis of customer requests and bids which are in the process of negotiation. Overall, management expects an increase in revenue in the Solar segment significantly greater than general market growth. The Executive Board also expects a significant improvement in EBIT margins in connection with the planned increase in revenue. Market expectations are factored in for 2026 and 2027 in particular. This revenue planning is used to determine the cost of sales and operating expenses based on current cost structures, budgetary calculations and past experience. Accordingly, the overall detailed budget period extends over five years.

Discount rates – The discount rates reflect estimates made by management on risks to be attributed to specific cash-generating units. The weighted average cost of capital ("WACC") for each cash-generating unit was used as the discount rate. The underlying base interest rate was determined using the Svensson method and yields of German government bonds (Bunds) for equivalent terms. Further components include the 7.00% market risk premium (previous year: 7.80%), beta factors, assumptions regarding country and credit risk premiums and the debt ratio using market data. The pre-tax discount rate applied to the cash flow projections is 14.8 % (previous year: 16.0%) in the Solar operating segment.

Management assumptions on market changes and growth are very significant in calculating value in use in the Solar segment. Specifically, technological trends, the future development of these trends, and the behavior of competitors is forecast for the budget period. The Company's own industry experience, dialog with customers and published industry-specific market research forecast continuing strong growth for the solar market despite the volatility prevalent in previous years.

Growth rate estimates – The forecast growth rates outside of the budget period are based on published industry-specific market research. The growth rate in the perpetual annuity using the discounted cash flow model ("DCF model") was extrapolated at 1% in the Solar segment.

The recoverable amount of the cash-generating units was determined based on a value-in-use calculation, using cash flow projections based on financial budgets prepared by senior management covering a five-year period.

Working capital attributable to the cash-generating unit is taken into account in calculating its carrying amount. This working capital was negative as of the reporting date due to prepayments received; the carrying amount of the cash-generating unit was also negative.

4.14.2 Sensitivity of assumptions made

For the Solar segment, the value in use exceeds the carrying amount by € 103.8 million. A change in the assumptions could lead to a situation in which the carrying amount of the cash-generating unit exceeds the recoverable amount.

This could result from revenue in each case falling more than 45.2 % short of the budgeted figures in the five-year planning period as well as in the perpetual annuity. The Solar segment is likely to benefit from the expected global market growth. In particular, the further development of the Chinese solar market is highly significant for the Company. At the same time, management expects the EBIT margin to increase. This development is thus reflected in the value in use of the cash-generating units in the Solar segment. EBIT margins will increase from a low level to 13.2 % by 2027. In the event the actual EBIT margin in the five-year planning period, as well as the perpetual annuity, is more than 11.5 percentage points lower than the assumed margin, the carrying amounts would be written down as a result.

4.15 Current tax assets and liabilities

Current tax assets and liabilities for current and prior periods are measured at the amount expected to be recovered from or paid to the tax authorities using the tax rates and tax laws that have been enacted by the end of the reporting period. The calculation of the amount is based on the tax rates and tax laws applicable at the balance sheet date.

Current taxes relating to items which are recognized in comprehensive income are also recognized in other comprehensive income and not in profit or loss.

4.16 Deferred tax liabilities and assets

Deferred taxes are recognized for all temporary differences between carrying amounts in the tax accounts and the consolidated balance sheet using the balance sheet liability method. Deferred tax liabilities are recognized for all taxable temporary differences. Deferred tax assets are recognized for all deductible temporary differences and the carryforward of unused tax losses, to the extent that it is probable that taxable profit will be available for use of the deductible temporary differences and the carryforward of unused tax losses.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of the deferred tax assets to be

utilized. Previously unrecognized deferred tax assets are reviewed at the end of each reporting period and recognized to the extent to which it has become probable that future taxable profit will allow the deferred tax asset to be recovered. This decision is made based on internal tax forecasts.

Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable profit in the years in which these temporary differences are expected to be reversed. In the event of a change in tax rate, the effects on deferred tax assets and liabilities are recognized in profit or loss in the period to which the new tax rate applies.

Deferred tax assets and liabilities are not discounted and are classified as non-current assets or liabilities in the consolidated balance sheet.

Deferred tax assets and deferred tax liabilities are offset if SINGULUS TECHNOLOGIES AG or one of its subsidiaries has a legally enforceable right to set off a current tax asset against a current tax liability when they relate to income taxes levied by the same taxation authority.

4.17 Pension provisions

The actuarial measurement of pension provisions is based on the projected unit credit method prescribed by IAS 19 for benefit obligations for pensions. This method takes into account the pensions and vested benefits known as of the balance sheet date as well as the increases in salaries and pensions to be expected in the future. The actuarial gains and losses are recognized in other comprehensive income.

4.18 Provisions

Under IAS 37, provisions are recognized if a present obligation toward a third party as a result of a past event exists which will probably result in a future outflow of resources, and whose amount can be reasonably estimated. Provisions that are not expected to lead to an outflow of resources in the subsequent year are carried at their discounted settlement amount on the balance sheet date. The discount factor is based on market interest rates. The settlement amount also includes the expected cost increases.

Provisions for warranty costs are recognized as soon as the respective revenue is realized. The provision is measured on the basis of historical estimates of the costs of meeting warranty obligations, including handling and transport costs.

For warranty claims, percentages are derived from experience for each product type and range between 2.75 % and 4.00 % (previous year between 2.75 % and 5.00 %).

4.19 Share-based compensation

The Executive Board and senior executives are granted share-based remuneration ("phantom stock") which is settled with a cash payment (cash-settled share-based payment transactions).

The cost of granting the share-based payments is measured at the fair value of these instruments on the date they were granted ("grant price"). The fair value is determined by an external expert using a suitable valuation model, further details of which are given in Note 15.

The recognition of the expenses incurred in connection with the issue of share-based payment instruments takes place throughout the period in which the exercise or performance condition must be fulfilled (vesting period). This period ends on the date on which the relevant employees become fully entitled to the award. The cumulative expenses recognized on each reporting date for equity-settled transactions until the vesting date reflect the extent to which the vesting period has expired and the number of awards that, in the opinion of the Group at that date, based on the best available estimate of the number of equity instruments, will ultimately vest. The income statement charge or credit for a period represents the movement in cumulative expense recognized as of the beginning and end of that period. No expense is recognized for compensation rights that do not vest. This excludes compensation rights, whose vesting is subject to certain market conditions. These are deemed vested, irrespective whether market conditions are met or not, subject to all other performance conditions are satisfied.

The costs arising due to cash-settled share-based payments is initially calculated using a binominal model with reference to the fair value at the date on which they were granted. This fair value is expensed over the period until vesting with recognition of a corresponding liability. The liability is recalculated at each balance sheet date and at the date of settlement. Changes in the fair value are recognized in profit or loss.

4.20 Earnings per share

Basic earnings per share are calculated by dividing profit by the weighted average number of shares outstanding. Diluted earnings per share are calculated by dividing profit by the weighted average number of shares outstanding plus the number of convertible bonds and stock options outstanding, provided that the exercise of conversion rights and the stock options are reasonably certain.

The dilutive effect of the outstanding options would be reflected as additional share dilution in the determination of earnings per share, if vesting were deemed to be probable as of the balance sheet date.

Note 5 - Segmental reporting

The Group's business is organized by product for corporate management purposes and has the following three operating segments which are subject to disclosure:

Solar Segment

In the Solar division SINGULUS TECHNOLOGIES combines its activities for the manufacturing of crystalline solar cells with a focus on high-performance cells as well as for thin-film solar cells on the basis of copper-indium-gallium-diselenide (CIGS) and cadmium-telluride (CdTe). This includes various vacuum coating machines, systems for thermal processes as well as machines for wet-chemical processing. The work area of crystalline silicon solar cells includes production solutions for high-performance cell concepts such as HJT (heterojunction), IBC (interdigitated back contact) as well as TOPCon (tunnel oxide passivated contacts) solar cells. In this market SINGULUS TECHNOLOGIES also supplies complete production lines for crystalline silicon solar cells

Life Science Segment

In the segment Life Science SINGULUS TECHNOLOGIES combined the new product solutions for Decorative Coatings, Medical Technology as well as machine and service solutions of the Data Storage areas (Optical Disc). A focus here is on vacuum coating machines for the finishing of surfaces as well as on various wet-chemical cleaning machines for applications in the medical technology and consumer goods industries.

For the consumer goods market an integrated production line DECOLINE II as well as the inline vacuum cathode sputtering machine POLYCOATER was developed in the past couple of years.

In addition, SINGULUS TECHNOLOGIES markets the MEDLINE production machine for applications in medical technology. In the segment Data Storage (Optical Disc) machines for the production of the known optical disc formats (CD, DVD, Dual Layer Blu-ray Discs as well as Ultra HD Blu-ray Discs) are offered.

Semiconductor Segment

SINGULUS TECHNOLOGIES is active in the semiconductor market as a supplier of special-purpose machines and offers the machine platforms TIMARIS and ROTARIS. The application range for the two machine platforms includes MRAM (magnetoresistive random access memory), sensory technology, power controllers and microelectromechanical systems (MEMS). The company has also regrouped the process solutions for the wet-chemical cleaning of electronic components to this segment.

The complete machines program of the company is complemented by a global network for replacement parts and service activities.

Directly attributable income, expenses and assets are generally reported directly under the segments to which they are directly attributable in the segment reporting. Income, expenses and assets which cannot be directly attributed to a given segment are allocated as a proportion of planned revenue for the fiscal year.

Management monitors the business segments' operating results separately in order to

facilitate decisions regarding the allocation of resources and to determine the units' performance.

The key figures for management are net revenue and EBIT (operating result). Liabilities are managed at the Group level. Revenue and operating results were allocated to the operating segments as follows in 2022:

	Segment S		Segi	Segment Segm				ULUS)LOGIES
	"So	lar"	"Life S	cience"	"Semico	nductor"	Group	
	2022	2021	2022	2021	2022	2021	2022	2021
	in million €							
Gross revenue	30.0	35.6	51.7	27.1	6.2	6.1	87.9	68.8
Sales deduction and direct selling costs	0.0	0.0	-0.1	-0.1	0.0	0.0	-0.1	-0.1
Net revenue	30.0	35.6	51.6	27.0	6.2	6.1	87.8	68.7
Operating result (EBIT)	0.1	-10.2	7.9	-0.1	-2.1	-2.1	5.9	-12.4
Depreciation	-2.6	-2.8	-0.8	-0.8	-0.1	-0.1	-3.5	-3.7
Financial result Earnings before							-2.0	-0.8
taxes							3.9	-13.2

The additions to capitalized development expenses concern the Solar Segment with € 1.1 million and the Semiconductor segment with € 0.4 million (previous year: € 0.5 million).

In the business year 2022, in the Solar division substantial sales were realized with the Chinese shareholder and major customer China National Building Materials (c. Note 35.). Of that revenue, € 21.1 million or 24.1% of total revenue was attributable to this customer. In the reporting period, significant revenue was generated with one customer in the Life Science segment. Of that revenue, € 36.7 million or 41.8 % of total revenue was attributable to this customer.

The table below displays information by geographical region as of December 31, 2022 based on assets:

	Germany	Rest of	North & South	Asia	Africa &
		Europe	America		Australia
	in million €	in million €	in million €	in million €	in million €
Assets	67.8	0.5	2.9	6.5	0.0

The table below displays information by geographical region as of December 31, 2021 based on assets:

	Germany	Rest of Europe	North & South America	Asia	Africa & Australia
	in million €	in million €	in million €	in million €	in million €
Assets	75.6	0.3	3.2	4.2	0.0

Outside of Germany, significant revenue was generated in China (€ 18.6 million; previous year: € 25.1 million) and in Singapore (€ 23.8 million; previous year: € 10.3 million) during the fiscal year.

The following matrix splits sales in the period under review according to the individual segments and selected categories.

Revenue by country of destination Germany 4.7 17.3 2.6 24.6 Rest of Europe 5.3 4.2 0.3 9.8 North & South America 19.9 23.4 2.4 45.7 Africa & Australia 0.0 0.1 0.0 0.1 Africa & Australia 0.0 51.7 6.2 87.9 Revenue by country of origin 29.1 44.1 4.1 77.3 Rest of Europe 0.0 0.5 0.1 0.6 North & South America 3.3 0.9 4.7 Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and 30.0 51.7 6.2 87.9 Products and 28.1 42.6 4.7 75.4 Services 30.0 51.7 6.2 87.9 Revenue recognition date 28.1 42.2	January 1 to December 31, 2022	Solar	Life Science	Semiconductor	Total	
Germany	December 31, 2022	in million €	in million €	in million €	in million €	
Rest of Europe						
North & South	Germany	4.7	17.3	2.6	24.6	
America	Rest of Europe	5.3	4.2	0.3	9.8	
Asia		0.1	6.7	0.9	7.7	
Revenue by country of origin		19.9	23.4	2.4	45.7	
Revenue by country of origin Germany 29.1 44.1 4.1 77.3	Africa & Australia	0.0	0.1	0.0	0.1	
of origin Germany 29.1 44.1 4.1 77.3 Rest of Europe 0.0 0.5 0.1 0.6 North & South America 0.1 3.7 0.9 4.7 Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 Parts Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 Revenue recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0		30.0	51.7	6.2	87.9	
of origin Germany 29.1 44.1 4.1 77.3 Rest of Europe 0.0 0.5 0.1 0.6 North & South America 0.1 3.7 0.9 4.7 Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 Parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0						
of origin Germany 29.1 44.1 4.1 77.3 Rest of Europe 0.0 0.5 0.1 0.6 North & South America 0.1 3.7 0.9 4.7 Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 Parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0	Revenue by country					
Rest of Europe 0.0 0.5 0.1 0.6 North & South America 0.8 3.7 0.9 4.7 Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 Products and 30.0 51.7 6.2 87.9 Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts 30.0 51.7 6.2 87.9 Revenue recognition date 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0						
North & South America	Germany	29.1	44.1	4.1	77.3	
America 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition Revenue recognition date 1.9 9.5 1.6 13.0	Rest of Europe	0.0	0.5	0.1	0.6	
Asia 0.8 3.4 1.1 5.3 Africa & Australia 0.0 0.0 0.0 0.0 30.0 51.7 6.2 87.9 Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0		0.1	3.7	0.9	4.7	
Products and Services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date		0.8	3.4	1.1	5.3	
Products and services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0	Africa & Australia	0.0	0.0	0.0	0.0	
services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0		30.0	51.7	6.2	87.9	
services Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0						
Production facilities 28.1 42.6 4.7 75.4 Service and spare 1.9 9.1 1.5 12.5 parts Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 9.5 1.6 13.0	Products and					
Service and spare 1.9 9.1 1.5 12.5	services					
parts 30.0 51.7 6.2 87.9 Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 1.6 1.9 1.0 <	Production facilities	28.1	42.6	4.7	75.4	
Revenue recognition date 28.1 42.2 4.6 74.9 Periodic revenue recognition 1.9 9.5 1.6 13.0	Service and spare	1.9	9.1	1.5	12.5	
Revenue recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date 1.9 1.0 1	parts	20.0			07.0	
recognition date Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date as of a specific date		30.0	51.7	6.2	87.9	
Periodic revenue 28.1 42.2 4.6 74.9 recognition Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date						
recognition Revenue recognition 1.9 9.5 1.6 13.0	· ·					
Revenue recognition 1.9 9.5 1.6 13.0 as of a specific date	Periodic revenue	28.1	42.2	4.6	74.9	
as of a specific date		1.9	9.5	1.6	13.0	
			<u> </u>			
	as or a specific date	30.0	51.7	6.2	87.9	

The Group reported an amount of € 84.8 million (previous year: 123.2 million) as outstanding order backlogs for performance obligations not yet rendered in full. These are expected to be rendered in the next 24 months.

January 1 to December 31, 2022	Solar	Life Science	Semiconductor	Total
2000111301 01, 2022	in million €	in million €	in million €	in million €
Revenue by country of destination				
Germany	4.9	1.9	4.1	10.9
Rest of Europe	0.5	7.6	0.8	8.9
North & South America	0.0	5.9	0.5	6.4
Asia	30.2	11.6	0.7	42.5
Africa & Australia	0.0	0.1	0.0	0.1
	35.6	27.1	6.1	68.8
Revenue by country of destination				
Germany	35.1	19.7	4.9	59.7
Rest of Europe	0.0	0.4	0.1	0.5
North & South America	0.1	5.1	0.5	5.7
Asia	0.4	1.9	0.6	2.9
Africa & Australia	0.0	0.0	0.0	0.0
	35.6	27.1	6.1	68.8
Products and				
Services and				
Production facilities	31.1	17.9	5.3	54.3
Service and spare parts	4.5	9.2	0.8	14.5
pante	35.6	27.1	6.1	68.8
Revenue recognition date				
Periodic revenue recognition	30.0	14.9	3.9	48.8
Revenue recognition as of a specific date	5.6	12.2	2.2	20.0
10 o. a spoomo dato	35.6	27.1	6.1	68.8

Note 6 - Cash and cash equivalents

Bank balances earn interest at floating rates based on daily bank deposit rates. Short-term deposits are made for periods ranging between one day and twelve months, depending on the relevant cash requirements of the Group. These earn interest at the relevant rates applicable to short-term deposits.

The fair value of cash and cash equivalents is € 18.7 million (previous year: € 15.0 million). For reasons of materiality, no loss allowances are recognized on the basis of the expected credit loss model because the bank balances are available at short notice and the selected banks have excellent credit ratings (Standard & Poor's A-3 or better).

Note 7 - Financial assets subject to restrictions on disposal

The Company has cash deposits of € 3.8 million (previous year: € 15.1 million) in blocked accounts over which it has no power of disposal. Accordingly, these deposits are included as cash flows from financing activities in the consolidated statement of cash flows if they are linked to the Group's financing transactions.

Note 8 - Trade receivables and receivables from construction contracts

	2022 in million €	2021 in million €
Trade receivables - current	2.9	2.9
Receivables from production contracts	10.4	3.5
Less allowances	-0.1	-0.1
	13.2	6.3

As of December 31, 2022, bad debt allowances of a nominal € 0.1 million had been charged on trade receivables (previous year: € 0.1 million). The development of the valuation allowances is presented below:

	2022 in million €	2021 in million €
As of January 1	0.1	0.1
Allowances recognized in profit		
or loss	0.0	0.0
Utilization	0.0	0.0
Reversals	0.0	0.0
As of December 31	0.1	0.1

If trade receivables become uncollectible, the associated receivables and allowances are derecognized.

As of December 31, the age structure of trade receivables and receivables from construction contracts, taking into account specific bad debt allowances, are broken down as follows:

	Total	Not due	overdue				
	in million	in million	< 30 days	30-60 days	60-90 days	90-180 days	> 180 days in million
	€	€	in million €	in million €	in million €	in million €	€
2022	13.2	12.6	0.2	0.2	0.1	0.1	0.1
2021	6.3	5.6	0.5	0.0	0.0	0.1	0.1

The overdue trade receivables are secured in the form of retention of title, insurance policies and letters of credit. With regard to trade receivables for which no bad debt allowance was charged, there were no indications as of the balance sheet date that the debtors would not meet their payment obligations.

Receivables from construction contracts arise when revenue can be recognized according to the stage of completion (using the cost-to-cost method) and the criteria set forth in IFRS 15.35 have been fulfilled, but this revenue cannot yet be invoiced to customers under the respective contract. The costs and estimated profits include directly allocable costs and all production-related overheads. Receivables from construction contracts are all recognized in current receivables. The receivables from construction contracts and the project-related prepayments offset against them break down as follows:

	2022 in million €	2021 in million €
Aggregate amount of costs incurred and recognized profits (less any recognized losses)	72.1	22.4
Prepayments received	-61.7	-18.9
Receivables from production contracts	10.4	3.5

Gross amounts due to customers for construction contracts, which are reported as liabilities from construction contracts in a separate balance sheet item, break down as follows:

	2022 in million €	2021 in million €
Aggregate amount of costs incurred and recognized profits (less any recognized		
losses)	95.8	148.6
Prepayments received	-131.0	-199.4
Liabilities from construction contracts	-34.8	-50.8

During the period under review sales over a certain period of time in the amount of € 74.9 million (previous year: € 48.8 million) were recognized.

Revenue from construction contracts include contract commissions amounting to € 0.1 million.

Of the € 29.5 million in liabilities from construction contracts as of December 31, 2021, (€ 50.8 million) was invoiced in the fiscal year.

Liabilities from construction contracts amounting to € 34.8 million were recognized. Recognition as income is expected in the next 24 months.

Note 9 – Other receivables and other assets

Other receivables and other assets break down as follows:

	2022 in million €	2021 in million €
Prepayments made	7.7	10.2
Tax assets	0.4	0.3
Miscellaneous	1.5	1.1
	9.6	11.6

Tax assets for fiscal year 2022 essentially concern SINGULUS TECHNOLOGIES AG (€ 0.1 million) and result primarily from claims for VAT reimbursements. Prepayments to suppliers are generally short-term in nature. The creditworthiness of the individual suppliers is reviewed on a regular basis.

Note 10 - Inventories

The Group's inventories break down as follows:

	2022 in million €	2021 in million €
Raw materials. consumables and supplies	22.6	20.2
Work in process	13.1	19.1
Less allowances	-21.7	-25.8
	14.0	13.5

The inventory allowances relate to reductions in value in accordance with the "lower of cost or net realizable value" principle.

During the 2022 fiscal year, € 4.3 million in write-downs to the net realizable value of inventories were reported (previous year: € 2.6 million).

The carrying amount of inventories recognized at net realizable value amounts to € 3.1 million (previous year: € 1.2 million).

In the reporting year, gains of € 0.1 million were generated from the reversal of impairment losses (previous year: € 0.3 million). This resulted from the sale of impaired parts.

Note 11 – Intangible Assets

In fiscal years 2022 and 2021, intangible assets developed as follows (all amounts in million €):

	Goodwill	Other intangible assets	Capitalized development costs	Total
Historic costs				
As of January 1, 2021	21.7	76.3	120.1	218.1
Additions	0.0	0.2	2. 0.5	0.7
Disposals	0.0	0.0	0.0	0.0
As of December 31, 2021	21.7	76.5	120.6	218.8
Additions	0.0	0.3	3 1.5	5 1.8
Disposals	0.0	0.0	0.0	0.0
As of December 31, 2022	21.7	76.8	122.1	220.6
Amortization and impairment				
As of January 1, 2021	15.0	75.7	114.9	205.6
Additions to amortization (scheduled)	0.0	0.1	1.5	5 1.6
Additions to impairment losses (unscheduled)	0.0	0.0	0.0	.00
Disposals	0.0	0.0	0.0	0.0
As of December 31, 2021	15.0	75.8	116.4	207.2
Additions to amortization (scheduled)	0.0	0.1	1.6	5 1.7
Additions to impairment losses (unscheduled)	0.0	0.0	0.0	0.0
Disposals	00	.0.0	0.0	0.0
As of December 31, 2022	15.0	75.9	117.9	208.9
Carrying amounts December 31, 202	l 6.7	0.7	4.2	2 11.6
Carrying amounts December 31, 2022	2 6.7	0.9	4.1	11.7

As of the balance sheet date, the Solar segment reported goodwill with a carrying amount of € 6.7 million (previous year: € 6.7 million). For further information on goodwill, please also refer to the comments under 4.5 "Goodwill" and 4.14 "Impairment of non-financial assets".

€ 1.5 million of the development costs incurred in fiscal year 2022 qualifies for recognition as an asset under IFRS (previous year: € 0.5 million). Amortization and impairment of capitalized development costs is recognized under research and development expenses in the consolidated income statement.

Note 12 - Property, plant & equipment

In fiscal years 2022 and 2021, property, plant and equipment developed as follows (all amounts in million €):

	Property and own building	Technical equipment and machinery	Office & operating equipment	Total
Historic costs				
As of January 1, 2021	16.8	9.2	9.7	35.7
Additions	0.0	0.0	0.4	0.4
Disposals	0.0	-1.1	-0.5	-1.6
As of December 31, 2021	16.8	8.1	9.6	34.5
Additions	0.0	0.5	0.6	1.1
Disposals	-6.9	-0.6	-0.9	-8.4
As of December 31, 2022	9.9	8.0	9.3	27.2
Amortization and impairment				
As of January 1, 2021	7.9	7.5	8.3	23.7
Additions to amortization (scheduled)	1.2	0.5	0.6	2.3
Additions to amortization (unscheduled)	0.0	0.0	0.0	0.0
Disposals	0.0	-0.9	-0.2	-1.1
As of December 31, 2021	8.7	7.1	8.7	24.5
Additions to amortization (scheduled)	0.9	0.4	0.5	1.8
Additions to amortization (unscheduled)	0.0	0.0	0.0	0.0
Disposals	-3.7	-1.3	-0.8	-5.8
As of December 31, 2022	5.9	6.2	8.4	20.5
Carrying amounts December 31, 2021	8.1	1.0	0.9	10.0
Carrying amounts December 31, 2022	4.0	1.8	0.9	6.7

In connection with the relocation of activities at the Fürstenfeldbruck site, the Company released the building from the original lease agreement and subsequently sold it. The production and administration building in Kahl am Main became the property of the Company on December 31, 2022, following the scheduled termination of the lease. Please refer to notes 31 and 33.

Note 13 - Other liabilities

Other liabilities are broken down as follows:

	2022	2021
	in million €	in million €
Outstanding liabilities to personnel	1.5	1.5
Executive Board and employee bonuses	2.4	2.2
Outstanding invoices	1.1	0.7
Financial reporting, legal and consulting fees	2.1	1.7
Services to be provided	0.3	0.1
Miscellaneous	2.5	2.0
	9.9	8.2

In the fiscal year, commitments for performance-related payments of \in 2.4 million (previous year: \in 2.2 million) to members of the Executive Board, managing directors of subsidiaries, senior executives and employees were recognized as a liability. Of this amount, \in 0.2 million related to share-based compensation. For further details, please refer to Note 15.

Note 14 - Prepayments received

	2022 in million €	2021 in million €
Prepayments from customers	8.0	5.6

Prepayments received as of December 31, 2022 mainly relate to advances for orders received by the Solar and Life Science segments for non-customer specific equipment, which are reported in inventories under work in process.

Note 15 - Share-based remuneration

The various share-based remuneration plans launched in previous years are described below:

In order to provide Executive Board members and senior executives with a long-term incentive, SINGULUS TECHNOLOGIES AG launched a phantom stock program. Each stock option under this program entitles the beneficiaries to subscribe to one virtual bearer share of the Company with a par value of € 1.00 each at the exercise price. The stock options were issued free of charge. The phantom shares are not settled in shares of the Company, but in cash. The cash settlement is determined on the basis of the difference between the exercise price and the relevant closing price.

Phantom Stock Program 2019 (PSP XV and PSP XVI)

By resolution dated April 11, 2019, the Supervisory Board resolved to issue 250,000 stock options to the Executive Board (PSP XV). A further 140,000 stock options were issued to senior executives (PSP XVI). The underlying phantom stock program corresponds to the 2015 program. The exercise price of these stock options is € 9,1000.

Phantom Stock Program 2020 (PSP XVII and PSP XVIII)

By resolution dated April 3, 2020, the Supervisory Board resolved to issue 350,000 stock options to the Executive Board (PSP XVII). A further 140,000 stock options were issued to senior executives (PSP XVIII). The underlying phantom stock program corresponds to the 2015 program. The exercise price of these stock options is € 3.9200.

Phantom Stock Program 2022 (PSP XIX und PSP XX)

By resolution dated June 17, 2022, the Supervisory Board resolved to issue 250,000 stock options to the Executive Board (PSP XIX). A further 114,000 stock options were issued to senior executives (PSP XX). The underlying phantom stock program corresponds to the 2015 program. The exercise price of these stock options is € 3.622.

The specific terms and conditions of the above phantom stock programs are as follows:

The term to maturity of the subscription right amounts to five years. The subscription rights can be exercised after lapse of the waiting period of two years at the earliest within a period of time of 14 trading days, beginning with the sixth trading day after the publication of the quarterly report for the first or third quarter, while during the first exercise period up to 25 % of the Phantom Stocks held by the beneficiary and within each additional exercise period semi-annually up to additional 25 % of subscription rights can be exercised.

For subscription rights under phantom stock programs PSP XI to PSP XVI, the reference price at the time of exercise must be at least 15.0% above the exercise price for all tranches. If the subscription rights of an exercise tranche cannot be exercised within the respective exercise period because the respective performance target has not been achieved, the phantom stocks of this exercise tranche can be exercised during the next exercise period or one of the following exercise periods if the performance target of the respective previous exercise tranche(s) is/are achieved in this next reference period or one of the following reference periods. The reference period is the period of five stock market trading days from publication of the quarterly report relevant for the start of the exercise period.

The development of the issued tranches is presented below:

	PSP	XI	PSP XII	
	2022 Number of stock options	Average exercise price	2022 Number of stock options	Average exercise price
Change in stock options		(€)		(€)
Outstanding as of beginning of the Fiscal year				
	250,000	8,7950	102,000	8.7950
Issued in the Fiscal year				
Revoked in the Fiscal year	-	-	-	-
Exercised during the fiscal year	-	-	-	-
Expired in the fiscal year	250,000	-	102,000	-
Outstanding at the end of the fiscal year	0	-	0	-
Exercisable at the end of the fiscal year	0	-	0	-

	PSP	XIII	PSP XIV	
	2022 Number of stock options	Average exercise price	2022 Number of stock options	Average _.
Change in stock options		(€)		exercise price (€)
Outstanding as of beginning of the Fiscal year				
	250,000	12.0160	112,000	12.0160
Issued in the Fiscal year				
Revoked in the Fiscal year	-	-	-	-
Exercised during the Fiscal year	-	-	-	-
Expired in the Fiscal year	250,000	-	112,000	-
Outstanding at the end of the Fiscal year	0	-	0	-
Exercisable at the end of the Fiscal year	0	-	0	-

	PSP	XV	PSP XVI	
Change in stock options	2022 Number of stock options	Average exercise price (€)	2022 Number of stock options	Average exercise price (€)
Outstanding as of beginning of the Fiscal year				
	250,000	9.1000	112,000	9.1000
Issued in the Fiscal year				
Revoked in the Fiscal year	-	-	-	-
Exercised during the Fiscal year	-	-	-	-
Expired in the Fiscal year	-	-	18,000	-
Outstanding at the end of the Fiscal year	250,000	9.1000	94,000	9.1000
Exercisable at the end of the Fiscal year	187,500	-	70,500	_

	PSP :	XVII	PSP XVIII	
	2022 Number of stock options	Average exercise price	2022 Number of stock options	Average
Change in stock options		(€)		exercise price (€)
Outstanding as of beginning of the Fiscal year				
	350,000	3.9200	112,000	3.9200
Issued in the Fiscal year				
Revoked in the Fiscal year	,-	-	-	-
Exercised during the Fiscal year	-	-	ı	-
Expired in the Fiscal year	100,000	-	1,8000	-
Outstanding at the end of the Fiscal year	250,000	3.9200	94,000	3.9200
Exercisable at the end of the Fiscal year	62,500	-	23,500	-

	PSP XIX		PSP XX	
Change in stock options	2022 Number of stock options	Average exercise price (€)	2022 Number of stock options	Average exercise price (€)
Outstanding as of beginning of the Fiscal year				
Issued in the Fiscal year	250,000	3.622	114,000	3.622
Revoked in the Fiscal year				
Exercised during the Fiscal year				
Expired in the Fiscal year				
Outstanding at the end of the Fiscal year	250,000	3.622	114,000	3.622
Exercisable at the end of the Fiscal year				

The subscription rights were priced according to a binomial model. This considers the limit of the payment to be made to an amount equal to three times the exercise price. Following parameter were used for the valuation of the subscription rights:

Tranche	PSP XV	PSP XVI	PSP XVII	PSP XVIII
Grant date	11.04.2019	11.04.2019	03.04.2020	03.04.2020
Exercise price	9.1000 €	9.1000€	3.9200 €	3.9200 €
Dividend yield	0,00 %	0.00 %	0.00 %	0.00 %
Interest rate	2.32 %	2.32 %	2.52 %	2.52 %
Volatility of SINGULUS TECHNOLOGIES	102.25 %	102.25 %	85.41 %	85.41 %
Fair value of each stock option as of December 31, 2022	0.082€	0.080€	0.433€	0.423€

Tranche	PSP XV	PSP XVI
Grant date	17.06.2022	17.06.2022
Exercise price	3.622	3.622
Dividend yield	0.00 %	0.00 %
Interest rate	1.42 %	1.42 %
Volatility of SINGULUS TECHNOLOGIES	64.32%	64.32%
Fair value of each stock option as of December 31, 2022	1.506 €	1.493€

The forecast for the expected volatility was derived from the historic share price movements of the SINGULUS TECHNOLOGIES AG. The historic calculation period corresponds to the term to maturity of the subscription rights.

The issuance of phantom stocks in the year under review resulted in income amounting to € 611k (previous year expense: € 185k). The program was treated as a cash-settled share-based payment within the meaning of IFRS 2.

The provision for phantom stock programs amounted to €189 thousand as of the balance sheet date (previous year: €773 thousand). As of the balance sheet date, the options had a weighted average remaining term of 2.7 years (previous year: 2.8 years).

Note 16 - Bond issuance

The secured bond (ISIN DE000A2AA5H5) with a volume of € 12.0 million was issued in July 2016.

The term is ten years until July 22, 2026, the annual interest rate is 4.50 % and the repayment amount is 105 %. The bond is mainly secured by non-restricted cash (€ 10.8 million), non-restricted receivables (€ 1.3 million), inventories (€ 6.7 million), property, plant and equipment (€ 1.3 million) as well as intangible assets (€ 4.1 million) of the SINGULUS TECHNOLOGIES AG. The collateral is used if the company breaches the bond conditions and the joint representative can therefore terminate the bond without notice. This would result in the liquidation of the collateral in favor of the bondholders. The values stated are the recorded carrying amounts according to IFRS as of December 31, 2022. The joint representative regularly reviews the company's

compliance with the bond conditions. The above figures are the carrying amounts recognized in accordance with IFRS as of December 31, 2022. The joint representative checks the Company's compliance with the bond terms and conditions on a regular basis. In the event of a violation, the bond may be terminated early.

On May 6, 2021, the term was extended by additional five years until July 22, 2026. Furthermore, the reduction of the interest rate to 4.5 % as well as an increased redemption amount of 105 % was resolved. The new terms and conditions of the bond became effective on July 13, 2021.

Financial liabilities accounted for at amortized costs resulted in a net loss of € 2.0 million in the period under review (previous year: € 0.8 million). The net losses are attributable to interest payments. Please refer to Note 32.

Note 17 – Pension provisions

Pension plans were granted by SINGULUS TECHNOLOGIES AG and by the previous HamaTech AG. They are defined benefit plans in both cases.

HamaTech AG's benefit obligations were transferred to SINGULUS TECHNOLOGIES AG in connection with the merger in fiscal year 2009. HamaTech AG's pension plan, which was transferred in the merger, was operated solely for former members of that company's Executive Board.

At SINGULUS TECHNOLOGIES AG company pension schemes in the form of direct pension commitments are provided for only some of the employees. On the one hand, beneficiaries are those employees who were employed at Leybold prior to the founding of the company in 1995 in accordance with the pension directives in the versions dated January 1, 1969 and January 1, 1986 and, on the other hand, some former Executive Board members as well as a few employees who were granted corporate pension benefits based on an individual contract. New pension commitments have not been issued for some time. In particular, there are no pension plans open for new employees.

The existing pension obligations are all based on defined benefit plans. In a special case based on individual contractual arrangements, a one-time capital payment is promised when the age limit is reached, otherwise all benefits are in the form of lifetime pensions upon disability, age or death (to survivors). The amount of the pensions is contractually stipulated for the individual commitments. The commitments under the Leybold pension directives are based on the length of service in the company and the pensionable income; the total pension from the company pension and statutory pensions has an upper limit that may not exceed the last net pay received. The age limit is the last day on which the beneficiary is 65.

All benefits are financed internally by the regular accumulation of provisions. There are no plan assets within the meaning of IAS 19, nor are there other employers' pension insurance plans.

The company is not charged with taxes or social security contributions on the retirement benefits.

Other than the general risks arising from interest rates, inflation, longevity and case law, there are no special risks specific to the company for these pension commitments. The longevity risk is taken into account through the use of cohort tables when calculating the obligation. The cohort tables make appropriate assumptions, in particular with respect to the further increase in life expectancy in the future. The risk of inflation is factored in sufficiently by a long-term estimate of 2.20% p.a. when calculating the obligation based on current knowledge. Moreover, this risk primarily impacts the adjustment when reviewing current pensions. Currently, there are no known risks arising from labor law by virtue of supreme court rulings which would impact the commitments.

HamaTech AG's pension plan, which was transferred in the merger, was operated solely for former members of that company's Executive Board. The pension plan is not covered by plan assets. Pension provisions are determined on the basis of an independent actuarial report. Pension benefits under the plan are based on a percentage of the employees' current pensionable compensation and their years of service.

The pension obligations and underlying assumptions are described below.

The change in SINGULUS TECHNOLOGIES AG's pension obligations as of December 31, 2022 and 2021 is presented in the following tables:

Change in pension obligations:	2022	2021
	in million €	in million €
Present value at the beginning of the fiscal year	15.4	17.0
Recognized in profit or loss:		
Service cost	0.2	0.2
Interest expense	0.2	0.1
Recognized in other comprehensive income: Actuarial gains/losses from:		
financial assumptions	-3.9	-1.4
demographic assumptions	0.0	0.0
experience-based adjustments	0.0	0.0
Miscellaneous:		
Payments made	-0.5	-0.5
Present value at the end of the fiscal year	11.4	15.4

Net pension expenses break down as follows:

	2022 in million €	2021 in million €
Service cost	0.2	0.2
Interest expense	0.2	0.1
	0.4	0.3

While service cost was mainly recognized under selling costs and general and administrative expenses as well as cost of sales, interest expense was disclosed in the financial result.

The figures for the current and previous four periods are as follows:

	2022	2021	2020	2019	2018
	in million €				
Present value of the defined benefit obligation	11.4	15.4	17.0	16.2	13.9

The assumptions underlying the calculation of the pension provision are as follows:

	2022	2021
Biometric	Heubeck 2018 G actuarial tables	Heubeck 2018 G actuarial tables
Discount rate (future pensioners)	3.90 %	1.10 %
Discount rate (current pensioners)	3.90 %	1.10 %
Estimated future wage and salary increases	2.50 %	2.00 %
Estimated future pension increases	2.20 %	1.60 %

As of December 31, 2022 the weighted average term of the defined benefit obligation was 12.9 years.

Contributions by the Company to the statutory pension insurance system amounted to € 1.6 million in the year under review. This is a defined contribution plan.

In addition, members of the Executive Board received a defined-contribution company pension benefit financed by the company. € 0.4 million was paid out for this in the year under review.

Keeping all other assumptions constant, from a reasonable perspective, possible changes to one of the significant actuarial assumptions as of the reporting date would have affected the defined benefit obligation in the following amounts.

Defined benefit obligation

Effect in million €	Increase	Decrease
Discount rate (0.5 percentage point change)	-0.7	0.7
Estimated future wage and salary increase (0.25 percentage point change)	0.0	0.0
Estimated future pension increases (0.25 percentage point change)	0.3	-0.3
Life expectancy (+1 year change)	0.6	-

The premiums expected for fiscal year 2023 amount to € 0.6 million.

Note 18 - Other provisions

Other provisions developed as follows in the fiscal year:

	01.01.2022 in million €	Utilizations in million €	Reversals in million €		31.12.2022 in million €
Warranties	6.8	-0.1	-1.3	2.0	7.4
Miscellaneous	0.6	0.0	0.0	0.0	0.6
	7.4	-0.1	-1.3	2.0	8.0

Provisions for warranty costs are recognized as a percentage of product cost. The percentages used are derived from experience for each product type and range between 2.75% and 4.00 % (previous year: between 2.75% and 5.00%). The guarantee period, and thus a possible utilization, ranges from 2 month to 22 months as of December 31, 2022.

Note 19 - Provisions from restructuring measures

Provisions from restructuring measures developed as follows in the fiscal year:

	1.1.2022	AdditionsC	Consumption	Reversal	31.12.2022
	in million €	in million €	in million € ir	n million €	in million €
Provisions from restructuring measures	0.2	2.4	-0.5	0.0	2.1
measures	0.2	2.4	-0.5	0.0	Z. 1

In connection with the relocation of activities at the Fürstenfeldbruck site to Kahl am Main, restructuring expenses of \in 2.4 million were incurred in the reporting year. By the balance sheet date, \in 0.5 million of the added provision had been utilized. The remainder of the provision is expected to be fully utilized in fiscal 2023.

Note 20 - Shareholders' equity

On September 21, 2017, SINGULUS TECHNOLOGIES AG disclosed in accordance with Art. 92 Para. 1 AktG that half of its share capital had been eroded as of August 31, 2017. This loss was announced to the shareholders at an extraordinary shareholders' meeting on November 29, 2017. In the course of the extraordinary general meeting on October 29, 2021, pursuant to Art. 92 Para. 1 AktG the Executive Board again reported on the loss of the nominal capital pursuant to HGB of the parent Company.

As of December 31, 2022, the share capital amounted to \in 8,896,527.00, divided into 8,896,527 bearer shares with a par value of \in 1.00. Authorized capital 2023/1 amounted to \in 4,448,263.00 as of the balance sheet date.

Other reserves

Other reserves include currency translation differences from translating the financial statements of foreign entities as well as actuarial gains and losses from pension commitments.

Capital reserves

The capital reserves amounting to € 19.8 million result from capital increases in previous years. For information on the capital management principles, please refer to the Status Report.

Note 21 - Tax expense/tax income; deferred tax assets/deferred tax Liabilities

The disclosures on income taxes for 2022 and 2021 are as follows:

	2022	2021
	in million €	in million €
<u>Current income taxes</u>		
Germany	0.0	0.0
Foreign countries	0.0	0.0
Sub-total	0.0	0.0
<u>Deferred taxes</u>		
Germany	4.0	-1.0
Foreign countries	0.0	0.0
Sub-total	4.0	-1.0
Total tax expense/income	4.0	-1.0

Pursuant to German tax law, the income taxes comprise corporate income tax, trade income tax and the solidarity surcharge.

Deferred tax assets relate to the following:

	2022	2021
	in million €	in million €
Inventories	5.2	7.8
Pension provisions	1.2	2.4
Trades receivables	0.1	0.1
Provisions for restructuring measures	0.0	0.3
Goodwill	0.3	0.4
Deferred taxes on loss carryforwards	7.2	2.9
Non-current assets	0.4	0.0
Other liabilities	0.3	0.3
	14.7	14.2
Netting with deferred tax liabilities	-14.6	-14.0
Deferred tax assets	0.1	0.2

The deferred tax assets (before netting with deferred tax liabilities) of \in 14.7 million were above the prior year's level (\in 14.2 million). After being offset against deferred tax liabilities, there were deferred tax assets in the amount of \in 0.1 million (previous year: \in 0.2 million).

Deferred tax assets developed as follows:

	2022 in million €	2021 in million €
Balance as of January 1.	0.2	0.2
Recognized in other comprehensive income: Change in actuarial gains and losses from pension commitments	1.1	-0.4
Recognized through profit and loss:		
Change in temporary differences Netting with deferred tax liabilities	-0.5 -0.7	1.2 -0.8
Balance as of December 31	0.1	0.2

As of December 31, 2022, SINGULUS TECHNOLOGIES AG (excl. foreign operating facilities) had preliminary corporate income tax loss carryforwards in the amount of € 229.7 million (previous year: € 212.8 million) and municipal trade tax loss carryforwards of € 221.7 million (previous year: € 204.9 million). In 2022, € 1.1 million was added to the € 17.8 million in interest carryforwards from previous years; these amounted to €18.9 million as of December 31, 2022.

Deferred tax assets are recognized for all temporary differences and for all unused tax loss carryforwards to the extent that it is probable that taxable profit will be available against which the tax assets can be utilized.

In accordance with IAS 12.34f in conjunction with IAS 12.31, no domestic deferred tax assets are recognized in the balance sheet beyond offsetting 60 % of deferred tax liabilities due to SINGULUS TECHNOLOGIES AG's loss history.

In accordance with the disclosures under 4.14 Impairment of assets, the Company expects a positive business development and SINGULUS TECHNOLOGIES AG to utilize existing loss carryforwards to a limited extent in the next three fiscal years.

Deferred tax liabilities break down as follows:

	2022	2021
	in million €	in million €
		••
Receivables and liabilities from construction contracts	18.5	14.8
Capitalized development costs	0.9	1.1
	19.4	15.9
	-14.6	-14.0
Netting with deferred tax assets		
	4.8	1.9

At € 19.4 million, deferred tax liabilities (before netting with deferred tax claims) are above the previous year's level (previous year: €15.9 million) due to higher temporary differences on receivables and liabilities from construction contracts. After netting with deferred tax assets, deferred tax liabilities amount to € 4.8 million (previous year: € 1.9 million).

Deferred tax liabilities developed as follows:

	2022 in million €	2021 in million €
Balance as of January 1	1.9	0.6
Recognized through profit and		
loss: Change in temporary differences	3.4	2.1
Netting with deferred tax assets	-0.5	-0.8
Balance as of December 31	4.8	1.9

The amount of the temporary differences related to investments in subsidiaries for which no deferred tax liabilities have been recognized totaled € 0.3 million.

The effective tax rate in Germany (for corporate income tax, trade tax and the solidarity surcharge) was 29.13% (previous year: 29.13%). The effective tax rate is reconciled to the actual tax rate as follows:

	2022 in million €	2021 in million €
Consolidated earnings before taxes	3.9	-13.2
Anticipated tax * Adjustment of temporary differences and loss and interest carryforwards of the current period for which no deferred	1.1	-3.8
taxes were recognized	2.9	4.3
Other permanent differences	0.0	0.5
Current taxes*	4.0	1.0

^{*} A minus sign denotes tax income

The most recent tax field audit of SINGULUS TECHNOLOGIES AG covered the period from 2010 up to and including 2013.

Note 22 - Earnings per share

For the calculation of the undiluted earnings per share the earnings attributable to the bearers of the common shares of the parent company are divided by the weighted average number of shares in circulation during the period under review.

For the calculation of the diluted earnings per share the earnings attributable to the bearers of the common shares of the parent company are divided by the weighted average number of common shares in circulation during the period under review in addition to the weighted average number of shares resulting from the conversion of all potential common shares with dilution effect into common shares. Dilution effects were neither recorded in the period under review nor in the same period one year ago.

The following table includes the amounts applied for the calculation of the undiluted and diluted earnings:

	2022	2021
	in million €	in million €
Profit attributable to owners of the parent for calculating basic earnings per share	-0.1	-14.2
Weighted average number of ordinary shares used to calculate basic earnings per share	8,96,527	8,896,527
Dilutive effect	-	-
Average weighted number of common shares adjusted for dilutive effect		
	8,896,527	8,896,527

In the period from the balance sheet date until the drawing up of the consolidated financial statements there were no transactions of common shares or potential common shares.

Note 23 - Sales deductions and direct selling costs

The sales reductions include all cash discounts granted. Direct selling costs essentially include expenses for commissions.

Note 24 - Cost of materials

The cost of sales for fiscal year 2021 includes material costs of € 44.0 million (previous year: € 35.7 million).

Note 25 - Personnel expenses

The income statement for fiscal year 2022 includes personnel expenses in the amount of € 35.2 million (previous year: € 30.6 million). Expenses for wages and salaries in the year under review totaled € 25.6 million (previous year: € 24.6 million); expenses for social security contributions totaled € 4.8 million (previous year: € 4.6 million); postemployment expenses were € 2.1 million (previous year: € 1.4 million).

Note 26 - Depreciation and amortization

Depreciation and amortization expenses amounted to € 3.5 million (previous year: € 3.8 million).

Note 27 - General administrative expenses

Administrative expenses include management expenses, HR expenses and finance and accounting expenses as well as the premises and vehicle expenses attributable to such areas. Ongoing IT costs, legal and consulting fees, investor relations costs as well as costs of general meetings and the financial statements are also recognized in this item.

Note 28 - Research and development

Research and development costs relate not only to research and non-capitalizable development costs but also to the amortization of capitalized development costs of € 1.6 million (previous year: € 1.5 million).

Totaling € 11.7 million in 2022, the expenditures for research and development (including development services included in cost of sales) were below the prior-year level (€ 10.3 million). € 1.5 million of these expenditures were capitalized (previous year: € 0.5 million).

The Company received national and EU subsidies amounting to € 0.8 million in the fiscal year (previous year: € 0.6 million).

Note 29 - Other operating income/expenses

In the reporting year, other operating income includes primarily income from the reversal of provisions amounting to € 0.5 million (previous year: € 0.3 million).

Other operating expenses in the fiscal year primarily included foreign currency losses amounting to € 0.5 million (previous year: € 0.2 million).

Note 30 - Financial income and financing expenses

In connection with the relocation of activities at the Fürstenfeldbruck site to Kahl am Main, restructuring expenses of € 2.4 million were incurred in the year under review.

Note 31 - Income from the sale of property, plant and equipment

In connection with the relocation of activities at the Fürstenfeldbruck site, the Company released the building from the original lease agreement and subsequently sold it. In this context, the Company realized income in the amount of \in 9.3 million. At the same time, the Company received advance rental payments from the original lease agreement in the amount of \in 2.2 million, the recoverability of which was not sufficiently probable in the previous fiscal years.

Note 32 - Financial income and financing expenses

The financial income / financing expenses break down as follows:

	2022 in million €	2021 in million €
Financial income from the bond amendments	0.0	0.9
Interest expenses from leases	-0.1	-0.4
Finance costs from the bond issue (including incidental expenses) Interest expense from interest accrued on the pension provisions	-0.8 -0.2	-0.8 -0.1
Other financing expenses and income	-0.9	-0.4
	-2.0	-0.8

The financing costs from the bond issue result from the bonds issued in 2016.

Note 33 - Leases

As a lessee, the Group leases various assets, including real estate, motor vehicles and IT equipment. The production and administration building in Kahl am Main became the property of the Company on December 31, 2022, following the scheduled termination of the lease. The production and administration building in Fürstenfeldbruck was purchased and sold during the financial year. We refer to Note 31 The term of the other leases is between three and five years.

The leases for IT equipment are of low value, meaning that no right-of-use assets or lease liabilities are recognized in accordance with IFRS 16.

i. Right-of-use assets

None of the right-of-use assets in connection with real estate leases meet the definition of investment property. These properties are reported under property, plant and equipment. For more details, please refer to Note 12.

in million €	Land and buildings	Operating and office equipment	Total
January 1, 2022	6.4	0.5	6.9
Depreciation charge	-1.0	-0.2	-1.2
Additions of right-of-use assets	0.0	0.3	0.3
Disposals of right-of-use assets	-5.2	0.0	-5.2
December 31, 2022	0.2	0.6	0.8

ii. Amounts recognized in the income statements

2022	in million €
Interest expenses for lease liabilities	0.1
Expenses for leases with underlying assets of low value	0.1
Total	0.2

III. Amounts recognized in the statement of cash flows

2022	in million €
Total cash outflows for right-of-use assets	1.9
Total cash outflows for assets of low value	0.1

As of December 31, 2022, the future minimum payments arising from leases in the Group were:

	in million €	
2023	0.4	
2024	0.2	
2025	0.1	
2026 and thereafter	0.1	
	0.8	

The amounts recognized in the cash flow statement for expenses relating to short-term leases amount to € 0.7 million.

Note 34 - Events after the Balance Sheet Date

Agreement to provide liquid funds

In order to secure the continued existence of the Company and thus of the Group, the Company signed an agreement with the major shareholder CNBM effective February 3, 2023, for the provision of liquid funds in the amount of € 20.0 million. In return, the Company granted various options relating to rights in connection with know-how in the field of solar technology.

The total volume flowed to the Company in two tranches in March in the amount of € 9.6 million and in early April 2023 in the amount of € 10.4 million. Both tranches have a maturity of at least 18 months, but the disbursed funds have to be repaid in full or in part only upon request of the lender.

Extension of the working capital credit line of € 10 million

In order to secure liquidity, the Company extended the term of the € 10 million working capital credit line by a further 12 months in April 2023.

Election of the Supervisory Board at the Annual General Meeting on July 19, 2023

Dr. rer. nat. Blessing has declared that he wishes to retire from the Supervisory Board at the end of his term of office. On July 19, 2023, the Annual General Meeting appointed Dr. Changfeng Tu as his successor with an approval of 99.80% for the period until the end of the Annual General Meeting which resolves on the ratification of the actions of the Supervisory Board for the financial year 2027.

There were no further events after the end of the fiscal year requiring disclosure.

Note 35 - Related party disclosures

In accordance with IAS 24, those persons and companies which are able to exercise control or a significant influence over SINGULUS TECHNOLOGIES AG are deemed related parties. At the balance sheet date, the members of the Supervisory Board and the Executive Board of SINGULUS TECHNOLOGIES AG and associates were identified as related parties.

In accordance with the articles of incorporation, the Supervisory Board of SINGULUS TECHNOLOGIES AG has three members. During the business year 2022 the members of the Supervisory Board included:

Dr.-Ing. Wolfhard Leichnitz, Essen, Chairman

Dr. Silke Landwehrmann, Düsseldorf, Deputy Chairwoman

Dr. rer. nat. Rolf Blessing, Trendelburg, Member

The above members of the Supervisory Board were elected for the period until the end of the annual shareholders' meeting that resolves the ratification of their actions for the fourth fiscal year following the beginning of their term of office; the fiscal year in which their term of office begins is not included in this calculation.

In addition to compensation for expenses, each member of the Supervisory Board is entitled to fixed remuneration of € 40 thousand for each full fiscal year of board membership. The Chairman receives twice this amount, the Deputy Chairwoman one and a half-times this amount. Members of the Supervisory Board not sitting on the Board for the full business year will receive a pro-rata compensation.

For their work in the fiscal year, taking into account the waiver the Supervisory Board members are therefore entitled to fixed remuneration in accordance with the articles of incorporation of € 180k (previous year: € 180k).

Dr.-Ing. Leichnitz held a total of 245 shares in the Company as of December 31, 2022 (previous year: 245 shares). Dr Landwehrmann held a total of 2,000 shares in the Company as of December 31, 2022 (previous year: 2,000 shares).

Companies are deemed related parties if they are able to exert control or a significant influence over the reporting entity and hence SINGULUS TECHNOLOGIES AG (associates). With effect from September 20, 2018, Triumph Science and Technology Group Co., Ltd (a wholly owned subsidiary of China National Building Materials, Beijing, China, "CNBM") acquired 13.11% of shares in SINGULUS TECHNOLOGIES AG. In January 2019, CNBM acquired a further 3.64% of shares in the Company. Its shareholding of SINGULUS TECHNOLOGIES AG was thus 16.75%. At the same time, CNBM is currently the Company's largest customer and has therefore been classified as a related party within the meaning of IAS 24 since September 20, 2018.

During the period from January 1 to December 31, 2022, revenue amounting to \leq 21.1 million was generated from the manufacturing and delivery of equipment for CNBM and its subsidiaries. As of the balance sheet date, liabilities from production orders amounted to \leq 23.7 million. The outstanding liabilities from construction contracts with related parties include long-term orders and are to be fulfilled up to 24 months after the reporting date. None of the balances are collateralized.

The current occupations of Supervisory Board members are listed as follows:

	Occupation	Membership of other supervisory boards and similar oversight bodies
DrIng. Wolfhard Leichnitz	Construction Engineer	None
Dr. Silke Landwehrmann	Diplom-Kauffrau, Managing Director of Aufam Asset Management GmbH, Rheinberg	Wuppermann AG, Leverkusen, Deputy Chairwoman
Dr. rer. nat. Rolf Blessing	DiplPhysicist	None

In the business year 2022 the Executive Board was comprised of the following members:

Dr.-Ing. Stefan Rinck

Chief Executive Officer

Dipl.-Oec. Markus Ehret

Chief Financial Officer

Chief Operating Officer (COO)

The total remuneration received by the Executive Board in the reporting period was as follows:

	2022				
	Fixed remuneration	Other compensation	Variable remuneration	Components with long-term incentive	Total
	in '000 €	in '000 €	in '000 €	in '000 €	in '000 €
DrIng. Stefan Rinck	440	48	88	226	802
DiplOec. Markus Ehret	300	32	160	151	643
Dr. rer. nat. Christian Strahberger	250	5	50	0	305
	990	85	298	377	1,750

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¹ Left the company as of October 31, 2022

The remuneration of the Executive Board for the previous year is broken down as follows:

	2021				
	Fixed remuneration	Other compensation	Variable remuneration	Components with long-term incentive	Total
	in '000 €	in '000 €	in '000 €	in '000 €	in '000 €
DrIng. Stefan Rinck	440	49	234	0	723
DiplOec. Markus Ehret	300	32	149	0	481
Dr. rer. nat. Christian Strahberger	300	7	192	0	499
	1,040	88	575	0	1,703

Members of the Executive Board receive a defined-contribution company pension benefit financed by the Company. The Company grants Executive Board members an annual pension contribution amounting to a certain percentage of their respective gross annual fixed remuneration. For Dr.-Ing. Stefan Rinck, this amounted to 59.97 % beginning on January 1, 2012, for Mr. Markus Ehret, this percentage was 31.58 %.

The annual expense for the Company in fiscal year 2022 was € 447 thousand (previous year: € 464 thousand), of which € 264 thousand (previous year: € 264 thousand) was for Dr.-Ing. Stefan Rinck, € 95 thousand (previous year: € 95 thousand) for Mr. Markus Ehret, and € 88 thousand (previous year: € 105 thousand) for Dr. Christian Strahberger (left the company as of October 31, 2022).

Former members of the Executive Board of SINGULUS TECHNOLOGIES AG received total remuneration of € 0.4 million in the fiscal year. As of December 31, 2022, the provisions for pension claims for former board members stood at € 5.2 million.

In addition, the members of the Executive Board held the following number of shares in SINGULUS TECHNOLOGIES AG from their own purchases as of the fiscal year-end:

	2022	2021
	Shares	Shares
DrIng. Stefan Rinck	122	122
DiplOec. Markus Ehret	43	43
Dr. rer. nat. Christian Strahberger ¹	<u>-</u> _	2.000
	165	2,165

¹ Left the company as of October 31, 2022

Note 36 - Disclosures on shareholdings

	Shareholding Shareholders Net incom		Net income/
		' equity	loss
	%	in '000 €	in '000 €
Germany			
SINGULUS CIS Solar Tec GmbH, Kahl am Main,			
Germany	100	11	-1
SINGULUS New Heterojunction Technologies			
GmbH, Kahl am Main, Germany	100	-329	-21
Abroad *			
SINGULUS TECHNOLOGIES Inc.,			
Windsor, USA	100	9.856	7
SINGULUS TECHNOLOGIES MOCVD			
Inc., Windsor, USA	100	-680	0
SINGULUS TECHNOLOGIES ASIA Pacific			
Pte. Ltd., Singapore	100	3.283	804
SINGULUS TECHNOLOGIES LATIN AMERICA			
Ltda., Sao Paolo, Brazil	98,8	5.612	325
SINGULUS TECHNOLOGIES FRANCE			
S.A.R.L., Sausheim, France	100	-125	-146
SINGULUS TECHNOLOGIES TAIWAN Ltd.			
Taipeh, Taiwan	100	-1.952	-147
SINGULUS TECHNOLOGIES SHANGHAI Co.,			
Ltd., Shanghai, China	100	-416	-572
STEAG HamaTech Asia Ltd.			
Hongkong, China	100	0	0
HamaTech USA Inc.,			
Austin/Texas, USA	100	-1.123	3

^{*} Equity and net income/loss were taken from the IFRS annual financial statements

SINGULUS TECHNOLOGIES Inc., Windsor, USA, holds a 100% stake in TECHNOLOGIES MOCVD Inc.

1.2% of the interest in SINGULUS TECHNOLOGIES LATIN AMERICA Ltda. is held by New Heterojunction Technologies GmbH.

STEAG HamaTech Asia Ltd. discontinued its operating business in April 2003.

Note 37 - Financial risk management

The financial liabilities contained in the consolidated financial statements essentially concern the bond placed in 2016. The Group has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations. In accordance with group policy, in the fiscal 2022, no derivatives trading took place nor will take place in the future for speculative purposes.

The operating and financing activities can essentially give rise to interest rate, credit, liquidity and foreign currency risks.

The individual risks are described in greater detail below. Additional remarks may be found in the risk report within the Status Report.

Foreign currency risk

Foreign currency risks from operations abroad are assessed as part of a risk analysis. Some sales of the SINGULUS TECHNOLOGIES Group are subject to the US dollar (USD) currency risk. For this reason derivatives to hedge the USD foreign exchange risk are used. Risks from foreign currencies are continually assessed as part the risk management system.

The following table shows the sensitivity of consolidated earnings before taxes (due to the change in the fair values of monetary assets and liabilities) and of consolidated equity (due to the changes in fair values of forward exchange contracts recognized in other comprehensive income) to a change in the USD/€ exchange rate generally possible based on reasonable judgment. All other factors remain unchanged.

	Price change of USD	Effect on earnings before taxes	Effect on shareholders' equity
		in million €	in million €
2022	+10 %	-0.2	0.0
	-10 %	0.1	0.0
2021	+10 %	-0.6	0.0
	-10 %	0.6	0.0

The effect of potential changes in the USD exchange rate on SINGULUS TECHNOLOGIES' earnings results from bank balances, unhedged trade receivables and payables as well as unhedged intragroup receivables and payables denominated in USD. As of the balance sheet date, the net value of these items amounted to USD 1.8 million.

Liquidity risk

The processing of the major orders as scheduled in 2023 and 2024 will be critical for the Company's future solvency. In particular, the Company is dependent on the major Chinese customer CNBM in this regard. The management also expects further order intake and thus additional cash and cash equivalents from prepayments for new projects.

The Group still has access to bank guarantee lines in the amount of € 20.8 million. € 3.5 million of these had been drawn down as of the end of the fiscal year. Cash and cash equivalents (€ 3.8 million) are deposited as collateral to secure these loan commitments. For further details, please refer to Note 4.

The table below summarizes the maturity profile of the Group's financial liabilities as of December 31, 2022. The disclosures are made on the basis of the contractual, nondiscounted payments.

Fiscal year ended December 31, 2022	Payable on demand	Up to 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
	in million €	in million €	in million <u>€</u>	in million €	in million €	in million <u>€</u>
Bond repayment Bond interest Liabilities from loan	0.0 0.0	0.0 0.2	0.0 0.0	11.1 0.0	0.0 0.0	11.1 0.2
Other liabilities Liabilities from accounts receivables	0.0 0.5	0.0 2.9	0.0 6.5	10.0	0.0 0.0	10.0 9.9
	2.3	7.5	0.1	0.0	0.0	9.9
	2.8	10,6	6,6	21.1	0.0	41.1
Fiscal year ended December 31, 2021	Payable on demand	Up to 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
	in million €	in million €	in million €	in million €	in million €	in million <u>€</u>
Bond repayment Bond interest Liabilities from loan	0.0 0.0	0.0 0.2	0.0 0.0	10.8 0.0	0.0 0.0	10.8 0.2
Other liabilities Liabilities from accounts receivables	0.0 0.6	0.0 2.5	0.0 5.1	0.0 0.0	0.0	0.0 8.2
	4.1	12.8	0.0	0.0	0.0	16.9
	4.7	15.5	2.3	13.6	0.0	36.1

Interest rate risk

The Group is exposed to the risk of fluctuations in market interest rates. A shift in the yield curve by +/- 50 basis points would not have any significant effect on the Group's earnings before taxes since none of the interest-bearing liabilities are subject to a variable interest rate.

Credit risk

The credit risk is the risk of financial losses if a customer or contractual party to a financial instrument fails to meet its contractual obligations. The credit risk generally arises from trade receivables and the Group's receivables from construction contracts and other receivables. The Group uses export credit insurance as the primary instrument to hedge against specific country risks. Customers' creditworthiness and payment history are continually monitored and corresponding credit limits are set. In addition, risks in individual cases are limited where possible through credit insurance, bank guarantees and retention of title. From the current perspective, the Group assumes sufficient coverage of the receivables default risk.

On the basis of expected credit losses in accordance with IFRS 9, loss allowances are recognized for unsecured trade receivables according to the following probabilities of default. The effect on earnings as of the end of the year amounted to \in 0.0 million (previous year: \in 0.0 million).

	Book value in million €	Estimated loss rate (weighted average)
Not overdue	2.2	0.00 %
1-30 days overdue	0.2	0.10 %
31-60 days overdue	0.2	0.63 %
61-90 days overdue	0.0	0.89 %
91-180 days overdue	0.1	1.50 %
More than 180 days overdue	0.1	28.19 %
Total	2.8	

The future probability of default was derived from historical credit losses. Due to its business model, the Group has a limited number of customers and can thus ensure that it can estimate the credit losses of its individual customers. Since the first-time recognition of expected credit losses under IFRS 9, the risk has not changed significantly.

For more information on the application of the expected credit loss model, please refer to Notes 6, 8 and 9.

Significance of the credit risk:

The carrying amounts of the financial assets and receivables from construction contracts (contract assets) correspond to the maximum credit risk. The Group's maximum credit risk as of the reporting date is presented below:

	2022	2021
	in million €	in million €
Cash and cash equivalents	18.7	14.9
Financial assets subject to restrictions on disposal	3.8	15.1
Trades receivables	2.8	2.8
Receivables from production contracts	10.4	3.5
Other receivables	9.6	11.6
	45.3	48.0

Capital management

The Group analyzes its capital based on the "net liquidity" (as the total of cash and cash equivalents, short-term deposits and financial assets subject to restrictions on disposal less the bond and interest-bearing loans). As of the end of the fiscal year, the net liquidity was as follows:

	2022	2021
	in million €	in million €
Cash and cash equivalents	18.7	14.9
Financial assets subject to restrictions on disposal	3.8	15.1
Financing liabilities from bond issue	-11.3	-11.0
Liabilities from bonds	-10.0	0.0
Net liquidity	1.2	19,0

In order to identify liquidity risks at an early stage, cash flow forecasts are prepared every month on the basis of a three-month forecast horizon. The insolvency risk is thus reviewed on a regular basis.

Note 38 - Financial instruments

Fair values

The following table shows the carrying amounts and fair values of all financial instruments recognized in the consolidated financial statements by category. Cash and cash equivalents, restricted cash, trade receivables, other receivables, trade payables, liabilities from borrowings and other liabilities regularly have short remaining terms. The balance sheet figures approximate the fair values, taking into account the expected credit loss model and are thus not disclosed separately.

		Book v	/alue	Fair v	alues
		2022	2021	2022	2021
	Valuation method	in million €	in million €	in million <u>€</u>	in million <u>€</u>
Financial assets Cash and cash equivalents** Financial assets subject to	AC	18.7	15.0		
restrictions on disposal** Derivatives	AC	3.8	15.1		
Hedging derivates**	HD	-	-		
Trade receivables**	AC	2.8	2.8		
Other receivables	AC	10.4	3.5		
Financial liabilities					
bond*	AC	11.3	11.0	5.3	8.1
Liabilities from bonds Derivatives	AC	10.0	0.0		
Hedging derivatives**	HD	-	-		
Trade payables**	AC	9.9	16.9		
Other liabilities	AC	9.9	8.2		
Total	AC	75.9	72.6		
Total	HD	0.0	0.0		

Abbreviations:

AC: Amortized costs (financial assets and liabilities measured

at amortized cost)

HD: Hedging Derivatives

Forward exchange contracts are measured using the ECB reference rates for spot currency and the valid forward exchange rates of the respective commercial bank for forward currency.

The fair value of the exchange-listed bond equals the market price as of the balance sheet date plus the carrying amount of accrued interest liabilities as of the balance sheet date.

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^{*} The fair value measurement was classified as Level 1 fair value based on the inputs to the valuation techniques used

^{**} The fair value measurements were classified as Level 2 fair values based on the inputs to the valuation techniques used

The maximum credit risk is reflected in the carrying amounts of the financial assets and liabilities.

The table below shows changes in liabilities held for financing purposes.

	As of January 1, 2022 in million €	Additio n/dispo sal in million €	Cash flows for interest and principal payments in million €	As of December 31, 2022 in million €
Bond	10.8	0.3	0.0	11.1
Interest	0.2	0.5	-0.5	0.2
Liabilities from loans	0.0	10.2	-0.2	10.0
Leases	5.3	-2.5*	-2.0	0.8
	16.3	8.5	-2.7	22.1

^{*} Disposal of building Fürstenfeldbruck

Note 39 - Employees

In the fiscal year, the Company had an annual average of 331 (previous year: 341) permanent employees. The annual average distribution of employees (FTEs) by functional area in the fiscal year is presented below:

	2022	2021
Assembly, production and logistics Development	99 94	106 92
Sales	96	100
Administration (excluding Executive Board members)	42	43
	331	341

The Group had 321 employees as of December 31, 2022 (previous year: 333).

Note 40 - Auditor's fees (disclosures pursuant to Art. 314 Para. 1 No. 9 HGB)

In the year under review, SINGULUS TECHNOLOGIES AG and its subsidiaries were charged the following fees by the auditor of the consolidated financial statements:

	2022 T€
a) for the audit of the financial statements	433
b) Other	0
Total	433

The fee for Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft's auditing services related to the audit of the annual and consolidated financial statements.

Note 41 - Corporate Governance

The Executive Board and the Supervisory Board made the declaration required under Artcile 161 AktG in June 2022 and have made it available to shareholders on a permanent basis on the Company's website at https://www.singulus.com/en/corporategovernance/.

Note 42 - Publication

The consolidated financial statements of SINGULUS TECHNOLOGIES AG were released for publication by the Executive Board on October 25, 2023.

Kahl am Main, October 25, 2023

SINGULUS TECHNOLOGIES AG

The Executive Board

Dr.-Ing. Stefan Rinck Dipl.-Oec. Markus Ehret

INDEPENDENT AUDITOR'S REPORT

To Singulus Technologies AG, Kahl am Main, Germany

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND THE GROUP MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Singulus Technologies AG and its subsidiaries (the Group), which comprise the consolidated statement of financial position as of December 31, 2022, the consolidated statement of income and comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from January 1 to December 31, 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. We have also audited the group management report of Singulus Technologies AG for the business year from January 1 to December 31, 2022. In accordance with German legal requirements, we have not audited the content of the components of the group management report mentioned in the section "Other information" of our audit opinion.

In our opinion, on the basis of the knowledge obtained in the audit:

- the accompanying consolidated financial statements comply in all material respects with IFRSs as adopted by the EU and the additional requirements of German law pursuant to § 315e (1) HGB and give a true and fair view of the financial position of the Group as of December 31, 20022 and of its financial performance for the fiscal year from January 1 to December 31, 2022 in accordance with these requirements; and
- the accompanying Group management report 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 suitably presents the opportunities and risks of future development. Our audit opinion on the Group management report does not cover the content of the components of the combined management report mentioned in the section "Other information".

Pursuant to Section 322 (3) sentence 1 of the German Commercial Code (HGB), we declare that our audit has not led to any reservations concerning the propriety of the consolidated financial statements and the Group management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and the group management report in accordance with Section 317 HGB and the EU Regulation on Auditors (No. 537/2014; hereinafter "EU-APrVO") and German accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibility under those provisions and principles is further described in the section "Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Group Management Report" of our auditor's report. We are independent of the Group companies in accordance with European law and German commercial and professional regulations and have fulfilled our other German professional obligations in accordance with these requirements. Furthermore, in accordance with Article 10 (2) (f) EU-APrVO, we declare that we have not performed any prohibited non-audit services as defined in Article 5 (1) EU-APrVO. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and the group management report.

Material uncertainty in connection with the going concern (also a key audit matter)

Facts and problem

We refer first to the disclosures in the notes to the consolidated financial statements in section "4. Significant accounting policies" and in the sections "Risk report" and "Outlook for the financial years 2023, 2024 and 2025" of the combined management report, in which the legal representatives of the parent company describe that the liquidity situation of the Company has improved in the financial year 2022 but has not yet fully normalized and that there may be a need for additional financing in the short term.

There, the legal representatives of the parent company state that the Singulus Technologies Group is highly dependent on the future development of business activities with a small number of large customers, both regarding the achievement of the expected financial ratios and the further development of liquidity in fiscal year 2023. Sufficient liquidity of the Company and the Group in the next 12 months from preparation of the annual financial statements can only be maintained if the planning can be realized in the next 12 months from preparation. A key prerequisite in the planning is that the partial payments to be made based on the major orders already contracted with CNBM are made or are not materially delayed. In addition, it is necessary to obtain further major orders with a contract value of EUR 116.7 million in the next twelve months. Furthermore, the availability and maintenance of the committed EUR 20.0 million CNBM financing beyond October 2024 as well as the availability of the super senior loan in the amount of EUR 4.0 million must be ensured. In addition, the extension of

the EUR 10.0 million working capital credit line must take place in March 2024 or alternatively be replaced by a shareholder loan from CNBM.

As outlined in the aforementioned sections of the notes and combined management report, these events and circumstances, together with the other matters set out therein, indicate the existence of material uncertainties that may cast significant doubt upon the Company's ability to continue as a going concern and that constitute going concern risks within the meaning of Section 322 (2) sentence 3 HGB.

The assessment of the appropriateness of the going concern assumption was therefore a key audit matter for us.

Audit approach according to Article 10 (2) (c) (ii) EU-APrVO and findings

As part of our audit, we identified the appropriateness of the going concern assumption and the reasonable presentation of the material uncertainty related to going concern as a significant risk and performed audit procedures including the following:

We first analyzed the current liquidity situation of the parent company and the Group, considering the measures already implemented in 2023. Based on the findings obtained here, in a second step we looked at the liquidity planning in the forecast period. Based on the presented earnings and liquidity planning for a 2-year period, we assessed whether the Executive Board's assessment of the ability of Singulus Technologies AG and the Group to continue as a going concern is appropriate. For this purpose, we first gained an understanding of the planning process and reviewed the planning for formal consistency (arithmetical correctness, correct implementation of the underlying premises). We also compared the revenue planning (the appropriateness of the revenue forecast) with existing contracts with customers and checked the plausibility of the planning for the main types of costs. Finally, in view of the ongoing budget variances, we assessed the key assumptions of the revenue planning based on selected projects and their realization.

This liquidity planning is based on the Group's current two-year plan. We first gained an understanding of the planning process and discussed the significant planning assumptions with those responsible. In this context, we assessed the design and implementation of controls integrated into the planning process.

We also satisfied ourselves of the implementation of the measures planned in the forecast period to ensure sufficient liquidity of Singulus Technologies AG and the Group. In detail:

 To secure liquidity, the parent company has had access to a working capital credit line of EUR 10.0 million since May 2022. The repayment of the loan is guaranteed by the Chinese main shareholder CNBM. The term of the agreement was initially 12 months and was extended by a further 12 months to March 31, 2024, effective January 31, 2023, subject to the occurrence of conditions precedent. If the disbursing bank does not extend the term further, CNBM guarantees to provide the Company with sufficient financial resources to enable it to meet its obligations.

- In April 2023, the meeting of the parent company's bondholders passed a resolution declaring a temporary waiver of notice that would have resulted from the late submission of the audited financial statements for fiscal year 2022.
- In order to secure the liquidity of Singulus Technologies AG, the parent company
 Triumph Science & Technologies Co. Ltd. gave an assurance in a letter dated
 October 25, 2023 that it will ensure that the parent company remains or becomes
 financially equipped in such a way that it is able to meet its financial obligations at all
 times.

We do not express a separate opinion on these matters. Based on the results of our audit, we consider the going concern assumption used by the legal representatives to be appropriate.

Our audit opinions on the consolidated financial statements and the combined management report have not been modified with respect to this matter.

Other 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 fiscal year from January 1 to December 31, 2022. These matters were considered in connection with our audit of the consolidated financial statements, and in forming our opinion thereon; we do not provide a separate opinion on these matters. In addition to the matter described in the section "Material Uncertainty Related to Going Concern", we have identified the following matter as a key audit matter to be disclosed in our audit opinion:

Revenue recognition for construction contracts

Facts and problem

Revenue from construction contracts recognized over a period amounts to EUR 74.9 million in fiscal year 2022. The Singulus Technologies Group recognizes revenue from construction

contracts when a performance obligation has been fulfilled by transferring a promised good to a customer and the customer has obtained control of that asset.

In the case of revenue recognition by period, revenue and the partial profit contributions received are recognized in accordance with the stage of completion of the contract. The prerequisite for this is that the results from the respective contract can be reliably estimated. In addition, there must be a right to payment for the (partial) services rendered.

The accounting for construction contracts is therefore complex and subject to judgment. Estimation uncertainties exist regarding the expectation of the total contract costs incurred based on continuously updated plans as a basis for determining the percentage of completion (cost-to-cost method). The agreements concluded with customers contain complex contractual provisions.

Due to the complex contractual arrangements and the scope for discretion in assessing the criteria for the timing of the transfer of control, there is a risk for the consolidated financial statements that revenue and results from construction contracts are inappropriately allocated to the financial years and that impending losses from construction contracts are not recognized in a timely manner.

Audit approach and findings

Based on our understanding of the process, we assessed the design and implementation of identified internal controls, regarding the determination of the stage of completion of individual projects. In addition, we assessed the accounting for selected construction contracts based on risk-oriented aspects as part of our audit.

For this purpose, we reconciled the order value with the corresponding contracts for the selected construction contracts and verified the allocation of actual costs to the respective projects on a sample basis. In addition, we traced the recording of contract changes for selected construction contracts.

In addition, we focused our audit on assessing the interpretation by the legal representatives of the criteria for recognizing revenue over time. To this end, we assessed selected new construction contracts concluded in the fiscal year based on a risk-oriented selection.

For contracts concluded in the fiscal year, we compared actual costs with the expectation of total contract costs incurred in the previous year to assess the general planning quality.

For contracts selected on a sample basis from a risk-oriented perspective, we assessed the appropriateness of significant discretionary decisions, such as the estimate of costs still to be

incurred. In doing so, we discussed the selected contracts, including existing risks, with the relevant contacts of the Company (e.g. the Board of Management, sales management, controlling, and the project managers), analyzed their updated contract costings, including changes in the planned production costs, and the respective degree of completion, and assessed related documents (e.g. contracts, acceptance reports). Based on our findings, we assessed the appropriate determination of the respective stage of completion and the recognition in the balance sheet and income statement.

Due to the long preparation period for the consolidated financial statements as of December 31, 2022, we have also assessed the impact of value-relevant events on revenue.

Reference to further information

For information on the accounting policies applied, please refer to Note 4.4 to the consolidated financial statements. For information on the amount of revenue recognized from construction contracts, please refer to Note 8 to the consolidated financial statements.

Recognition and measurement of development costs

Facts and problem

The capitalized development costs recognized within intangible assets amount to EUR 4.1 million as of December 31, 2022, of which EUR 2.5 million is attributable to the "Solar" segment, EUR 1.1 million to the "Life Science" segment and EUR 0.5 million to the "Semiconductor" segment. The Singulus Group capitalizes development costs at cost if the requirements of IAS 38.57 are met.

Capitalized development costs are amortized over a period of five years from the date on which the asset becomes available for use.

For the presentation of the requirement under IAS 38.57 (d), the Singulus Group uses profitability calculations (project calculations). In this process, the respective net present value of the development project is calculated based on certain budgeted values for revenues/contributions to profit attributable to a development project and using a company-specific discount rate.

The impairment test and the determination of the recoverable amount of capitalized development costs are based on updated project calculations. In addition, the capitalized development costs allocated to the "Solar" segment are subjected to an additional

impairment test at a higher level as part of the impairment test for the goodwill of the "Solar" segment.

The determination of the recoverable amount based on project calculations involves estimates regarding future profit contributions of the individual projects and is complex and discretionary. These include the expected sales and earnings contributions of the projects and the discount rate used. There is a risk for the financial statements that the requirements for capitalization in accordance with IAS 38.57 are not met and that impairment losses existing at the reporting date have not been recognized.

Audit approach and findings

Based on our obtained process understanding, we assessed the design and setup of identified internal controls regarding the criteria of initial recognition and the review of the respective recoverability of capitalized development costs in subsequent periods.

For development costs capitalized for the first time, we verified the assumptions of the legal representatives regarding the fulfillment of the recognition criteria by inspecting internal records of the Company (e.g. release protocols, approval for development, project calculations) and by discussing the development projects with the relevant contacts of the Company (e.g. the Executive Board, Controlling and the project managers). In addition, we reconciled the project calculations with the relevant details of the overall corporate planning.

As part of the impairment test of capitalized development costs, we compared the development of deliberately selected projects in the current fiscal year with the previous year's planning and reconciled the updated project calculations with the corresponding details of the overall corporate planning.

We also assessed the appropriateness of the discount rates used.

In addition, we assessed whether the impairment test for the goodwill of the "Solar" segment indicated any further impairment of the capitalized development costs allocated to this segment (we refer to our explanations on the impairment of goodwill).

The Singulus Group's approach to capitalizing development costs is appropriate. The determination of the acquisition or production costs for the initial capitalization of development costs and the determination of the recoverable amount for the subsequent measurement of capitalized development costs are appropriate.

Reference to further information

For information on the accounting policies applied, please refer to Note 4.6 to the consolidated financial statements. For information on the amount of capitalized development costs, please refer to Note 11 to the consolidated financial statements.

Other information

The legal representatives and the Supervisory Board are responsible for the other information. The other information comprises the corporate governance statement pursuant to Section 315d in conjunction with Section 289f (1) of the German Commercial Code.

§ Section 289f (1) HGB" section of the combined management report with all its components.

The other information also includes the annual report expected to be available to us after the date of this auditor's report. The other information does not include the consolidated financial statements, the audited content of the combined management report, or our audit opinion thereon.

Our audit opinions on the financial statements and combined management report do not cover the other information and, accordingly, we do not express an audit opinion or any other form of conclusion thereon.

In connection with our audit, we have a responsibility to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements, the combined management report, or our knowledge obtained in the audit or

- are materially inconsistent with the financial statements, the group management report or our knowledge obtained in the audit; or
- otherwise appear to be materially misrepresented.

Management's Responsibility for the Consolidated Financial Statements and for the Group Management Report

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with IFRSs as adopted by the EU and the additional requirements of German law pursuant to Section 315e (1) HGB and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from

material misstatement, whether due to fraud or error (i.e., manipulation of the accounting system or misstatement of assets).

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They are also responsible for disclosing, as applicable, matters related to going concern. Furthermore, they are responsible for preparing the financial statements on a going concern basis 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, which provides a suitable view of the Group's position and is consistent in all material respects with the consolidated financial statements, complies with German legal requirements, and suitably presents the opportunities and risks of future development. Furthermore, management is responsible for the arrangements and measures (systems) that it determines are necessary to enable the preparation of a group management report in accordance with the applicable German legal requirements and to provide sufficient appropriate evidence for the statements made 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 the Group management report.

Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Group Management Report

Our objective is 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 a suitable view of the Group's position and is consistent, in all material respects, with the consolidated financial statements and with our audit findings, complies with German legal requirements and suitably presents the opportunities and risks of future development, and to issue an auditor's report that includes our audit opinion 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 § 317 HGB and the EU-APrVO and in compliance with German accepted standards for the audit of financial statements 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 the group management report.

During the audit, we exercise dutiful judgment and maintain a critical mindset. In addition:

- Identify and assess the risks of material misstatement of the consolidated financial statements and the group management report 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 audit opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error because fraud may involve collusion, forgery, intentional omissions, misleading representations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and the arrangements and actions relevant to the audit of the group management report to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of those systems.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the going concern basis of accounting used by management 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 our auditor's report to the related disclosures in the consolidated financial statements and the group management report or, if such disclosures are inadequate, to modify our respective audit opinion. We draw our conclusions based on the audit evidence obtained up to the date of our audit opinion. However, future events or conditions may result in the Group being unable to continue as a going concern.
- we assess the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in such a way that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with IFRSs as adopted by the EU, and the additional requirements of German law pursuant to § 315e Abs. 1 HGB.
- obtain sufficient appropriate audit evidence regarding the accounting 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 directing, supervising, and performing the audit of the consolidated financial statements. We are solely responsible for our audit opinions.

- We assess the consistency of the group management report with the consolidated financial statements, its compliance with the law and the view it conveys of the Group's position.
- We perform audit procedures on the forward-looking statements made by management in the Group management report. Based on sufficient appropriate audit evidence, we reproduce the significant assumptions made by management regarding the forward-looking statements and evaluate the appropriateness of the information derived from these assumptions. We do not express an independent opinion on the forward-looking statements or on the underlying assumptions. There is a significant unavoidable risk that future events may differ materially from the forward-looking statements.

We discuss with those charged with governance, 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 make a declaration to those charged with governance that we have complied with the relevant independence requirements and discuss with them all relationships and other matters that may be thought to bear on our independence and, where relevant, the actions taken, or safeguards implemented to address independence threats.

From the matters we discussed 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 of the matter.

OTHER STATUTORY AND OTHER LEGAL REQUIREMENTS

Report on the Audit of the Electronic Reproductions of the Consolidated Financial Statements and the Group Management Report Prepared for the Purposes of Disclosure Pursuant to Section 317 (3a) of the German Commercial Code (HGB)

Declaration of non-issuance of an audit opinion

In accordance with Section 317 (3a) of the German Commercial Code (HGB), we were engaged to perform a reasonable assurance engagement to determine whether the reproductions of the annual financial statements and the combined management report to

be prepared for disclosure purposes (hereinafter also referred to as "ESEF documents") comply in all material respects with the requirements of Section 328 (1) of the German Commercial Code regarding the electronic reporting format ("ESEF format").

We do not express an audit opinion on the ESEF documents. Due to the significance of the matter described in the section "Basis for not expressing an opinion", we have not been able to obtain sufficient appropriate audit evidence to provide a basis for our opinion on the ESEF documents.

Basis for the declaration of non-issuance of an audit opinion

As the legal representatives have not submitted any ESEF documents to us for audit by the time of issuing the audit opinion, we do not express an opinion on the ESEF documents.

Responsibility of the legal representatives and the supervisory board for the ESEF documents

The Company's management is responsible for the preparation of the ESEF documents containing the electronic reproductions of the annual financial statements and the combined management report in accordance with section 328 (1) sentence 4 no. 1 HGB and for the preparation of the consolidated financial statements in accordance with section 328 (1) sentence 4 no. 2 HGB.

Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of ESEF documents that are free from material non-compliance, whether due to fraud or error, with the requirements of Section 328 (1) HGB regarding 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.

Auditor's Responsibility for the Audit of the ESEF Documents

Our responsibility is to perform an audit of the ESEF documents in accordance with Section 317 (3a) HGB and IDW Auditing Standard: Audit of Electronic Reproductions of Financial Statements and Management Reports Prepared for Disclosure Purposes in Accordance with Section 317 (3a) HGB (IDW PS 410). Due to the circumstances described in the section "Basis for the declaration of non-issuance of an audit opinion", we have not been able to obtain sufficient appropriate audit evidence as a basis for an audit opinion on the ESEF documents.

Other information according to Article 10 EU-APrVO

We were appointed as auditors by the court by resolution of the Aschaffenburg Local Court

on May 16, 2023. We were appointed by the Supervisory Board on May 22, 2023. We have served as auditors of the consolidated financial statements of Singulus Technologies AG

without interruption since fiscal year 2022.

We declare that the audit opinions contained in this audit opinion are consistent with the

additional report to the Audit Committee pursuant to Article 11 EU-APrVO (Audit Report).

OTHER MATTERS - USE OF THE AUDIT OPINION

Our audit opinion should always be read in conjunction with the audited consolidated

financial statements and the audited combined management report and the audited ESEF documents. The consolidated financial statements and combined management report

converted to ESEF format - including the versions to be published in the Federal Gazette -

are merely electronic reproductions of the audited consolidated financial statements and the

audited combined management report and do not replace them. In particular, the ESEF

opinion and our audit opinion contained therein can only be used in conjunction with the

audited ESEF documents provided in electronic form.

AUDITOR IN CHARGE

The auditor responsible for the audit is Thomas Gloth.

Düsseldorf, October 29, 2023

Baker Tilly GmbH & Co. KG

Auditing Company

(Düsseldorf)

Christian P. Roos

Thomas Gloth

Certified Public Accountant

Certified Public Accountant

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SINGULUS TECHNOLOGIES AG

Balance Sheet as of Dezember 31, 2022

Assets		12/31/2022		12/31/2021	
		EUR k	EUR K	EUR K	EUR K
Δ	Fixed assets				
	I. Intangible fixed assets				
	Purchased industrial and similar rights				
	and assets	1,025		529	
	2. Goodwill	0		0	
	3. Prepayments	19		447	
			1,044		976
	II. Tangible fixed assets				
	1. Land, land rights and buildings,				
	including buildings on third-party land	4,139		5,248	
	2. Plant and machinery	506		891	
	Other equipment, operating and office equipment	480		601	
	4. Prepayments	7	5,132	0	6,740
	III. Long-term financial assets		0.540	2.522	
	Shares in affiliates		6,540	6,508	44004
	Comment		12,716		14,224
	Current assets				
	Inventories1. Raw materials, consumables and supplies	6,684		6,133	
	2. Work in progress	117,269		96,577	
	3. Prepayments	7,737		9,990	
	4. Prepayments received	-131,690	0	-112,700	0
	4. Frepayments received	-131,090	U	-112,700	U
	II. Receivables and other assets				
	1. Trade receivables				
	- thereof with a maturity of more than one year EUR 89k	1,334		979	
	2. Receivables from affiliates	3,224		2,451	
	3. Other assets	666	5,224	529	3,959
	III. Cash and bank balances		16,735		26,850
			21,959		30,809
C.	Prepaid expenses		639		667
D.	Deficit not covered by equity		115,605		103,831
Total assets			150,919		149,531
			100,019		1 7 3 , 3 3 1

Equity and liabilities	12/31/2022	12/31/2021	
	EUR k EUR K	EUR K EUR K	
A. Equity			
I. Subscribed capital	8,896	8,896	
II. Capital reserves	19,697	19,697	
III. Balance sheet loss	-144,198	-132,424	
IV. Deficit not covered by equity	115,605	103,831	
	0	0	
B. Provisions			
1. Provisions for pensions and similar obligations	15,135	13,740	
2. Provisions for taxes	465	455	
3. Other provisions	10,981	8,939	
	26,581	23,134	
C. Liabilities			
1. Bonds	12,600	12,600	
2. Payments received on account of orders	84,784	90,846	
3. Trade payables	7,513	13,309	
4. Liabilities to affiliated companies	7,892	7,017	
5. Other liabilities from financing contracts	10,000	1,322	
6. Other liabilities - thereof in relation to taxes EUR 552k			
(PY: EUR 378k)	1,549	1,303	
	124,338	126,397	
D. Deferred items	0	0	

SINGULUS TECHNOLOGIES AG

Income Statement for the Period from January 1 to December 31, 2022

	2022		2021	
	EUR k	EUR K	EUR K	EUR K
1. Revenue		46,998		43,210
2. Increase (+) / decrease (-) in inventories in work in progress		20,692		11,331
3. Own costs capitalized		0		0
 Other operating income thereof currency translation gains EUR 220k (PY: EUR 114k) 		15,528		2,548
5. Cost of materials	24 602		26.220	
 a) Cost of raw materials, consumables and supplies and of purchased merchandise 	-34,693		-26,320	
b) Cost of purchased services	-11,155	-45,848	-7,799	-34,119
 6. Personnel expenses a) Wages and salaries b) Social security, pension and other benefit costs - thereof for old-age pensions EUR 2,133k (PY: EUR 1,410k) 	-24,615 -5,975	-30,590	-21,309 -5,228	-26,537
7. Amortization or depreciation of intangible and tangible fixed assets		-1,702		-1,788
8. Other operating expenses - thereof expenses from currency translation EUR 467k (PY: EUR 667k)		-14,460		-14,357
9. Income from investments		0		650
10. Income from long-term loans - thereof from affiliates EUR 234k (PY: EUR 229k)		234		229
11. Other interest and similar incomethereof from affiliates EUR 0k (PY: EUR 0k)thereof income from discounting EUR 0k (PY: EUR 0k)		0		0
12. Write-downs of financial assets		-100		-150
13. Interest and similar expenses - thereof to affiliates EUR 821k (PY: EUR 750k) - thereof expenses from interest EUR 269k (PY: EUR 303k)		-2,481		-2,724
14. Tax income		-9		-4
15. Earnings after taxes		-11,738		-21,711
16. Other taxes		-36		-27
17. Net loss for the year (PY: net profit)		-11,774		-21,738
18. Retained earnings (PY: loss carryforward)		-132,424		-110,686
19. Withdrawals from other revenue reserves		0		0
20. Income from capital reduction		0		0
21. Balance sheet loss (PY: net profit)		-144,198		-132,424

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Photovoltaics

Amorphous Silicon (a-Si) Solar Cell: A type of thin-film solar cell that uses non-crystalline silicon, often used in consumer electronics and small-scale applications.

Cadmium Telluride (CdTe) Solar Cell: A thin-film solar cell technology that uses cadmium telluride as the semiconductor material, known for its low production costs.

Copper Indium Gallium Selenide (CIGS) Solar Cell: Another type of thin-film solar cell that uses a combination of copper, indium, gallium, and selenium as the semiconductor material, offering a good balance between efficiency and cost.

HJT (Heterojunction Technology): HJT is a solar cell technology that uses different layers of material with different band gaps to increase efficiency. This technology combines amorphous silicon with crystalline silicon to achieve higher efficiency.

IBC (Interdigitated Back Contact): IBC is an advanced solar cell technology in which the electrical contacts are located on the back side of the cell to minimize front side loss and maximize efficiency.

Inverter: A device that converts the direct current (DC) electricity generated by solar panels into alternating current (AC) electricity, which is used in most household appliances.

Maximum Power Point (MPP): The point on the current-voltage (I-V) curve where a solar cell or panel operates at its maximum efficiency and power output.

Monocrystalline Solar Cell: A type of solar cell made from a single crystal structure, known for its high efficiency.

Net Metering: A billing arrangement that allows solar panel owners to receive credit for excess electricity they generate and feed back into the grid.

PERC (Passivated Emitter Rear Cell): PERC is an advanced solar cell technology in which the rear side of the solar cell is passivated to improve efficiency. This technology has become a standard in the solar industry in recent years.

Perovskite Solar Cell: Perovskite solar cells are a promising and emerging type of solar cell that incorporate perovskite materials such as methylammonium lead iodide (MAPbl3). These materials have the potential to achieve high efficiencies and are comparatively inexpensive to manufacture. Perovskite solar cells are still in the research and development phase, but they

have attracted the interest of the scientific community due to their rapid progress and high efficiency potential.

SHJ/HJT (Heterojunction Technology): HJT is a solar cell technology that uses different layers of material with different band gaps to increase efficiency. This technology combines amorphous silicon with crystalline silicon to achieve higher efficiency.

Photovoltaic (PV) Cell: A device that converts sunlight directly into electricity using the photovoltaic effect.

Polycrystalline Solar Cell: A type of solar cell made from multiple crystal structures, slightly less efficient but more cost-effective than monocrystalline cells.

Solar Efficiency: The percentage of sunlight converted into usable electrical energy by a solar cell or panel.

Solar Irradiance: The power per unit area received from the Sun in the form of electromagnetic radiation.

Solar Panel: A collection of solar cells that are used to generate electricity from sunlight.

Solar Spectrum: The distribution of electromagnetic radiation emitted by the Sun, ranging from infrared to ultraviolet wavelengths.

Tandem Cells: Tandem solar cells consist of multiple layers of different materials with different band gaps. These layers are stacked on top of each other to better utilize the spectrum of incoming sunlight. By combining materials with different absorption properties, tandem solar cells can achieve higher efficiencies than conventional solar cells.

Thin-Film Solar Cell: A solar cell made by depositing one or more thin layers of photovoltaic material on a substrate, known for its flexibility and versatility in applications.

Topcon (Tunnel Oxide Passivated Contact): Topcon is a solar cell technology in which the front and back sides of the cell are passivated with a thin oxide layer to reduce electrical resistance and increase efficiency.

SINGULUS TECHNOLOGIES AG

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