BROCKHAUS TECHNOLOGIES

Elevating champions

2022 Annual Report

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Brockhaus Technologies in figures

REVENUE*

€145.3 million

2021 | €105.2 million +38.1%

GROSS PROFIT*

€94.3 million

2021 | €73.9 million +27.6%

ADJUSTED EBITDA

€50.0 million

2021 | €40.8 million +22.5%

EMPLOYEES**

372

2021 | 327 +14%

ADJUSTED EBIT

€46.8 million

2021 | €38.7 million +20.8%

FREE CASH FLOW BEFORE TAX

€39.8 million

2021 | €10.6 million +277.0%

Note: revenue, gross profit, adjusted EBITDA, EBIT and number of employees excluding Palas (sold in November 2022)
* Revenue and gross profit adjusted for non-recurring effects from purchase price allocation (PPA)
** Number of employees on the reporting date

Highlights in 2022

High value realization from the sale of Palas

With the sale of its majority stake in the particle measurement specialist Palas at the end of November at a total valuation of €100 million (for all the shares), Brockhaus Technologies has demonstrated its ability to identify attractive companies, develop them further and generate significant increases in value for its shareholders. Palas doubled its revenue and operating income in its four years as part of Brockhaus Technologies. The proceeds from the sale are significantly higher than the equity of €18 million invested in December 2018 and are to be used to further expand the technology group and increase shareholder value. The first tranche, which was paid when the contract was signed, amounts to around €59 million (or approximately €5.38 in sales proceeds per share). Two further, future-oriented purchase price tranches may generate up to €16.7 million in additional proceeds.

Bikeleasing with record year and very dynamic growth

The 2022 fiscal year was the most successful to date in the history of Bikeleasing, the digital B2B platform for brokering, financing and managing employee benefits through employers. The number of corporate customers connected to Bikeleasing's platform increased by 43% from 31.9 thousand to 45.5 thousand, representing a combined workforce of 2.5 million employees. The number of new company bikes brokered also rose by around 45% to 118 thousand. Access to more and more corporate customers and employees offers Bikeleasing great further growth potential for the future, both with regard to company bicycles and, moving ahead, through the incorporation of further benefits for employee incentivization, such as smartphone, tablet or computer leasing. Bikeleasing also grew strongly in Austria and became market leader there right away.

Security Technologies (IHSE) segment posts double-digit revenue growth and obtains official certifications of compliance with the highest IT security standards

The Security Technologies segment bounced back strongly as a result of the increase in customer demand after the revocation of many COVID-19 related travel restrictions and social distancing in western industrialized countries, in particular in the USA. At the end of 2022, IHSE also obtained important new official certifications of compliance with the strictest security specifications in Europe and North America. That means IHSE can now offer customer solutions that are used in high-security areas such as law enforcement, defense, healthcare and other critical infrastructure.


BROCKHAUS
TECHNOLOGIES

Letter from the Executive Board

Fiscal year 2022 was a record year for us: We surpassed our guidance and were able to increase free cash flow significantly. The sale of Palas at an attractive strategic valuation also enabled us to reduce our net debt significantly and increase liquidity reserves. We are excellently positioned for the coming fiscal year and feel confident that we can continue to build Brockhaus Technologies into one of Germany’s leading technology groups.

Letter from the Executive Board

Dear Shareholders,

Fiscal 2022 was a record year with impressive successes for Brockhaus Technologies. In a challenging market environment, we have once again proven that our business model with its focus on high-margin, fast-growing technology and innovation champions with B2B business models and pricing power is resilient and capable of delivering profitable growth to help us keep building ourselves into one of Germany's leading technology groups.

The key performance indicators speak for themselves: Our revenue (before PPA) increased by 38% to €145.3 million and our adjusted EBITDA was €50.0 million, giving an adjusted EBITDA margin of 34.4%. We thus significantly exceeded our forecasts, with revenue of €130 million to €135 million and an adjusted EBITDA (excluding Palas) of between €45.5 million and €47.3 million. With our focus on business models with low capital intensity and a strong operating performance, we were able to generate a very high free cash flow before tax of €39.8 million (previous year: €10.6 million) in the Group. This enabled Bikeleasing to make voluntary early repayments of around €21 million on the financing raised to acquire the company. The Group's net debt was significantly reduced to €37 million or just 0.75 times adjusted EBITDA. A substantial factor in that was the significant increase in cash and cash equivalents due to the sale of Palas at such an enhanced value.

Brockhaus Technologies is therefore in a better shape than ever before and is excellently positioned operationally and financially moving forward. We have the ability and flexibility to seize opportunities for value-enhancing company acquisitions at high speed even in difficult markets for financing, applying a highly selective approach at all times in accordance with our strict investment criteria.

High value realization from the sale of the subsidiary Palas
With the successful sale of our 70% stake in the particle measurement specialist Palas to the Swedish technology and industry group Indutrade in November 2022, we realized a high increase in value for you, our shareholders. The sales proceeds of around €59 million at closing and future-oriented purchase price tranches for the years 2023 and 2024 of €16.7 million are many times the equity of around €18 we invested in 2018. The sale valued Palas as a whole at €100 million, reflecting the company's great attractiveness and its strategic potential for the new shareholder. With this transaction we have demonstrated our ability to identify attractive companies with great growth potential, develop them further and generate significant increases in value. Palas doubled its revenue and operating income in its four years under the roof of Brockhaus Technologies.

+38%

REVENUE

€50 million

ADJUSTED EBITDA

>€5

SALES PROCEEDS PER SHARE
FOR THE STAKE IN PALAS

Our subsidiaries continue to perform successfully
Bikeleasing achieved another record fiscal year in 2022, growing its revenue (before PPA) by over 50% to €109 million (previous year: €73 million) and posting an adjusted EBITDA margin of 42.6%. Bikeleasing was able to increase the number of corporate customers connected to its platform in 2022 by 43% to 45.5 thousand, representing a combined workforce of approximately 2.5 million employees. The number of new company bikes brokered rose by around 45% to 118 thousand. Apart from performing dynamically in its core market of Germany, the company also expanded business in Austria strongly and acquired a number of prominent customers. The digital and highly automated B2B finance platform for arranging, financing and managing employee benefits via the employer currently focuses on company bicycles and addresses the growing demand for sustainable mobility with its innovative business model. Bikeleasing's access to a large number of corporate customers and employees offers its untapped potential moving ahead through the incorporation of further benefits for employee incentivization, such as smartphone, tablet or computer leasing.

The Security Technologies segment, consisting of IHSE and kvm-tec, a company acquired in 2021, likewise achieved a significant increase in revenue (before PPA) of more than 10% to €36 million in the 2022 fiscal year. The segment's successes are founded on the further development of existing KVM systems, the development and market launch of new joint hybrid solutions and further market potential arising from the award of additional official certifications of compliance with the highest IT security standards, such as are required for solutions in the areas of critical infrastructure and defense. Alongside the increase in customer demand after the revocation of many COVID-19 related travel restrictions and social distancing in western industrialized countries, revenue in the Americas region in particular grew dynamically by 61% to €12 million. However, revenue in APAC in 2022 was again adversely impacted by China's zero COVID policy. At 23.9%, the adjusted EBITDA margin in the reporting period was slightly down on the previous year. Given the relaxation in travel restrictions and social distancing, however, we expect to see in 2023 a noticeable pickup in demand for high-performance and secure hardware solutions to protect against the increase in cyberattacks worldwide.

Further profitable growth in 2023 and continued efforts to build a leading technology group in Germany
Despite the fact that there are still great uncertainties due to the geopolitical crises, the Ukraine war and the banking turmoil, we are very optimistic about 2023 and aim to achieve another record year in terms of revenue and earnings. We expect to generate revenue between €165 million and €175 million and a high adjusted EBITDA margin of 35%. In the new fiscal year, we will continue to strengthen our subsidiaries and make the best possible use of the liquidity released to undertake selective organic and inorganic growth initiatives and reduce debt further. We will thus continue to rigorously pursue our strategic goal of building one of Germany's leading technology groups.

We would like to thank all employees of the Brockhaus Technologies Group. Their achievements, drive and expertise have enabled the successes we now enjoy. We would also like to thank the Supervisory Board for its active support and encouragement, and you, our shareholders, for your trust.

Only with that backing we can get closer to our goal of being the leading technology group in Germany.

We thank you for putting your trust in us on this journey.

Marco Brockhaus **Dr. Marcel Wilhelm**

Report of the Supervisory Board

The Supervisory Board of Brockhaus Technologies AG oversaw the activities of the Executive Board in accordance with the requirements of the German Stock Corporation Act and the Articles of Association of BKHT and provided advice and support to in the 2022 fiscal year.

Dr. Othmar Belker
Chairman

Member of the Supervisory Board

Michael Schuster
Deputy Chairman

Dr. Nathalie Krebs
Member

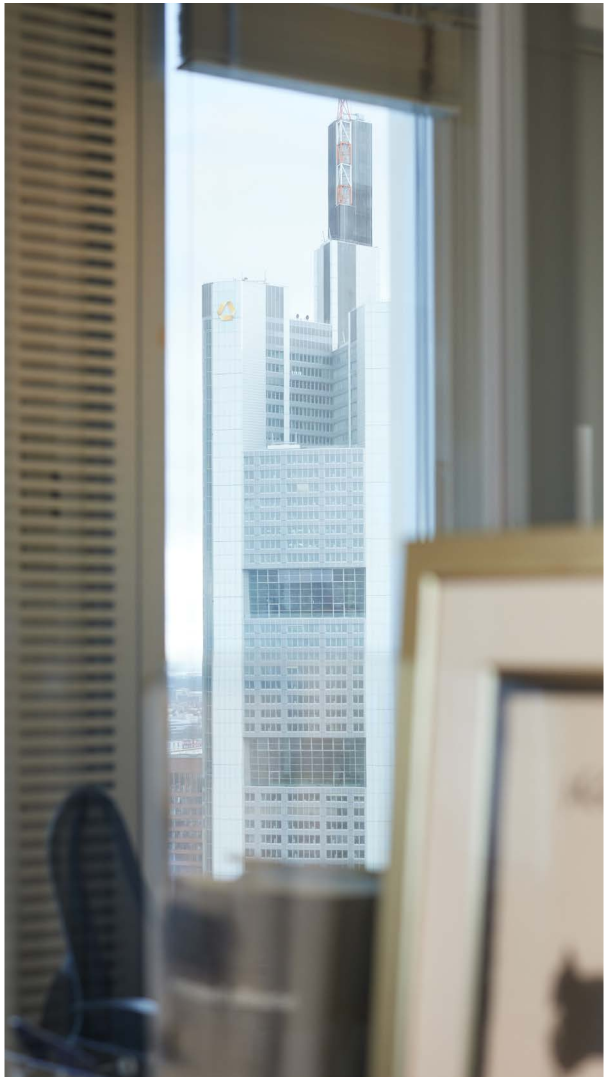
Andreas Peiker
Member until 12/2022

Prof. Dr. Christoph Hütten
Member

Martin Bestmann
Member

Dr. Cornelius Liedtke
Member until 06/2022

Report of the Supervisory Board



The Supervisory Board of Brockhaus Technologies AG, Frankfurt am Main, (“**Company**” or “**BKHT**”, together with its subsidiaries “**Brockhaus Technologies**” or the “**Group**”) oversaw the activities of the Company’s Executive Board in accordance with the requirements of the German Stock Corporation Act and the Articles of Association of BKHT and provided advice and support to the Executive Board during the fiscal year from January 1, 2022, to December 31, 2022.

The Executive Board reported regularly to the Supervisory Board on the business development of BKHT. Particular highlights were integration of the Bikeleasing Group (“Bikeleasing”), whose acquisition was completed at the end of 2021, the performance of the two business segments Environmental Technologies (Palas Holding GmbH and its subsidiaries (“Palas”) and Security Technologies (IHSE AcquiCo GmbH and its subsidiaries (“IHSE”)), and the ongoing assessment of the influence of COVID-19 pandemic restrictions and of the war in Ukraine on the Company’s business activities in Germany and on export markets. In the second half of the year, the successful sale of the shares in Palas Holding GmbH and its subsidiaries, as well as structural improvements to the financing arrangements in the Group, became further focal issues. Changes in revenue, earnings, statement of financial position items and cash flows were presented and explained in detail, with a comparison with the budget and the previous year. The Supervisory Board was directly involved in all key decisions, in particular on issues of strategy and planning and in the review of strategic options. On this basis, in-depth discussions were held at numerous meetings, the number of which far exceeded the minimum number required.

The Company’s Articles of Association specify that the Supervisory Board should hold at least two meetings per calendar half-year. A large number of Supervisory Board meetings as well as other informal verbal and telephone discussions were held in fiscal year 2022. In the current fiscal year 2023, there have been several additional Supervisory Board meetings (3 as per the time of publication in March). The Chairman of the Supervisory Board was in regular personal and telephone contact with the members of the Executive Board and was proactively and comprehensively informed about all important business transactions. If necessary, the Chairman of the Supervisory Board kept the other members of the Supervisory Board informed between meetings.

The Executive Board provided detailed information on the course of business at the regular Supervisory Board meetings. The regular meetings usually have an agenda that is identical in parts and structures the discussion on key economic issues and potential risks. Regular topics were the current economic situation of the operating segments and Group, the current impacts and future risks of the COVID-19 pandemic and the war in Ukraine, a regularly assessed risk report, the opportunities and risks of the search processes for new acquisition targets and developments in the field of investor relations. Fundamental issues at the meetings were the annual and consolidated financial statements of BKHT for fiscal year 2022, the quarterly financial statements for fiscal year 2022, the half-yearly report as of June 30, 2022, preparation for and evaluation of the Annual General Meeting on June 22, 2022, cost trends at the Company and the subsidiaries, personnel development at the Company, the implementation of the Group’s employee stock option program and discussion and approval of the internal rules of procedure and declarations of compliance. The operations and strategy of all operating segments were discussed at each regular meeting.

Another fixed feature of the regular Supervisory Board meetings was an examination of the relevant risks and support for the development of a formal internal control system at the Company and the subsidiaries. The status of external auditing was also reported on. In the course of the discussions relating to risk, the Supervisory Board was in all cases able to obtain a clear picture, in particular about whether and which risks could adversely affect the Company's financial position and results of operations. In addition, the Supervisory Board and the Executive Board regularly discussed the Company's long-term strategic alignment. Among other things, the latest economic figures of the Company, the subsidiaries and the Group, including changes in cash flows and, where expedient, in statement of financial position items, were presented and discussed.

The Supervisory Board mandate of Dr. Cornelius Liedtke ended at the close of the 2022 Annual General Meeting. The Annual General Meeting elected Dr. Nathalie Krebs as a new member of the Company's Supervisory Board on June 22, 2022. Andreas Peiker resigned from the Supervisory Board for personal reasons effective December 31, 2022. A new member of the Supervisory Board will be elected before the 2023 Annual General Meeting.

In fiscal year 2022, the Supervisory Board held 9 meetings (7 in presence / 2 via videoconferencing), some of which were initially conducted in hybrid form (i.e. with individual members participating by means of video-conferencing or over the phone) due to the conditions caused by the COVID-19 pandemic and to reduce the risk of infection. After the 2022 Annual General Meeting, the Supervisory Board was generally able to resort to joint in-person meetings. Unless specified otherwise below, the Supervisory Board meetings were attended by all Supervisory Board members in office. Dr. Cornelius Liedtke was excused from the meeting on April 27, 2022, but had previously submitted his written vote by e-mail dated April 27, 2022. Dr. Liedtke and Andreas Peiker were excused from the meeting on May 2, 2022, but both had previously approved the documents relating to the annual financial statements. Dr. Liedtke and Prof. Dr. Hütten did not attend the meeting on June 15, 2022, but both of them had previously submitted their written vote on the resolutions relating to remuneration by e-mail. Andreas Peiker was excused from the meeting on October 6. Michael Schuster and Andreas Peiker were excused from the meetings on November 22 and 30, 2022.

In fiscal year 2023 to date, three meetings of the Supervisory Board were held. With the exception of the meeting on March 29, 2023, all members of the Supervisory Board attended the meetings. On March 29, 2023, Dr. Nathalie Krebs was absent.

Overview of attendance at meetings of the Supervisory Board and committees

	Supervisory Board	Audit Committee	Executive and Nomination Committee	Total
Dr. Othmar Belker	9 (100%)	10 (100%)	0 (n/a)	19 (100%)
Michael Schuster	7 (78%)	-	0 (n/a)	7 (78%)
Martin Bestmann	9 (100%)	10 (100%)	-	19 (100%)
Dr. Christoph Hütten	8 (89%)	10 (100%)	-	18 (95%)
Dr. Nathalie Krebs	4 (100%)	-	-	4 (100%)
Dr. Cornelius Liedtke	2 (22%)	-	-	2 (22%)
Andreas Peiker	5 (56%)	-	0 (n/a)	5 (56%)

All members of the Supervisory Board are to be considered independent as defined by the German Corporate Governance Code.

At its meeting on June 16, 2021, the Supervisory Board formed an Executive and Nomination Committee and an Audit Committee. The Audit Committee met regularly in fiscal year 2022. The Executive and Nomination Committee did not meet in fiscal year 2022, as the remuneration-related issues were discussed by the full Supervisory Board.

The training and development measures required for discharging their duties, for example on changes in the legal environment and on new technologies, are taken by the members of the Supervisory Board under their own responsibility, with the Company's support where requested.

The Supervisory Board addressed the following topics at its meetings in the 2022 fiscal year:

Supervisory Board meeting on January 19, 2022
The Supervisory Board discussed the submitted budget for the 2022 fiscal year and approved the provisional budget. Earlier preparation of the complete budget was not possible because of the late closing of the Bikeleasing transaction in December 2021. The budget figures will also change as a result of Bikeleasing-Service's annual financial statements. The Supervisory Board discussed the general conditions for successful closing. After in-depth consideration and in view of the ongoing situation as regards coronavirus, it decided to organize and hold the 2022 Annual General Meeting once more as a virtual Annual General Meeting.

Supervisory Board meeting on March 30, 2022
This Supervisory Board meeting focused on the economic performance of the three operating segments. The Supervisory Board discussed strategic options to develop the respective business models further, taking into account the gradual lifting of coronavirus restrictions as well as the war between Russia and Ukraine. During the meeting, the organization of the virtual 2022 Annual General Meeting and the process of the ongoing annual audit, especially with regard to the transition of Bikeleasing to IFRS, were also discussed. Furthermore, the proposal for a new member of the Supervisory Board for the upcoming Annual General Meeting was discussed. Against the background of the Executive Board appointments expiring in mid-2022, the Supervisory Board resolved to introduce staggered new appointment periods for the Executive Board members (CEO 5 years, COO 4 years).

Supervisory Board meeting on April 27, 2022
The focus of the meeting was discussion of the 2021 accounting documents and the status and remaining timeline of the 2021 annual audit. The Chairman of the Audit Committee and the auditors also reported on this. The agenda for the 2022 Annual General Meeting was also discussed. The Supervisory Board discussed and resolved the remuneration of the Executive Board for the fiscal year 2021 and discussed the draft remuneration report 2021. The meeting also dealt with the structure and implementation of new Executive Board contracts in 2022, taking into account the Executive Board remuneration system adopted by the Annual General Meeting on June 16, 2021.

Supervisory Board meeting on May 2, 2022
The Supervisory Board discussed and approved the Company's financial reporting and consolidated financial reporting and adopted the Report of the Supervisory Board and the corporate governance statement.

The independent auditor reported on the conduct of the audit, the focus points of the audit and the audit results relating to the 2021 HGB annual financial statements of Brockhaus Technologies AG, the IFRS consolidated financial statements and the combined management report for the fiscal year 2021 prepared in accordance with the requirements of the HGB. The independent auditor issued unqualified audit opinions for the annual financial statements, the consolidated financial statements and the combined management report. Following its own detailed examination of the accounting documents and the independent auditor's reports, the Supervisory Board approved the annual financial statements, the consolidated financial statements and the combined management report. The annual financial statements are thereby adopted.

Supervisory Board meeting on June 15, 2022
The Supervisory Board resolved the total target remuneration for the 2022 fiscal year for the Executive Board members Marco Brockhaus and Dr. Marcel Wilhelm. The Supervisory Board approved the new Executive Board contracts applicable from August 1, 2022, for the Executive Board members Marco Brockhaus and Dr. Marcel Wilhelm, which are based on the Executive Board remuneration structure adopted by the 2021 Annual General Meeting.

Supervisory Board meeting on June 22, 2022
Following the Annual General Meeting, Dr. Nathalie Krebs introduced herself as a newly elected member of the Supervisory Board. The Supervisory Board discussed the efficiency of the Supervisory Board's work and the need for training for Supervisory Board members. The Executive Board and Supervisory Board analyzed potential for improvement based on the feedback and voting results from the 2022 Annual General Meeting. There was extensive and detailed discussion of strategic options for the Group's further development. Despite the Group's continued excellent operating performance and targeted strategic further development, the stock market valuation of the share does not reflect its success. Further intensification of investor and press relations was jointly initiated.

Supervisory Board meeting on October 6, 2022
The Executive Board presented the status of the integration of kvm-tec, which was acquired in 2021, in IHSE. Due to the positive business performance and especially the very strong cash flow of Bikeleasing-Service, the Executive Board and the Supervisory Board discussed possible ways of optimizing the internal financing structures. The Executive Board and Supervisory Board discussed the latest interim risk report and the risk policy principles of the Company in detail.

Supervisory Board meeting on November 22, 2022
The Executive Board provided information about the impending process steps up to successful implementation of the sale of Palas. After presentation of the negotiated commercial and legal details, the Supervisory Board noted with approval the sale of the shares in Palas. The Executive Board provided information on the effects of a sale on the balance sheet. The Executive Board and Supervisory Board discussed the positive strategic development opportunities the sale would open up for the Group.

Supervisory Board meeting on November 30, 2022
The Executive Board and Supervisory Board discussed strategic adjustments, including a greater alignment of M&A processes toward recurring revenue business models. The Supervisory Board discussed the selection criteria and the profile of skills and expertise of a new Supervisory Board member and jointly held an interview with a potential candidate.

Supervisory Board meeting on February 8, 2023
The Supervisory Board unanimously elected Dr. Nathalie Krebs to replace Andreas Peiker, who had left the Supervisory Board, as a member of the Executive and Nomination Committee.

The Supervisory Board discussed various topics relating to its work in connection with the updated declaration of conformity with the German Corporate Governance Code unanimously adopted by the Supervisory Board at the end of January 2023. The Supervisory Board reviewed the existing corporate governance statement. It discussed the Supervisory Board's profile of skills and expertise. The Supervisory Board noted with approval the latest risk report. Other focus points of the meeting were the review of the effectiveness of ICS and RMS and the current status of the preparation of the 2022 annual and consolidated financial statements and the combined management report and the audit of them by the independent auditor from KPMG. The Supervisory Board defined the variable component of the Executive Board's remuneration for the 2023 fiscal year.

In addition, the self-evaluation on the effectiveness of the fulfillment of the tasks of the Supervisory Board and its committees was addressed.

The budget for fiscal year 2023 was discussed and, following a discussion of the assumptions and about the planning risks, the Supervisory Board noted with approval the draft budget presented for 2023.

Supervisory Board meeting on March 29, 2023
The Supervisory Board discussed and approved the Company's accounting and consolidated financial statements and adopted the Report of the Supervisory Board.

The independent auditor reported on the conduct of the audit, the focus points of the audit and the audit results relating to the 2022 HGB annual financial statements of Brockhaus Technologies AG, the IFRS consolidated financial statements and the combined management report for the fiscal year 2022 prepared in accordance with the requirements of the HGB. The independent auditor issued unqualified audit opinions for the annual financial statements, the consolidated financial statements and the combined management report. Following its own detailed examination of the accounting documents and the independent auditor's reports, the Supervisory Board approved the annual financial statements, the consolidated financial statements, the combined management report and the appropriation of the 2022 annual result. The annual financial statements are thereby adopted. The Supervisory Board discussed the target for the Executive Board members' short-term bonuses and finalized it for 2023. The Executive Bard and Supervisory Board continued their discussion on the strategic performance options from the perspective of the company's shareholders.

The work of the Audit Committee
The Audit Committee, which was set up in June 2021, held a total of ten meetings (8 virtual / 2 hybrid) in fiscal year 2022, some of which were held in hybrid form or virtually. All members of the committee took part in all the meetings.

In September 2021, the Supervisory Board adopted rules of procedure for the Audit Committee. These rules of procedure assigned the committee the tasks of dealing with the accounting and the accounting process, the audit and the auditor, with oversight of the internal control system, risk management system, internal audit system, and compliance management system and with transactions with related parties.

In addition to the committee members, an Executive Board member, the manager responsible for the consolidated financial reporting and a representative of the auditor took part in most of the committee meetings in the 2022 fiscal year.

The following topics were dealt with at the Audit Committee's meetings:
- preparation of the rules of procedure for the Audit Committee as the basis for the committee's further work
- discussion of financial statement preparation processes in the Group, associated internal controls and improvement potential
- discussion of the details of individual important accounting policies in the consolidated financial statements
- discussion of the 2022 half-yearly report and the interim statements for the first and third quarters of fiscal year 2022 before their publication and of the corresponding preparation processes
- engagement of the auditor for a voluntary content audit of BKHT's remuneration report
- discussion of the audit planning and audit focal points of the audit of the 2022 financial statements
- discussion of the impact on the Company of the newly adopted German Act to Strengthen Financial Market Integrity (FISG)

In addition, the chair of the Audit Committee advised on various aspects of the points listed above and important individual topics in the Audit Committee's area of activity in numerous discussions both with members of the Executive Board and the manager responsible for the consolidated financial reporting and with representatives of the auditor. The chair of the Audit Committee in each case informed the other committee members about these discussions at the next meeting. The chair of the Audit Committee also regularly reported on the activities of the Audit Committee at the Supervisory Board meetings.

The work of the Executive and Nomination Committee
The Executive and Nomination Committee, which was also set up in June 2021, did not hold any meetings following an ordinary meeting of the Supervisory Board in fiscal year 2022.

Audit of the financial reporting and consolidated financial reporting in 2022

On June 22, 2022, in response to the proposal of the Supervisory Board, the Company's Annual General Meeting elected KPMG AG Wirtschaftsprüfungsgesellschaft ("KPMG") as the auditor of the financial reporting and consolidated financial reporting. KPMG has been the auditor of BKHT's financial statements since the Company was founded in 2017 and has also been the auditor of the consolidated financial statements since the first acquisition of the Company at the end of 2018. Before the Supervisory Board proposed it to the Annual General Meeting as the auditor, KPMG had confirmed to the Chairman of the Supervisory Board that no circumstances existed that could impair its independence as the auditor or give rise to doubts about its independence. The engagement letter for the audit of the annual and consolidated financial statements and of the combined management report was issued by the Supervisory Board following the Annual General Meeting.

KPMG audited BKHT's financial reporting and consolidated financial reporting for the year ended December 31, 2022, and issued an unqualified audit opinion on these on March 28, 2023. The audited financial reporting and consolidated financial reporting consisted of BKHT's annual financial statements prepared in accordance with the requirements of the German Commercial Code (HGB), its consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union, and its combined management report in accordance with HGB for fiscal year 2022. In addition, in accordance with section 317 (3a) HGB, KPMG audited and confirmed that the reproduction of the annual financial statements, the consolidated financial statements and the combined management report, which were contained in the files provided on an electronic data storage medium and retrievable in the client portal with access protection and were prepared for the purpose of publication, complies in all material respects with the requirements of section 328 (1) HGB for the electronic reporting format ("ESEF format").

The Supervisory Board also arranged for KPMG to inform it and note in the audit report if, during the performance of the audit, any facts are identified that indicate an inaccuracy in the Declaration of Compliance regarding the recommendations of the German Corporate Governance Code issued by the Executive Board and Supervisory Board.

The Audit Committee, and in particular the chair of the Audit Committee, was always closely involved in the preparation of the audit measures and the support of the auditor and commercial functions in the Group.

Ahead of the first financial statements meeting on March 29, 2023, the Supervisory Board received the draft versions of the financial reporting, the consolidated financial reporting, and the corresponding auditor's reports. In the Audit Committee meetings on March 17 and 29, 2023 as well as in the Supervisory Board meeting on March 29, 2023, the Audit Committee and the Supervisory Board discussed the financial reporting and consolidated financial reporting. At these meetings, the Executive Board and the manager responsible for the consolidated financial reporting reported on the preparation of the documents and the auditor reported on the current status of the audit overall, on the individual key audit matters, and on the key findings of the audit. At their respective meetings, the Audit Committee and the Supervisory Board then discussed the financial reporting, the consolidated financial reporting, the findings of the audit and the audit reports with the Executive Board and the auditor. All the Audit Committee's and the Supervisory Board's questions were answered. Furthermore, the auditor explained that there were no facts that gave rise to concerns about bias on its part and informed the Supervisory Board about services provided in addition to the audit services. At the Supervisory Board meeting, the Audit Committee also reported on its own review of the financial reporting and consolidated financial reporting, its discussion with the Executive Board and the auditor, and its oversight of the financial reporting process.

Both the Audit Committee and the Supervisory Board were able to satisfy themselves that the audit by KPMG was properly conducted. In particular, the Audit Committee and the Supervisory Board concluded that the audit reports and the audit itself complied with statutory requirements. They therefore approved the findings of the audit, and the Supervisory Board determined that, on the basis of the final result of the review by the Audit Committee and its own review, no objections were to be raised. The Supervisory Board therefore approved the financial reporting and consolidated financial reporting. The annual financial statements were thus adopted in accordance with section 172 sentence 1 of the German Stock Corporation Act (AktG).

Appropriation of the result

The net accumulated losses, consisting of the accumulated losses brought forward from the previous year and the net profit for the fiscal year 2022, are carried forward to new account.

The Supervisory Board thanks the members of the Executive Board and all employees of Brockhaus Technologies AG and its subsidiaries for their enormous personal commitment and our shareholders for the confidence they placed in the Company in this fiscal year, in which the Company posted excellent operating results despite the enormous external challenges that prevailed again.

On behalf of the Supervisory Board

Dr. Othmar Belker, Chairman
Frankfurt am Main, March 2023.


We know
Mittelstand.

Strategy

We know Germany.
We know Mittelstand.
We know Technology.
We acquire Champions.

“The goal of Brockhaus Technologies is to build a leading and diversified technology group which grows sustainably and profitably, both organically and through the acquisition of further companies.

Marco Brockhaus
Founder, CEO

Elevating champions

Brockhaus Technologies (BKHT) pursues a clearly defined strategy. We predominantly acquire high-margin, fast-growing technology and innovation champions with B2B business models from the Mittelstand and are building one of the leading technology groups with a long-term orientation in Germany. We actively and strategically support our subsidiaries to make them even more successful and thus take them to the next level of growth. We leverage our more than 20 years of experience as part of that. We offer them our expertise and network to achieve long-term profitable growth across industries and national borders. We maximize the value of our Group sustainably by enhancing the performance of our subsidiaries, by identifying and selecting further highly attractive investment opportunities and by holding on to investments for a flexible period of time.

As a listed technology group, we at Brockhaus Technologies offer capital market investors access to unlisted technology champions in the German speaking region as well as value enhancement measures and transaction structures that only owners, owner families or private equity funds otherwise enjoy.

That enables them to participate in the high value added created by what is the economy's core: small and medium-sized enterprises (the Mittelstand). For entrepreneurs, we are the safe haven for their life's work, and for investors, we are the gateway to Germany's technology small and medium-sized enterprises.

The strong free cash flow of the subsidiaries means that further acquisitions can be made from existing liquidity and from the Group's financing capacity. The result is a self-financing technology group. If required, however, further funding in the form of fresh equity and outside capital is also possible in order to finance the technology group's expansion.

Selective criteria in the investment process
In choosing potential new company acquisitions, we continue to pursue a highly selective approach by focusing on technology and innovation champions that can set prices and thus achieve high margins in an attractively growing market. Typically, these are companies with an EBITDA margin of at least 30%, double-digit revenue growth and business models with low capital intensity. The focus is on technology champions with EBITDA between €3 million and €30 million and an enterprise value between €30 million and €300 million. We always have flexibility at both the lower and upper end when a compelling opportunity arises.

In its efforts aimed at gaining attractive acquisition targets and access to companies, Brockhaus Technologies focuses on generating proprietary transaction situations from its existing network as well as on structured identification and approaching of attractive champions. The subsidiaries are supported in identifying and evaluating possible add-ons. In addition to proprietary transaction situations, Brockhaus Technologies also participates in competitive bidding processes of M&A consultants, but very selectively and with a sense of proportion in terms of cost-benefit ratio.

Moving forward, we plan to acquire further technology leaders (ideally one to two per year, depending on the environment) as well as other strategic add-ons if they meet our selective criteria. We are not under pressure to invest and we do not deviate from our criteria and methods.

Further development of the subsidiaries
After the acquisition, Brockhaus Technologies actively and strategically supports the management of its subsidiaries in further developing their business. Typically, an advisory board consisting of industry experts from BKHT's network is established for that purpose after closing a transaction. The closure of sites, disbanding of departments or scrapping of existing brand names are not part of our value enhancement strategy.

We see ourselves as an entrepreneurial partner who, following an acquisition, provides strategic and long-term support in the design and implementation of a targeted growth strategy in new markets or new application areas. In the past, the BKHT team has also successfully assisted with strategic acquisitions (add-ons), the launch of new marketing and sales strategies, the evaluation and implementation of strategic product expansions or internationalization projects within Europe as well as in Asia and the USA.

"Brockhaus Technologies' strategy is unique in Germany. With our approach, we focus on equity stakes in economically strong enterprises and open a new investment universe for investors."

Marco Brockhaus
Founder, CEO

Management

Our management team combines experience, strategic vision and a keen feel for technology.

"We pull together in the same direction to find top-class investment opportunities and take our subsidiaries to the next level in order to create value for our shareholders."

Marco Brockhaus
Chief Executive Officer

Executive Board

The members of the Executive Board bear joint responsibility for management, decide on fundamental issues of corporate strategy and business policy and implement them.

Marco Brockhaus has been a successful investor for over two decades. He is CEO of Brockhaus Technologies AG, which he founded in 2017 together with other team members and which, in a new structure, continues Brockhaus Private Equity's tradition of investing in German technology champions.

With more than 20 years of experience in the equity investment business he has successfully managed and advised three generations of funds with capital of around €300 million with Brockhaus Private Equity GmbH. He has held a large number of supervisory and advisory board positions in various industries. In addition, as a member of the board of the German Private Equity and Venture Capital Association (BVK), he was responsible for the Mittelstand department from 2011 to 2015. He was previously a manager at 3i from 1997 to 2000. He began his career in 1995 in the Corporate Finance unit at Rothschild.

Marco Brockhaus graduated from the Julius Maximilian University of Würzburg in 1994 with a degree in Business Administration.

Dr. Marcel Wilhelm is responsible for all legal and administrative matters at Brockhaus Technologies AG. He has worked at Brockhaus Private Equity GmbH since 2006 and has been its Managing Director since 2012.

As a lawyer specializing in corporate and fiscal law, he previously headed the international clients team at Rödl & Partner Germany.

As a graduate from the University of Passau, he has been a member of the Munich Bar Association since 2001. He gained his doctorate in media law and policy in 2006.

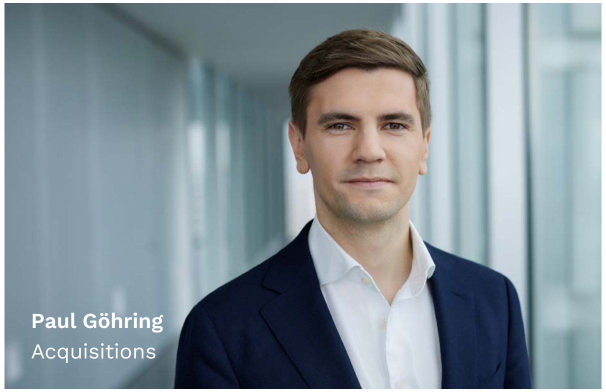
Executive Committee

The Executive Committee supports the Executive Board of Brockhaus Technologies AG in implementing the corporate strategy in the most important fields of the company.

Harald Henning is responsible for reporting at Brockhaus Technologies AG and its investments and has been a member of the Executive Committee since 2021.

His previously held positions as an M&A consultant at Lincoln International and IKB Deutsche Industriebank as well as an Audit Associate at Ernst & Young, among others.

In 2009, he graduated with a Bachelor of Science in business administration from the University of Mannheim and Leeds University Business School.



Paul Göhring has headed the Acquisitions division of Brockhaus Technologies AG as a member of the Executive Committee since 2021. He is also responsible for investor relations and all capital market activities. He has been with Brockhaus Technologies AG since 2018.

He previously worked at Berenberg Bank in the field of corporate finance / equity capital markets, where he assisted companies in equity capital measures on the capital market – in particular as part of IPOs, capital increases and replacements.

Paul Göhring graduated in business administration from the Frankfurt School of Finance & Management in 2015.

Yannick Moyles-Johnson is Head of Operations and has been a member of the Executive Committee of Brockhaus Technologies AG since the beginning of 2023.

Before joining Brockhaus Technologies in the summer of 2022, he was Managing Director of VIA Optronics GmbH for nearly two years. Prior to that, he worked in various functions at the Brose Group for more than eight years.

Yannick Moyles-Johnson holds a master's degree in Business Administration from the University of Gießen and a master's degree in Management, Leadership & Strategy from Michigan State University.

Performance in 2022

Brockhaus Technologies had an extremely successful fiscal year 2022.

+38%

Revenue

+78%

Adjusted earnings per share

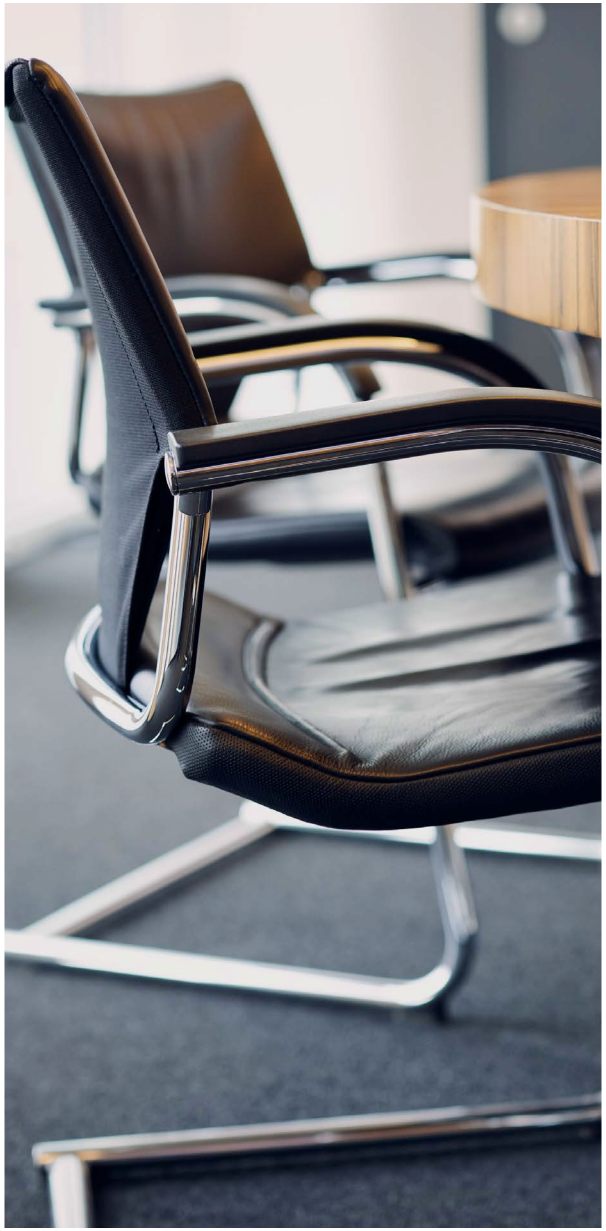
Performance in 2022

Brockhaus Technologies had an extremely successful fiscal year 2022.

Revenue (before PPA) grew by +38.1% to €145.3 million. Adjusted earnings before interest, tax, depreciation and amortization (adjusted EBITDA) increased by +22.5% to €50.0 million, giving an EBITDA margin of 34.4%. The free cash flow before tax rose sharply in fiscal 2022 from €10.6 million to €39.8 million. Adjusted earnings per share likewise improved significantly from €0.41 to €0.73.

Both the guidance for revenue and adjusted EBITDA for 2022 as a whole were significantly exceeded, although these had already been raised noticeably compared with the first full-year outlook in March 2023 to revenue of €130 million to €135 million and adjusted EBITDA of €45.5 million to €47.3 million – taking into account the deconsolidation of Palas, which was sold in November 2022 – when the nine-month figures were published in November 2022.

Brockhaus Technologies thus significantly exceeded its guidance for 2022 as whole.



Strong development of the subsidiaries

The Group's strong performance is evidence to the successful implementation of the corporate strategy and is based on the positive operational development of the two subsidiaries.

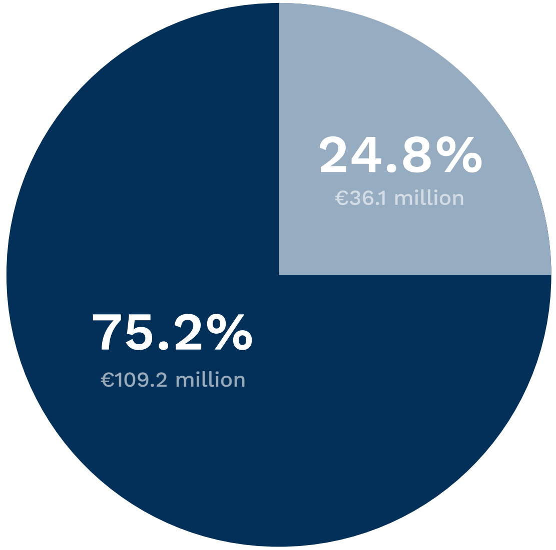
Bikeleasing continued to record strong growth and high profitability in fiscal year 2022. The company operates a digital platform for financing, brokering and managing employee benefits. As of December 31, 2022, Bikeleasing numbered more than 45 thousand connected corporate customers, representing a combined workforce of approximately 2.5 million employees. Revenue at the equity investment increased year over year by over 50% to €109.2 million.

IHSE and kvm-tec develop, produce and distribute KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission of often high data volumes in mission-critical applications. Customer demand picked up strongly again in the past fiscal year after COVID-19 related travel restrictions and social distancing requirements – especially in western industrialized countries – were partially and later almost completely lifted. Revenue rose in the wake of that by 10.4% to €36.1 million.

Brockhaus Technologies sold the subsidiary Palas to the Swedish technology and industrial group Indutrade on November 24, 2022. Palas is therefore no longer part of Brockhaus Technologies. Palas had grown strongly and profitably by the time it was sold.

In the total of four years under the roof of Brockhaus Technologies, Palas posted an impressive performance, doubling revenue, EBITDA and EBIT. Together with Brockhaus Technologies, Palas has tackled its internationalization successfully and established branches in Hong Kong and Shanghai.

Revenue by operating segment in 2022



Financial Technologies
Operation of a digital B2B finance platform for arranging, financing and managing employee benefits through the employer, consisting of Bikeleasing

Security Technologies
Development, production and distribution of KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission in mission-critical applications, consisting of IHSE and kvm-tec

Performance of the share

Global stock markets faced challenging circumstances in 2022. Especially in Germany, any economic recovery was held back by Russia's war of aggression on Ukraine, supply bottlenecks, an energy crisis, inflation and rising interest rates. Accordingly, stock prices on the world's major exchanges declined, in some cases significantly. The Brockhaus Technologies share was not able to buck this trend, which affected small caps in particular, although the Group's business developed excellently and demonstrated a very high level of resilience to various crisis factors.

"The sale of Palas marks the first time in our corporate history that we have sold a subsidiary and thus created substantial value for our shareholders. Our strategy is successful and we are sticking to it unswervingly."

Paul Göhring
Acquisitions

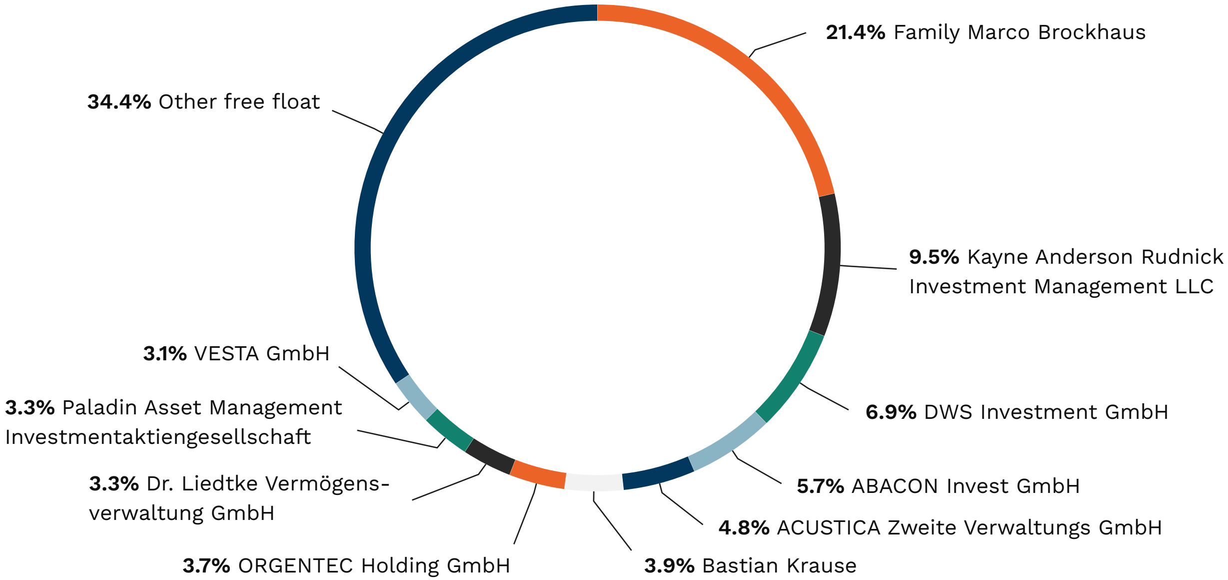
Share performance in 2022

Opening price on January 3, 2022	€23.00
Peak in 2022	€25.50
Low in 2022	€13.80
Closing price on December 30, 2022	€22.40

The Brockhaus Technologies share

Type of share	Registered shares
Share capital	€10,947,637
Shares (December 31, 2022)	10,947,637
ISIN	DE000A2GSU42
Securities identification number	A2GSU4
Stock exchange	Frankfurt Stock Exchange
Segment	Prime Standard

Brockhaus Technologies AG's shareholder structure*



* Total voting rights via direct and indirect shareholdings as of December 31, 2022


BROCKHAUS
TECHNOLOGIES

Our champions

Our subsidiaries are the heart of Brockhaus Technologies. Technology champions in the Mittelstand, with high growth potential and strong margins.

01 Bikeleasing P. 32 →

02 IHSE P. 36 →

03 Palas P. 40 →

Bikeleasing – At a glance

Financial Technologies

The digital B2B financing platform enables highly automated arranging, financing and managing of employee benefits through the employer. More than 45 thousand corporate customers, representing a combined workforce of approximately 2.5 million employees, are now connected to the platform.

REVENUE
€109.2million

EMPLOYEES
200

HEADQUARTERS
Vellmar, Germany

BRANCHES
Uslar, Berlin, Freiburg, Innsbruck

Bikeleasing – Business model and strategy

Bikeleasing operates a digital and highly automated B2B financing platform for arranging and managing employee benefits. The platform currently focuses on company bicycles and brings together companies, employees, retailers, insurers and financing providers on a specially developed platform and an app for mobile devices.

Bikeleasing allows employers to provide benefits and financing of them for employees under a transfer agreement. That involves part of their gross salary being converted into non-cash compensation ("deferred-compensation model"). The lease installment reduces employee's gross wages, and thus their taxes and social security contributions, offering significant savings compared with a cash purchase. Employees can also choose from a comprehensive insurance offering covering damage or wear and tear. Because of the savings from the deferred compensation model, most bicycles procured through Bikeleasing are high-value ones – particularly, but not exclusively, e-bikes. For retailers, insurers and financing providers, Bikeleasing creates additional demand and so is growing in importance as part of their sales strategy.

The Bikeleasing platform is used to arrange and manage the contracts: From onboarding the employer, through ordering the bicycle by employees at the retailer, down to the purchase or return of the bike by the employee at the end of the lease – Bikeleasing delivers a convenient end-to-end solution. Insurance claims are also handled between all the parties involved using the platform. Since its formation, Bikeleasing has recorded strong and highly profitable growth and has been able to steadily expand its market share thanks to its innovation leadership. As of December 31, 2022, there were over 45 thousand connected corporate customers, representing a combined workforce of approximately 2.5 million employees. Bikeleasing's offering focuses primarily on the core market of Germany, but also to an increasing extent in Austria. A total of more than 118,000 Bikeleasing company bicycles were brokered in 2022. Approximately 70% of the company bicycles are financed via the Group's own leasing companies, the remaining approximately 30% through external leasing providers. Bikeleasing earns a commission on every leased item it brokers. Among other things, commission is paid on financing and insurance.

The Bikeleasing platform's current offering focuses on bicycles and is benefiting from the trend toward more outdoor activities, greater environmental awareness and political and trade union support for green transportation. People of all ages are increasingly choosing bicycles to do sport, relax or use as a means of transportation. E-bikes in particular make it possible to cover longer distances. Many cities are improving their infrastructure for bicycles – in Germany as well as in Europe. Bicycles are gaining importance as a means of transport.

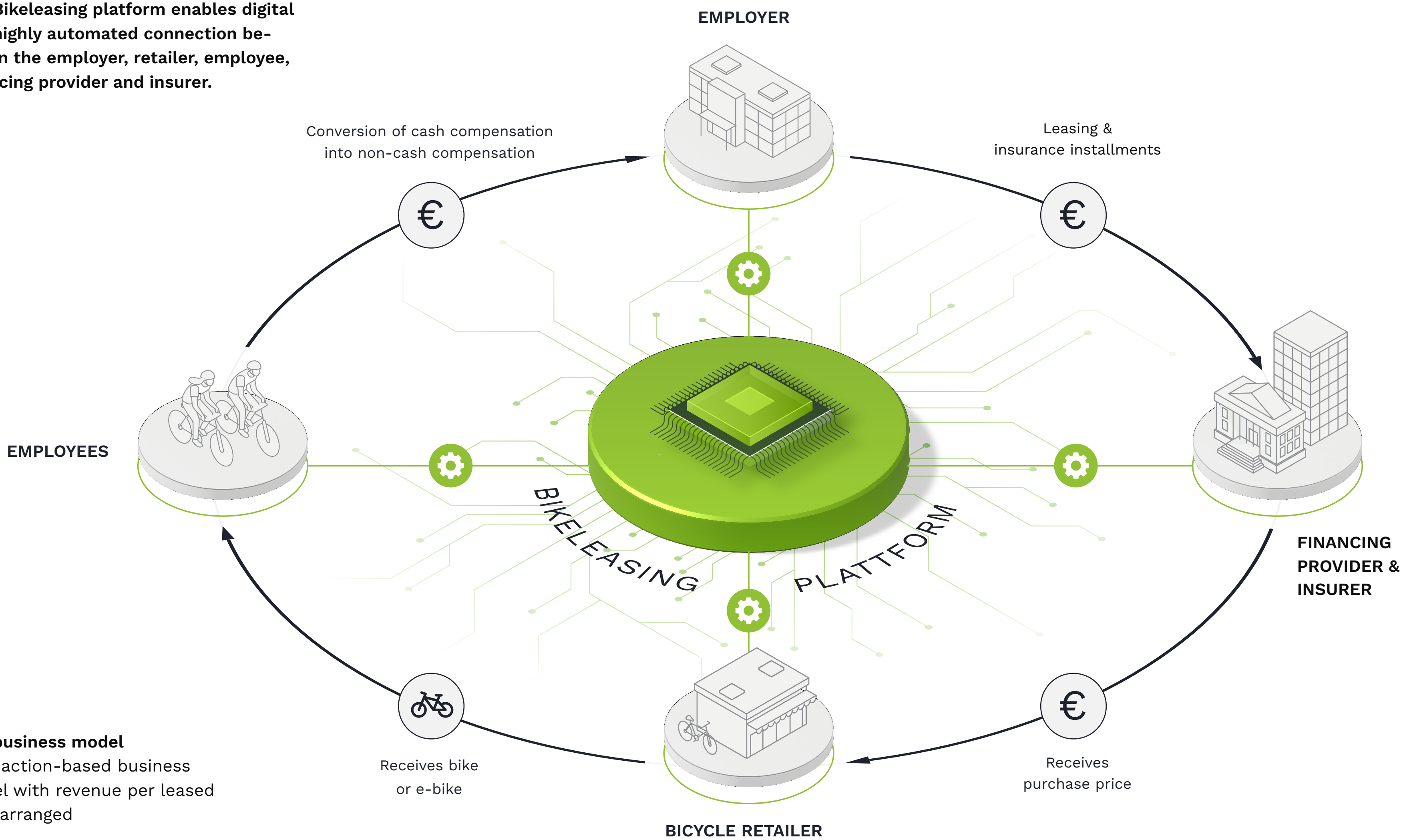
The established platform is neutral about the type of employee benefit being brokered and offers untapped potential through the incorporation of further product groups for employee incentivization. The bicycle offering can be complemented in the future by further benefits, such as smartphones, tablets or computers for employees. These new potential product groups could be handled with the Bikeleasing platform at little effort.

"We can look back on a very successful 2022. Our employees have done an extraordinary job and together with Brockhaus Technologies we were even able to exceed our high expectations. We're grateful for the support and the spirit of mutual respect and cooperation and look forward to further developing the Group together."

Bastian Krause
CEO of Bikeleasing

Bikeleasing – Visualization of the business model

The Bikeleasing platform enables digital and highly automated connection between the employer, retailer, employee, financing provider and insurer.



The business model
Transaction-based business model with revenue per leased item arranged

Bikeleasing – Highlights of the fiscal year

Connection to highly attractive bike manufacturers with direct mailing (D2C) and bike leasing as a payment and financing option

In addition to purchasing bicycles from local dealers, employees can now also handle purchases directly from selected, highly attractive bike manufacturers over the Internet and, behind that, through Bikeleasing. The company is additionally tapping into new target groups by offering direct mailing from the manufacturer.

Support for dealers

Dealers are an important part of the Bikeleasing platform. They ensure that bicycles are widely available. That is why Bikeleasing works together with them. Bikeleasing traditionally acts as an equal with its retail partners. That is reflected in many aspects – including the fact that dealers do not have to pay commission on transactions. More than 6,000 dealers in German-speaking countries are now active on the Bikeleasing platform. There is further growth potential in the retail sector. To leverage that potential, Bikeleasing is expanding its support for dealers, offers special training and is setting up a new team for this purpose last year.

Expansion of the company's headquarters

As part of the company's expansion, Bikeleasing further extended its headquarters in Uslar in 2022, adding a new building with an impressive sustainable design. High thermal insulation, economical infrared heating and a solar system enable virtually autonomous operation. It is mainly built of wood and other renewable raw materials. There are no load-bearing interior walls, which means the rooms can be adapted flexibly to all conceivable desired uses.

IHSE – At a glance

Security Technologies

IHSE is a world-leading technology provider for flexible and highly secure keyboard, video and mouse (KVM) solutions for extending and switching computer signals in compliance with the highest security standards in mission-critical applications. For almost 40 years, IHSE has created high-performance solutions that are used wherever latency, system failures or cyberattacks could have serious consequences.

REVENUE

€36.1 million

EMPLOYEES

160

HEADQUARTERS

Oberteuringen, Germany

BRANCHES

Austria, Singapore, USA, France, Israel, India, South Korea, China

IHSE – Business model and strategy

IHSE and kvm-tec, which has been part of IHSE since November 2021, develop, produce and distribute KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission of often high data volumes in mission-critical applications. KVM technology can be used to create direct, highly secure access from a workstation (which may be remote) to several servers (switching) and/or conversely from several workstations to a single server (sharing).

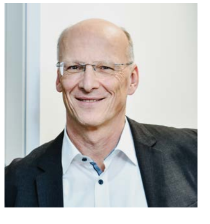
IHSE's products are used, for example, in air traffic control, healthcare, the utility sector, transportation, banking, maritime shipping, semiconductor production and generally in control centers – i.e. wherever latency, system failures or cyberattacks could have serious consequences and people's lives even depend on the transmission of data. IHSE's products can bridge distances of up to 160 kilometers between control units and computer units, usually servers or other high-performance computers.

kvm-tec's services include flexible, highly secure KVM-over-IP solutions where, in contrast to IHSE, the standardized Internet Protocol (IP) is used for signal transmission in existing networks. These KVMoIP (keyboard, video, mouse over Internet Protocol) products are increasingly being used in industry, television and radio or in the public sector as a quickly implemented, flexible, low-cost solution.

The strategic add-on acquisition of kvm-tec in November 2021 means IHSE has added complementary products to its portfolio so that customers can now flexibly choose between proprietary, IP-based as well as hybrid KVM solutions. In addition, the acquisition delivers further synergies in the areas of development, sales, purchasing and production.

IHSE's business is benefiting from the global digital transformation and increasing connectivity in many different application areas – from autonomous driving to networked production. The need for secure data transmission continues to grow rapidly. That presents operators of control rooms, for example, with the challenge of anticipating future developments as best as possible in order to prevent security gaps in hardware and software. The systems from IHSE and kvm-tec are optimized for these needs and offer high investment security for operators due to their modular design. Customized systems can be assembled from a variety of modules, while existing systems can be upgraded or converted with little effort.

"IHSE and kvm-tec have grown further together as a company at both the personal and technical level, and we have been able to achieve clear synergy effects. With our various technical approaches, we serve the breadth of the market perfectly and unleash our combined innovative strength with Brockhaus Technologies as a strong partner for further growth."

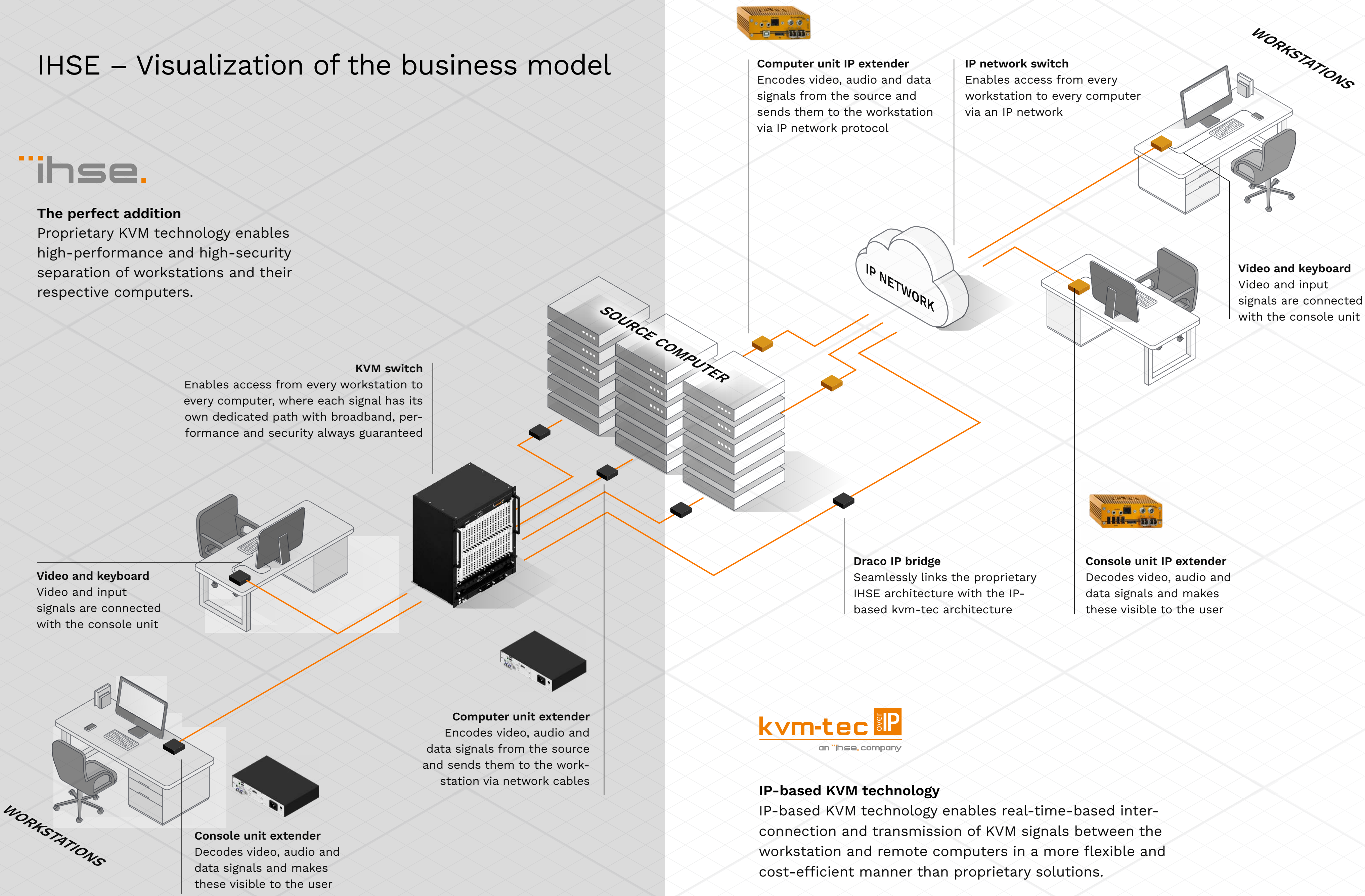


Dr. Enno Littmann
CEO of IHSE

IHSE – Visualization of the business model

The perfect addition

Proprietary KVM technology enables high-performance and high-security separation of workstations and their respective computers.



kvm-tec over IP
an ihse. company

IP-based KVM technology

IP-based KVM technology enables real-time-based interconnection and transmission of KVM signals between the workstation and remote computers in a more flexible and cost-efficient manner than proprietary solutions.

IHSE – Highlights of the fiscal year

IHSE obtains official certifications (NIAP and EAL4+) for data transmission complying with the strictest IT security requirements

IHSE KVM extenders (NIAP PP 4.0 and EAL4+) enable remote computer access and support the shared use of systems in high-security environments that must meet stringent cybersecurity regulations – such as at government institutions or in the defense area. Thanks to advanced shielding technology, the IHSE system prevents tapping and access attempts and enables the precise assignment of access rights such as is required in military and security facilities.

Technical linking of IHSE and kvm-tec

kvm-tec grew further together with IHSE in 2022. The new, jointly developed “Draco IP Bridge” allows IHSE systems to be seamlessly connected with IP-based architectures from kvm-tec. If required, all computers can thus be accessed from all endpoints, regardless of the network protocol. The result is a diverse range of possible combinations and enormous flexibility. Customers are free to choose where which system is best suited for them.

IHSE establishes smart city control center for autonomous driving

The leading-edge smart city control center developed by IHSE in Friedrichshafen serves as the data center for the Automated Driving Test Bed (ALFRIED) funded by the German Federal Ministry of Digital and Transport. Scientists and engineers are working there on a sustainable mobility system of the future in real-life operation. The prototype of the control center was built in 2022. The operators use it to conduct simulations and tests for road traffic based on actual real-time data – for example, multiple collisions simultaneously along the route, two major incidents on the same day, flooding or similar events relevant to traffic flow.

Palas – An “elevated champion”

Palas is a leading developer and producer of high-precision devices for measuring, characterizing and generating particles in the air. With a large number of active patents, Palas develops technologically leading and certified fine-dust and nanoparticle measuring devices, aerosol spectrometers, generators, sensors and associated systems and software solutions.

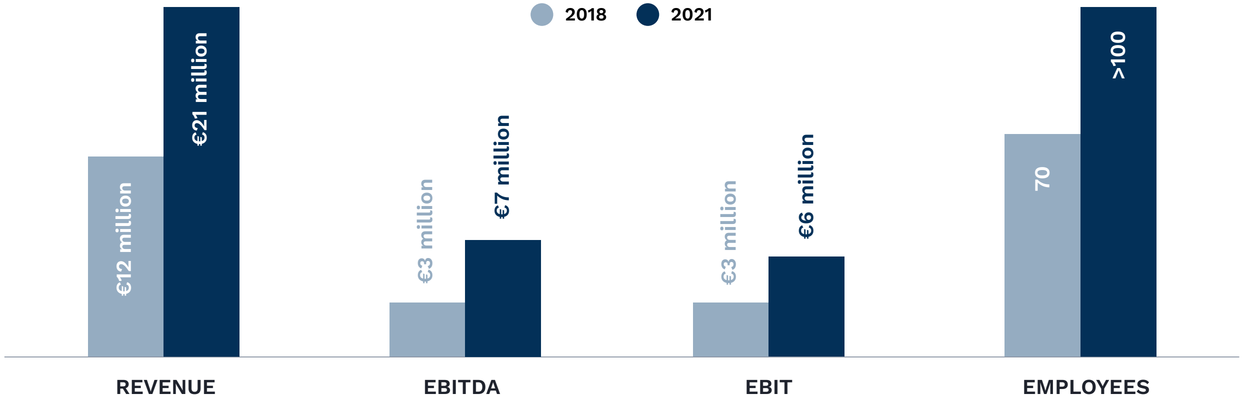
Brockhaus Technologies acquired a majority stake (70%) in Palas in December 2018 for €18 million. In the almost four years that followed, Brockhaus Technologies actively supported Palas in its internationalization and in building scalable structures, for example with the foundation of subsidiaries in Hong Kong and Shanghai and establishment of a second management tier.

Brockhaus Technologies sold its stake in Palas to the Swedish technology and industrial group Indutrade in November 2022. The sale was based on a high strategic company valuation of €100 million for all of the shares.

“Brockhaus Technologies has proven its strategy with Palas: Identify an attractive company, develop it further and make it more valuable.”

Marco Brockhaus
Founder, CEO

Impressive development of Palas under the roof of Brockhaus Technologies




BROCKHAUS
TECHNOLOGIES

Combined Management Report

Combined Management Report

The registered office of Brockhaus Technologies AG (**BKHT**, or the **Company**, together with its subsidiaries **Brockhaus Technologies** or the **Group**) is Nextower, Thurn-und-Taxis-Platz 6, 60313 Frankfurt am Main, Germany, and the Company is registered in the commercial register at the Local Court in Frankfurt am Main under commercial register number HRB 109637.

In addition to information on the Group, this combined management report (**management report**) includes information on the parent company. The reporting on the position of the Group generally corresponds to the reporting on the position of the Company. Additional disclosures regarding the BKHT annual financial statements pursuant to the German Commercial Code (HGB) can be found in the section Brockhaus Technologies AG's economic development. This combined management report has been prepared in accordance with German Accounting Standard No. 20 (GAS 20). The report describes the position of both the Group as a whole and the parent company as a single entity.

Unless otherwise stated, the period-related disclosures in this management report relate to the period from January 1, 2022, to December 31, 2022 (**reporting period**) and disclosures for a specific date relate to December 31, 2022 (**reporting date**). Quantitative information is rounded in accordance with standard commercial practice. This rounding method does not necessarily preserve totals, so that it is possible that the amounts in this report do not add up precisely to the total shown. Negative amounts are shown in parentheses.

Equal treatment is important to us. Only for reasons of better legibility, the use of male, female or language forms of other genders is avoided. All personal references apply to all genders unless otherwise specified.

Fundamentals of the Group

Business model

Brockhaus Technologies is a group of companies consisting of high-margin, fast-growing technology and innovation leaders with B2B business models in the German Mittelstand. The Company's strategy is to continuously acquire cash compounding businesses and develop them further in line with this focus. With its distinctive platform approach and a long-term horizon, Brockhaus Technologies supports its subsidiaries actively and strategically to enable them to achieve profitable long-term growth beyond sector and national boundaries. At the same time, Brockhaus Technologies offers capital market investors access to these unlisted German technology champions.

In addition to capital for future acquisitions, carrying out the business activities requires in particular highly qualified specialists from a wide variety of high-tech fields, e.g., information technology, electronics, optics and various fields of physics. Material intangible assets include the extensive experience of the employees and their technological and process expertise, long-standing customer relationships and internally developed software and trademarks.

Brockhaus Technologies' business activities consist firstly of its acquisition activities, i.e., identifying, investigating and acquiring subsidiaries and supporting their long-term growth and, secondly, of its operating segments of Financial Technologies and Security Technologies. The basis of consolidation comprised 22 consolidated companies in Germany and abroad and two structured entities at the reporting date.

One of the structured entities is Debt Marketplace SARL. Companies can securitize receivables through this entity. The Group has no ability to influence the management of the structured entities. However, the Group handles a material activity of the structured entity by servicing the lease receivables and recovering them upon default by the lessee. The Group additionally assumes the credit risk associated with the lease receivables by way of a purchase price discount and participates substantially in the variable returns of the structured entity by receiving a share of the excess spread. In the overall assessment, the Group has control over Compartment B of Debt Marketplace SARL within the meaning of IFRS 10. The company must therefore be consolidated in accordance with IFRS.

The second structured entity is KVM-TEC MPP GmbH & Co. KG. As part of a management investment in KVM-TEC, the Group uses a GmbH & Co. KG structure. The Group holds all shares in the general partner, but not in KVM-TEC MPP GmbH & Co. KG itself. Nevertheless, the Group controls KVM-TEC MPP GmbH & Co. KG by virtue of separate segregated agreements. The overall assessment is that the Group exercises de-facto control over KVM-TEC MPP GmbH & Co. KG within the meaning of IFRS 10. The entity therefore has to be consolidated in accordance with IFRS.

Effective November 24, 2022, the Palas group, which constituted the Environmental Technologies segment until the date of sale, was sold to the Swedish technology and industrial group Indutrade AB. Palas was therefore deconsolidated at the end of November 2022. The structure of the Group changed with the sale and deconsolidation of Palas. The activities of the former Environmental Technologies segment up to the date of sale are presented for the first time as a discontinued operation in the statement of comprehensive income, whereas they are included in the statement of cash flows until the deconsolidation date. The former Environmental Technologies segment is no longer presented in the segment reporting of the management report. Details on the accounting treatment of the deconsolidation of Palas can be found in Note 34 to the consolidated financial statements. Unless indicated otherwise, the disclosures on the statement of comprehensive income presented in the management report relate solely to continuing operations.

Since July 14, 2020, Brockhaus Technologies has been listed in the regulated market of the Frankfurt Stock Exchange with additional post-admission obligations (Prime Standard). Brockhaus Technologies' reporting therefore follows the high level of requirements stipulated for the Prime Standard.

Financial Technologies | The segment Financial Technologies consists of the business with digital B2B finance platforms. At present, the segment comprises the Bikeleasing companies (**Bikeleasing**), in which Brockhaus Technologies acquired an approximately 52% stake in November 2021. Of the remaining 48%, 40% is held by the founders and directors of Bikeleasing and 8% by coinvestors.

Bikeleasing operates a digital and highly automated B2B financing platform for arranging and managing employee benefits through the employer – focused on company bicycles today. Approximately 69% of the company bicycles are financed via internal Group leasing companies, the remaining approximately 31% through external leasing providers.

The business model enables employers to use a transfer agreement to offer their employees benefits and their financing via a change of the form of remuneration from cash remuneration to non-cash remuneration (deferred compensation model). This deferred compensation model reduces taxes and social security contributions for the employee, offering significant savings compared with a cash purchase. In addition, the employee can choose from a comprehensive insurance offering, for example covering damage and wear and tear, and even the risk of early termination of the lease because of an employee leaving the company is covered by insurance for the employer, as lessee. Because of the savings from the deferred compensation model, the main bicycles acquired through Bikeleasing are high-value ones, particularly e-bikes. This is also an attractive model for bicycle retailers because higher revenues are also generated due to the high price level and – in contrast to other providers – with Bikeleasing, the dealer does not incur any commission costs.

Bikeleasing offers a digital ecosystem with its own proprietary platform or app for mobile devices through which the companies, their employees, retailers, insurers and financing providers can be integrated with each other. The entire process of arranging and managing bicycle leasing, from onboarding the employer, through ordering the bicycle by the employee at the bicycle retailer, down to the purchase or return of the bike by the employee at the end of the lease, as well as insurance claims handling, uses the digital Bikeleasing platform.

Since its formation, Bikeleasing has recorded strong and highly profitable growth and has been able to steadily expand its market share thanks to its innovation leadership. The established platform, with its more than 45,000 affiliated corporate customers and their 2.5 million employees as of the reporting date, is neutral about the type of employee benefit being brokered. It offers hitherto unexploited potential in terms of incorporating other product groups for employee incentivization – such as smartphone, tablet or computer leasing.

The current offering of the Bikeleasing platform focuses on bicycles, which are being used more and more. More and more people of all ages are choosing bicycles as a recreational sport, a hobby or as a means of transportation. E-bikes in particular are ensuring that greater distances can be traveled. Cycling is also becoming increasingly attractive in German towns and cities. Due among other things to the German "Bicycle Plan 2030," considerable sums are being invested in modern cycling infrastructure, such as protected cycle lanes, cycle highways and bicycle parking. This trend can also be observed in large cities in other European countries, which is also why the EU has adopted a 17-point action plan that recognizes cycling as a fully-fledged mode of transport and takes it into account in all planning. As well as recreational use, bicycles also offer transportation solutions to current challenges facing society, such as reducing road congestion and emissions, thus actively contributing to improving the quality of urban life.

Bikeleasing's headquarters are in Vellmar, with branches in Uslar, Freiburg, Berlin and Innsbruck (Austria).

The business activities of Bikeleasing are normally subject to very pronounced seasonality in conjunction with the warm "biking season." Accordingly, a significant part of its revenue (2022: 64%) is generated in the second and third quarters of the year.

Security Technologies | The segment Security Technologies is active in the field of security technology, in particular for data transmission. The segment currently consists of the IHSE companies (**IHSE**), which have been wholly owned by Brockhaus Technologies since December 2019, as well as KVM-TEC Electronic GmbH (**kvm-tec**), in which IHSE acquired a 100% interest in November 2021.

IHSE and kvm-tec develop, produce and distribute KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission of often high data volumes in mission-critical applications.

KVM technology can be used to create direct, highly secure access from a workstation (which may be remote) to several servers (switching) and/ or conversely from several workstations to a single server (sharing). The outcome is a significant improvement in the efficiency, reliability, security and user-friendliness of high-end IT applications, without any loss of performance.

The operating segment focuses on high-performance systems in the following product groups:

- KVM extenders: Modular devices to control PC-based applications remotely in real time independently of the operating system (operating channel extension)
- KVM matrix switches: Routing systems for single and multiple workstation solutions to operate PC-based applications on one or more computer units
- KVM-over-IP (KVMoIP): KVMoIP extenders for physical separation between workstation and data source or servers via the standardized Internet Protocol (IP), as well as modules that enable IP-based access to remote KVM systems.
- Converters and accessories: devices for signal conversion
- Other: Repeaters, programmable controllers and input devices, aftersales service and other services

IHSE's products comprise proprietary network infrastructure solutions that, as cross-cutting technologies, are used in a wide range of the mission-critical fields such as air traffic control, medicine, utilities, transportation, banking, maritime shipping, semiconductor production in fabs and control centers in general – especially in situations where latency, system failures or cyberattacks could have serious consequences and where people's lives depend on the transmission of data. They bridge distances between control units and computer units, usually servers or other high-performance computers, of up to 160 kilometers.

kvm-tec's products include flexible, highly secure KVM-over-IP solutions where – in contrast to IHSE – the standardized Internet Protocol is used for signal transmission in existing networks. KVMoIP products are increasingly being used in industry, television and radio (broadcasting) as well as in postproduction and in the public sector as a rapidly implemented, flexible, low-cost solution.

Thanks to the acquisition of kvm-tec, in November 2021, IHSE's product portfolio now includes proprietary IP-based and hybrid KVM technologies. IHSE can thus deliver flexible solutions for the application in question. In addition, the acquisition resulted in synergies in the areas of development, sales, purchasing and production.

IHSE products are hub technologies that can be used in a wide range of end markets and benefit from a large number of megatrends (including autonomous driving, Industry 4.0/ networked production, etc.) that are driven by growing connectivity and digital transformation and the accompanying growth in mission-critical data transmission.

When planning (e.g., control rooms), operators must take into account of future developments to the farthest extent possible. The increasing pace of digital transformation, the closure of security gaps in hardware and software in light of growing cyberattacks and the creation of best working conditions possible are the focus of efforts when optimizing control rooms. The systems of IHSE and kvm-tec are optimized for these factors and are thus focused directly on customer requirements. The solutions offer a high degree of investment security because of things such as their modular approach. Customers can flexibly assemble a tailored KVM system from a variety of modules. Existing installations can be retrofitted with new functions and interface standards with a minimum of effort and expense. These aspects systematically enhance customer loyalty and hence also follow-up business with longstanding customers.

IHSE is certified according to the ISO 9001 quality management standard and applies a certified environmental management system in accordance with ISO 14001.

IHSE is headquartered in Oberteuringen by Lake Constance. IHSE USA LLC, based in Cranbury, New Jersey, has been wholly owned by IHSE since 2017. In 2015, IHSE additionally established IHSE GmbH Asia Pacific Pte Ltd., a subsidiary in Singapore. On April 20, 2021, IHSE GmbH Asia Pacific Pte Ltd. formed its wholly owned subsidiary IHSE China Co., Ltd., based in Guangzhou. IHSE also has regional sales offices in France, Israel, India and South Korea. The headquarters of kvm-tec are in Tattendorf, Austria.

The customers are primarily sales partners and systems integrators, which in turn sell to a wide range of data-driven end markets.

Business activities in the Security Technologies segment are largely immune to seasonal factors, with a slight overweighting in the second half of the year.

Central Functions | Organizationally, the M&A activities are concentrated on the Group parent. They focus on the identification, due diligence and acquisition of majority stakes in high-margin, high-growth companies in the German Mittelstand that lead in technology and have B2B business models. Central Functions also include activities such as financial controlling, investor relations, risk management and compliance.

In addition to competitive bidding processes with several prospective buyers, Brockhaus Technologies also focuses on creating proprietary transaction situations. This approach aims to avoid the high purchase prices commonly found in auctions. It is also designed to ensure the greatest possible probability that the transaction will enter the due-diligence phase. Selling processes of M&A consultants are selectively pursued with an eye to cost-benefit aspects.

To obtain access to attractive investment opportunities, Brockhaus Technologies actively nurtures its existing network and expands it continuously. To ensure a constant deal flow of high-quality proprietary acquisition opportunities, Brockhaus Technologies has implemented a structured and tried-and-tested process that is designed to identify and proactively develop close relationships with attractive companies, their founders, family shareholders and directors.

Brockhhaus Technologies' support for its subsidiaries' sustainable post-acquisition performance pursues a nuanced approach with the goal of driving further organic growth. The aim is to develop a close relationship and partnership with the management teams of the subsidiaries, to provide them with comprehensive strategic support and access to the Brockhaus Technologies network and to enable the continuous review of strategic options, such as professionalization or expansion through internationalization.

Control system

The Group's control system is geared toward its objective of sustainably increasing the long-term value of its subsidiaries. To achieve this, Brockhaus Technologies' management receives and evaluates monthly reports from its subsidiaries. In addition to financial reporting, these also contain explanations by the relevant management on material events, opportunities and risks.

The Group's most important financial key performance indicators (KPIs) are revenue before purchase price allocation (PPA) and its adjusted EBITDA margin, both relating to the Group's continuing operations.

Revenue before PPA is the key indicator of market performance or the growth generated by the Group. For the purpose of managing the Company, revenue is calculated in accordance with IFRS 15 for revenue from contracts with customers and with IFRS 16 in conjunction with IFRS 9 for income from leases. The Group adjusts this KPI for one-time PPA (purchase price allocation) effects. This was because the acquisition of Bikeleasing in fiscal year 2021 was initially followed by PPA for solely the statement of financial position and not the statement of cash flows, which affected the Group's revenue. There had previously been comparable effects, particularly for depreciation and amortization, and they had always been adjusted when calculating the Group's alternative performance measures. Accordingly, the management believes that the analogous method applied for the Group's revenue is consistent with the perspective applied in the past. Please refer to Note 6 of the consolidated financial statements for more information about this and the KPIs in general.

Adjusted EBITDA or the ratio of adjusted EBITDA to revenue before PPA expressed as a percentage (**adjusted EBITDA margin**) indicates the Group's pricing power and its cost efficiency. It is calculated as earnings before interest, taxes, depreciation and amortization, adjusted for the cost of acquisition of subsidiaries, costs of equity transactions to be recognized in profit or loss, costs of stock-based compensation and the reduced income resulting from the value step-up as a consequence of the Bikeleasing PPA.

Research and development

The Group's development activities are concentrated on the development of new – and enhancement of existing – technologies, products, processes and software. These activities are undertaken in the high-performance secure transmission and switching of computer signals and as part of the digitization and automation of the B2B finance platform for employee benefits.

Research and development activities

€ thousand	2022	2021PF
Research and development expense	3,716	2,657
Research intensity (research and development expense / revenue before PPA)	2.6%	2.5%
Capitalized development investments	1,385	464
Capitalization rate	37.3%	17.5%

The Group's research and development activities are presented on a pro forma basis. These adjustments are relevant for the prior period and shown the Group as if Bikeleasing and kvm-tec were already part of Brockhaus Technologies as of January 1, 2021. No pro forma adjustments were made in the reporting period. The table does not include research and development expenses for discontinued operations for either the reporting period or the comparative period.

Research and development expense in the reporting period amounted to €3,716 thousand (previous year: €2,657 thousand), corresponding to a research intensity of 2.6% (previous year: 2.5%). Development investments of €1,385 thousand (previous year: €464 thousand) were capitalized in the reporting period. The capitalization ratio was therefore 37.3% (previous year: 17.5%). Including amortization of capitalized development costs amounting to €533 thousand (previous year: €578 thousand), the total capitalized development costs were €2,863 thousand (previous year: €2,771 thousand).

Financial Technologies | The development activities in the Financial Technologies operating segment that were driven forward in fiscal year 2021 were also continued in the reporting period. The focus here on the one hand is on the further development of the front ends of the website and mobile app to improve user-friendliness and, on the other, on the optimization, expansion and automation of the back end of the digital Bikeleasing platform.

Among other things, a new customer journey was developed and implemented to optimize user experience and satisfaction. Automated testing for quality assurance was also introduced in order to optimize processes more precisely. Additionally, an internal data analysis system was established to enable continuous monitoring of key data points related to the behavior of all stakeholders involved. Among other things, this continuous data analysis is also intended to support the development of effective measures to help achieve the strategically important goal of increasing the pick-up rate in the workforce. It is also designed to provide empirical pointers for the future direction of the business strategy.

Further measures as part of the digital transformation and automation strategy are being continuously implemented.

In the comparative period, Bikeleasing's development activities were dominated by a high degree of outsourcing in the form of collaboration with external development service providers. One of the measures identified during the due diligence process was the expansion of the in-house development team. This expansion was significantly driven forward in the reporting period by the recruitment of five new employees for the development team, with the aim of safeguarding key expertise for the company, making processes more efficient and becoming more independent of external service providers. As of the reporting date, Bikeleasing had 7 employees working in research and development (December 31, 2021: 2 employees).

Security Technologies | The further development of KVM and KVMoIP products in the Security Technologies operating segment begun in fiscal year 2021 was continued. KVMoIP solutions work on the basis of the standardized Internet Protocol (IP) and are a cost-efficient alternative in some applications to a proprietary KVM network solution. In the course of producing and further developing the IP capability of existing devices, the modular IHSE KVM platform was enhanced to create a hybrid solution that combines both proprietary and new, IP-based components in a single system, enabling it to respond even more flexibly to customer requirements. Several prototypes of IP-enabled devices have already been demonstrated at trade shows and are being prepared for testing with the first pilot customers.

In cooperation with Austrian-based KVMoIP specialist kvm-tec, acquired in 2021, IHSE is currently working on new software-based KVM components that are at an advanced stage of development. A special focus of the development team at kvm-tec is on the innovative use of the KVM console unit as a multiviewer. A multiviewer is a combination of software and hardware that enables multiple video signals to be viewed together on a single display.

In light of the continuing shortage of relevant components, dependence on specific chips was further reduced through product redesigns and the delivery capability of the Security Technologies segment was improved.

To satisfy the growing demand security-certified products to a greater extent to suit the needs of our customers, the ongoing certification processes for a product family under the US NIAP (National Information Assurance Partnership), the international Common Criteria for Information Technology Security Evaluation and the German KRITIS (critical infrastructure in accordance with the Federal Offices for Civil Protection, Disaster Assistance and Information Security) were further driven forward and were awarded final approval by the certifying authorities at the end of the fiscal year.

There is also a cooperative arrangement in the field of research and development with the Fraunhofer Society and with a number of companies in the Lake Constance District to develop – with government support – a test track for autonomous vehicles with an integrated smart-city control center under the leadership of IHSE. IHSE and kvm-tec had 32 employees working in research and development as of the reporting date (December 31, 2021: 31).

Employees

As of December 31, 2022, Brockhaus Technologies employed a total of 372 employees (previous year: 447 employees). This corresponds to year-over-year decline of around 16.8% in our headcount. The headcount includes all companies that are part of the Group at the relevant reporting date. The change in the number of employees is primarily the result of the sale of Palas at the end of November 2022. The headcount at the continuing operations increased in total by 13.8%. The number of employees in the Segment Financial Technologies segment rose by 24.1% from 162 to 201. The number of employees in the Security Technologies segment grew by 3.9% to 160 (previous year: 154). The number of employees in the Central Functions remained unchanged at 11.

The average number of full-time-equivalent employees (part-time positions weighted according to their share of full-time working hours, FTE) was 321 (previous year: average of 360 FTE positions).

Economic report

During the 2021 comparative period, the income and expenses of Bikeleasing and kvm-tec were only included for December in the statement of comprehensive income because control was only obtained at the end of November 2021 in both cases. For this reason, the informative value of the statement of comprehensive income for fiscal year 2021 and in particular, its suitability for deriving forecasts, is limited. The Executive Board therefore analyzes the Group's earnings figures for the comparative period on a pro forma basis. In the pro forma view, the Group's statement of comprehensive income is presented as if Bikeleasing and kvm-tec had already been acquired as of January 1, 2021. No acquisitions were made in the 2022 reporting period and no pro forma adjustments were therefore performed.

The results presented in this economic report are based on pro forma figures unless otherwise indicated for the comparative period. The corresponding non-pro forma values are designated as "as-is".

Please refer to the comments at the beginning of this report and Note 34 of the consolidated financial statements for information on the subject of recognition of the Palas group as a discontinued operation.

Comparison of actual and forecast business performance

Forecasts of business performance for 2022

As of the publication date of the 2021 Annual Report on May 2, 2022, Brockhaus Technologies expected revenue before PPA to grow between 11% and 19% to €140 million to €150 million. The adjusted EBITDA margin was projected to be 35%. This estimate was reaffirmed in the half-year report published on August 15, 2022.

On the back of the positive business development until the end of September 2022 and the positive outlook for the last quarter of the fiscal year, BKHT raised its guidance for fiscal 2022 in its quarterly statement 9M 2022 to revenue of between €150 million and €155 million and an adjusted EBITDA margin of 35%.

With the sale of Palas at the end of November 2022, Brockhaus Technologies adjusted its guidance for fiscal 2022 to revenue before PPA to between €130 million and €135 million. The adjusted EBITDA margin was projected to be unchanged at 35%, which meant the range for projected adjusted EBITDA was €45,500 thousand to €47,250 thousand. This adjustment was solely a consequence of the deconsolidation of Palas, as the revenue and other income and expenses of Palas following the sale are presented separately as discontinued operations in the consolidated statement of comprehensive income and are therefore no longer included in the corresponding consolidated revenue, income and expenses.

Forecast achieved

Brockhaus Technologies beat its revenue guidance for fiscal year 2022 (€130 million and €135 million), by generating revenue before PPA of €145.3 million. Compared with the most recently issued guidance, the key factors for exceeding the forecast were a higher than planned volume of company bicycles brokered via the digital Bikeleasing platform and a very strong fourth quarter of IHSE.

At 34.4%, the adjusted EBITDA margin was slightly below the forecast (35%). However, BKHT surpassed the expectations for adjusted EBITDA (€45,500 thousand to €47,250 thousand) underlying the adjusted EBITDA margin forecast by posting a figure of €50,006 thousand.

Macroeconomic environment

In fiscal year 2022, any economic recovery in Germany was held back by Russia's war of aggression on Ukraine, supply bottlenecks, the COVID-19 pandemic, an energy crisis, inflation and rising interest rates.

In the first half of fiscal year 2022, the German economy according to the September 2022 monthly report of the Federal Ministry of Finance had still withstood the adverse circumstances. According to revised data from the Federal Statistical Office as of August 25, 2022, real gross domestic product (GDP) grew by 0.8% in the first quarter of 2022 and by 0.1% in the second quarter of 2022, in both cases quarter-on-quarter. Economic output thus performed better in the first half of the year than expected by the German government in its spring projection. In the second quarter, real GDP returned to its pre-pandemic level for the first time (fourth quarter of 2019).

However, following the almost complete suspension of gas supplies from Russia, the exceptionally high energy prices as a result and the rise in key interest rates, the situation deteriorated significantly in the second half of the year. Inflation also rose again significantly in August 2022 after slight declines in the previous months.

When viewing the year as a whole, GDP was up 1.9% according to the Federal Statistical Office of Germany.

2022 was a turning point in monetary policy. Responding to the high level of inflation, the ECB raised its key interest rate in four steps, first in July, then in September, October and finally in December 2022, with the result that it reached 2.5% at the end of the fiscal year.

According to estimates by the German Federal Statistical Office, economic growth in the EU was 3.5% in 2022.

Industry-specific environment

Because of the niche strategy of Brockhaus Technologies' segments, no reliable statistics or studies are available on developments in the corresponding relevant markets. For this reason, the following information on market developments in the relevant segments refers to estimates by the management at subsidiaries.

Financial Technologies | The persistently high demand for bicycles, especially e-bikes, continued unabated during the fiscal year 2022.

Thanks to the growing familiarity with the idea of leasing a company bicycle and the greater acceptance of this offer, an increasing number of employees have the possibility of leasing their new bicycle or e-bike through their employer at a low price. As a result, the share that company bicycle leasing has in the overall bicycle market rose further. It should be emphasized in this regard that this increase was not exclusively attributable to the German market, as company bicycle leasing also experienced higher demand in Austria.

Bikeleasing faces other competitors for company bicycle leasing. With its comprehensive platform-based approach and highly digitalized processing and management of lease agreements, Bikeleasing sees itself as a digital disrupter and leading innovator in its industry.

Inflation and the consequent reduction in purchasing power are strengthening interest in leasing solutions, as no upfront payment is required for them, but rather 36 monthly installments, which are significantly (approximately 35%) cheaper than a cash purchase.

Security Technologies | Sales markets in the Security Technologies segment developed positively overall in the reporting period. A clear, albeit only partial, recovery from the negative effects of the COVID-19 pandemic was evident. As a result, both order intake and revenue increased significantly year-on-year.

On the procurement side, however, the disrupted supply chains led to delays in the completion of order backlogs, which delayed the recognition of income and thus had a direct impact on period-specific performance. This resulted firstly in internal development costs for redesigns and secondly in higher material costs in some cases, in order to be able to safeguard the greatest possible delivery capability.

Whereas the technologically lower and middle market for KVM is characterized by a high degree of fragmentation and competition between a large number of generalist suppliers, there are only a few specialized suppliers in the high-end segment relevant for IHSE that compete with each other in specific end markets.

Central Functions | After the market for M&A transactions evolved into a record year in the previous year despite the ongoing COVID-19 pandemic, the number of M&A transactions and their total transaction value declined in fiscal year 2022. This is a result of economic uncertainties in the wake of Russia's war of aggression on Ukraine, high energy prices and inflation and challenges in supply chains. For example, according to S&P Market Intelligence, the transaction value of European M&A transactions fell by around 33% year-on-year.

The technology and software sector remained very active. Although the transaction volume here also decreased globally by approximately 24%, the transaction multiples (EV / EBITDA) remained high compared with previous years. This is reflected in consistently high purchase price expectations and the unchanged intense competition – on the part of both strategic and financial investors – in this attractive area. The resilience of business models in the face of geopolitical challenges, inflation and supply chain disruptions, as well as the digital transformation efforts of numerous companies triggered by COVID-19, additionally contributed to the continued strong investor interest in the sector. Despite the sustained high level of investor interest, fewer owners, particularly of high-quality companies, appeared to initiate a sale in light of the difficult market situation.

With the comprehensive process that the three-pronged sourcing approach involves, consisting of contact with M&A consultants, proactive sourcing and a long-standing industry network, Brockhaus Technologies continued to have an appealing pipeline of potential acquisition targets. Brockhaus Technologies continued to follow the principle of operating very selectively in its acquisition processes and, in keeping with this principle, did not make any acquisitions in 2022.

Results of operations

Bikeleasing and kvm-tec were only required to be included in the consolidated financial statements for December 2021 when Brockhaus Technologies obtained control (closing of the acquisition). The statement of comprehensive income in the first eleven months of the previous year therefore only included the income and expenses of IHSE and BKHT. For this reason, there is limited comparability for the results of operations in the reporting period compared with fiscal year 2021. We referred to corresponding pro forma adjustments in the previous year in the introduction to the economic report.

The Group's revenue rose by 44.1% to €142,712 thousand on a pro forma basis in 2022. Adjusted for the effects of PPA, the pro forma revenue before PPA was up 38.1% at €145,318 thousand. In the as-is view, this represents revenue growth of 265.5% and an increase in revenue before PPA of 221.1%. Please refer to the segment reporting further below for a detailed explanation of the revenue developments. The adjusted EBITDA margin rose to 34.4% compared with 32.0% in the previous year but decreased on a pro forma basis (previous year: 38.8%). The reduction in the pro forma figure is mainly attributable to the Financial Technologies segment and results from positive non-recurring effects in fiscal year 2021 and special expenses that negatively impacted the margin in the reporting period. Details of that can be found in the segment reporting.

The main items of the statement of comprehensive income are presented as as-is values in this paragraph. The increases are primarily because Bikeleasing was part of the Group for 12 months for the first time in fiscal year 2022. Because it was acquired in November 2021, Bikeleasing was part of the Group for only one month in the previous year. The cost of materials rose by 566.9% to €51,734 thousand (previous year: €7,757 thousand), personnel expenses by 77.4% to €26,625 thousand (previous year: €15,013 thousand), and depreciation of property, plant and equipment and amortization of intangible assets (excluding PPA assets) by 219.4% to €3,245 thousand (previous year: €1,016 thousand). Other operating expenses decreased by 16.1% to €19,542 thousand in fiscal year 2022 (previous year: €23,280 thousand). The higher expenses in the previous year are principally attributable to one-time expenses in connection with the acquisition of Bikeleasing. The amortization of intangible assets identified during initial consolidation increased by 127.3% to €14,184 thousand (previous year: €6,240 thousand). Finance costs increased by 426.6% to €14,748 thousand (previous year: €2,800 thousand). Finance income amounted to €4,779 thousand (previous year: €36 thousand) and consists almost exclusively of the income from the remeasurement of the earn-out liability from the purchase of kvm-tec. After income taxes, the net profit for the year was €10,466 thousand (previous year: net loss of €18,970 thousand).

Net assets

With total assets of €655,509 thousand, the Group's assets are split between 77.8% non-current assets and 22.2% current assets as at the reporting date. The largest items by value are intangible assets including goodwill (€356,936 thousand), lease receivables (€144,520 thousand), cash and cash equivalents (€70,800 thousand), trade receivables (€29,317 thousand), other financial assets (€26,165 thousand), inventories (€10,914 thousand) and property, plant and equipment (€7,629 thousand). Intangible assets relate primarily to the customer base, basic technologies and trademarks identified in the course of purchase price allocation for the subsidiaries (PPA assets) as well as goodwill.

The main component responsible for the increase in other financial assets is the earnout receivable from the sale of the former subsidiary Palas amounting to €10,816 thousand (previous year: €- thousand).

The change in net assets compared to the beginning of the fiscal year results in particular from the sale of Palas and the associated disposal of its assets, as well as the increase in cash and cash equivalents from the sale proceeds.

Financial position

The Group's cash and cash equivalents as at the reporting date amounted to €70,800 thousand. This stood against financial liabilities of €252,690 thousand, which include loans (€90,947 thousand), other financial liabilities (€7,934 thousand) and lease refinancing for Bikeleasing (€153,809 thousand). After factoring in lease receivables, the Group's net debt was €37,370 thousand and therefore 0.75 times adjusted EBITDA.

Calculation of net debt

€ thousand	2022	2021
Senior loans	46,501	79,979
Subordinated loans	38,932	49,696
Real-estate loans	5,514	5,942
Cash and cash equivalents*	(70,800)	(30,327)
Net debt from loans	**20,147**	**105,290**
Other financial liabilities	**7,934**	**5,316**
Lease refinancing	153,809	128,179
Lease receivables	(144,520)	(119,759)
Net debt from leasing	**9,289**	**8,420**
Net debt	**37,370**	**119,027**

* Cash and cash equivalents are deducted from the loan in this presentation for purposes of analysis. There is no corresponding earmarking.

The reduction in net debt is primarily attributable to the sale of Palas, which on the one hand significantly increased cash and cash equivalents by €58,934 thousand and on the other reduced financial liabilities through the disposal of debt in the Group.

The senior loans have different times to maturity lasting up until and including 2027. The purchase agreement for the sale of IHSE's property was signed on December 13, 2022 and closing (and thus realization of the disposal gain) is expected in the new fiscal year 2023. Accordingly, the associated real-estate loans will be repaid in full in fiscal 2023. All loans are denominated in euros. Part of the collateralized loans bear fixed rates of interest, whereas the rest bear interest of EURIBOR plus a margin. If EURIBOR is negative, it is set at zero for determining the interest rate in line with the loan agreements. In relation to the liabilities that already existed as at the end of the previous reporting period, there were no changes to the loan terms in this reporting period that required explanation.

As part of the purchase of Bikeleasing, loans totaling €78,066 thousand (as of November 30, 2021) were taken out to fund the acquisition. €20,660 thousand of that was voluntarily repaid early in fiscal year 2022. In addition, the vendor loans totaling €15,000 thousand were repaid in full. The following acquisition loans from the purchase of Bikeleasing therefore remain as of the reporting date:

> €38,932 thousand acquisition loan at the level of the intermediate holding company BCM Erste Beteiligungs GmbH, 94.87% of which is attributable to BKHT
> €9,166 thousand acquisition loan at the level of the holding company BLS Beteiligungs GmbH, 52.09% of which is attributable to BKHT

Some of the Group's loan agreements contain arrangements on whose basis extensive early repayment obligations may be triggered. For example, the loans in question may be repayable immediately if the Group breaches contractual conditions. For example, the loans in question are subject to covenants that must be complied with by the subsidiaries funded by the loans. There was no breach of the covenants in this respect in the reporting period.

The deferred tax liabilities of €52,590 thousand relate mainly to the customer bases, basic technologies and trademarks identified in the course of purchase price allocation for the acquisitions of the subsidiaries (PPA assets) and will be reversed through profit or loss (but with no effect on cash flow) in the future as these PPA assets are amortized. There will be no cash outflows from this.

The parent company made a non-cash capital increase of €13 million as part of the acquisition of Bikeleasing. The reclassification as subscribed capital and capital reserves took effect when the non-cash capital increase was recorded in the commercial register as of February 10, 2022. At the end of fiscal year 2021, this figure was reported in the statement of financial position under the item "Capital increase not yet implemented."

There are restrictions on the availability of the Group's capital in the form of restrictions on distributions by the subsidiaries resulting from the loan agreements. Cash and cash equivalents are held in separate accounts by the relevant Group companies. There is no cash pooling.

The Group had cash and cash equivalents of €1,902 thousand in a range of foreign currencies at the reporting date. These cash holdings are not hedged.

Because of its good liquidity position, the Group was able to discharge its payment obligations at all times in the reporting period. No liquidity shortfalls arose and none are foreseeable on the basis of the expected development of the Group's business.

Group equity at the reporting date was €315,337 thousand, equal to 48.1% of total assets. This represents an increase of 23.7% compared with December 31, 2021, when equity amounted to €254,920 thousand or 41.5% of total assets. The principal driver of the increase in the equity ratio was the positive profit for the period, including earnings from the sale of Palas, which increased Group equity.

The Executive Board defines the principles and goals of the Group's financial management. The primary goals are to safeguard liquidity and limit financial risks. Our goal is therefore not to enter into any risks from the investment of the Group's cash funds. To ensure this, these funds are held in bank accounts at domestic financial institutions until they are needed to finance acquisitions.

There are currently no plans to pay dividends under Brockhaus Technologies' dividend policy. The aim is to make investments for the acquisition of high-margin, fast-growing technology companies. Assuming that our business development remains largely unchanged, we expect to be able to pay a regular dividend in the medium term.

Cash flow from operating activities amounted to €34,914 thousand (previous year: €–6,205 thousand) or €42,742 thousand before income taxes paid (previous year: €–2,037 thousand) and was primarily attributable to the operating cash flow surpluses of the subsidiaries.

Cash flow from investing activities of €53,035 thousand mainly comprised cash received from the disposal of subsidiaries and is attributable to the sale of the Palas. Payments to acquire property, plant and equipment are largely on a level with the previous year. Excluding cash flow from acquisitions and divestments, cash flow from investing activities would have been €–2,957 thousand (previous year: €–2,338 thousand).

Cash flow from financing activities amounted to €–46,702 thousand and was dominated by the voluntary early repayment on one of the acquisition loans amounting to €20,660 thousand and the full repayment of the vendor loan of €15,000 thousand. In the comparative period, the strongly positive cash flow from financing activities resulted from borrowings to acquire Bikeleasing.

The **free cash flow before tax** (cash flow from operating and investing activities adjusted for acquisitions, disposals of subsidiaries net of cash and cash equivalents sold, income taxes, costs of equity transactions and purchasing subsidiaries) was €39,785 thousand (previous year: €10,552 thousand).

Condensed statement of cash flows

€ thousand	2022	2021
Adjusted EBITDA (as-is)	**50,006**	**21,841**
EBITDA adjustments	(3,279)	(21,422)
Effects from the disposal of Palas	1,180	-
(Income taxes paid)/ income tax refunds	(7,828)	(4,168)
Expenses for equity-settled share-based payment transactions	673	196
(Gain)/ loss on sale of property, plant and equipment	(190)	(42)
Other non-cash expenses/ (income)	4,402	(8,673)
(Increase)/ decrease in lease receivables	(27,954)	(1,469)
Increase/ (decrease) in lease refinancing liabilities before interest rate effect	28,896	3,792
(Increase)/ decrease in lease assets from operating leases	565	(1,467)
(Increase)/ decrease in inventories, trade receivables and other assets not attributable to investing or financing activities	(16,118)	(2,329)
Increase/ (decrease) in trade payables and other liabilities not attributable to investing or financing activities	4,590	7,589
Increase/ (decrease) in other provisions	(28)	(55)
Cash flow from operating activities	**34,914**	**(6,205)**
Payments to acquire property, plant and equipment	(1,250)	(1,173)
Proceeds from sale of property, plant and equipment	198	91
Payments to acquire intangible assets	(548)	(435)
Capitalized development costs	(1,357)	(861)
Acquisition of subsidiaries, net of cash acquired	-	(141,619)
Disposal of subsidiaries, net of cash and cash equivalents sold	55,992	-
Interest received	-	40
Cash flow from investing activities	**53,035**	**(143,958)**
Proceeds from loans raised	10,000	63,400
Repayment of loans and other financial liabilities	(51,172)	(5,379)
Repayment of lease liabilities	(1,257)	(558)
Interest paid	(4,273)	(1,797)
Proceeds from issuance of shares	-	-
Cost of capital increases	-	-
Cash flow from financing activities	**(46,702)**	**55,666**
Change in cash and cash equivalents	**41,247**	**(94,497)**
Effect of exchange rate changes on cash and cash equivalents	202	285
Cash and cash equivalents at period start	29,331	123,544
Cash and cash equivalents at period end	70,780	29,331

Segment reporting

Brockhaus Technologies comprises the Financial Technologies and Security Technologies operating segments.

- **Financial Technologies:** Operation of a digital B2B finance platform for arranging, financing and managing employee benefits through the employer, consisting of Bikeleasing
- **Security Technologies:** Development, production and distribution of KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission in mission-critical applications, consisting of IHSE and kvm-tec

Operating segments

	Reportable segments							
	Financial Technologies		Security Technologies		Central Functions and consolidation		Brockhaus Technologies	
€ thousand	2022	2021 (pro forma)	2022	2021 (pro forma)	2022	2021	2022	2021 (pro forma)
Revenue before PPA	109,229	72,555	36,086	32,688	2	2	145,318	105,245
Revenue growth	*50.5%*		*10.4%*				*38.1%*	
Gross profit before PPA	67,727	51,243	26,331	22,502	269	166	94,327	73,910
Gross profit margin	*62.0%*	*70.6%*	*73.0%*	*68.9%*			*64.9%*	*70.2%*
Adjusted EBITDA	46,544	39,765	8,617	8,315	(5,155)	(7,261)	50,006	40,819
Adjusted EBITDA margin	*42.6%*	*54.8%*	*23.9%*	*25.5%*			*34.4%*	*38.8%*
Adjusted EBIT	44,586	38,767	7,485	7,318	(5,311)	(7,369)	46,761	38,716
Adjusted EBIT margin	*40.8%*	*53.4%*	*20.7%*	*22.4%*			*32.2%*	*36.8%*

With the sale of Palas, effective November 24, 2022, the Environmental Technologies segment no longer exists.

Bikeleasing and kvm-tec were included in the consolidated financial statements when control was obtained by Brockhaus Technologies in December 2021 and were therefore only part of Brockhaus Technologies for a period of one month in the comparative period. Consequently, the relevant figures presented in the table below for 2021 would have been significantly lower in the Financial Technologies and Security Technologies segments.

To enhance the information value of the segment reporting and in line with the Group's internal reporting, the information is presented on a pro forma basis for the comparative period. It presents the Group as if Bikeleasing and kvm-tec had been part of Brockhaus Technologies since January 1, 2021. Non-pro forma values are designated as "as-is."

Brockhaus Technologies' revenue before PPA has risen by 38.1% year over year. Both segments recorded revenue growth.

Viewed by region, Brockhaus Technologies' revenue development (before PPA) was very successful, with 46.3% growth in EMEA and 61.4% growth in the Americas, although revenue did drop by 26.6% in APAC. The increase in EMEA was primarily attributable to Bikeleasing's revenue volume, while the growth in the Americas was driven by IHSE's growing business in the USA. The decline in APAC is mainly due to the COVID-related restrictions in China, which remained in place in 2022.

Financial Technologies

Revenue before PPA in the Financial Technologies segment (Bikeleasing) grew by 50.5% in fiscal year 2022 to €109,229 thousand (previous year: €72,555 thousand). The clear growth trend however, can be illustrated by operating KPIs. In the reporting period, Bikeleasing increased the number of corporate customers connected to its platform by 13.6 thousand to a total of 45.5 thousand. These companies have a total of approximately 2.5 million employees. The number of new company bikes brokered was 118 thousand, which reflects an increase of approximately 45% compared to the previous year. In addition, the average price per brokered company bike also increased by 6.2% to €3,900.

Bikeleasing was not only able to significantly increase the growth of newly brokered company bicycles in Germany, but also to strongly expand its business in Austria and acquire a number of prominent customers. At the end of fiscal year 2022, Bikeleasing already numbered 784 companies in Austria among its customers.

The gross profit margin before PPA was 62.0%, the adjusted EBITDA margin was 42.6% and the adjusted EBIT margin was 40.8%.

The gross profit margin, as well as the EBITDA margin and EBIT margin, were down year-on-year. This was due to two primary factors.

First, there was a non-recurring effect in fiscal year 2021 from the derecognition of a large portfolio of lease receivables, which increased revenue exceptionally by €7,112 thousand and thus had a positive effect on Bikeleasing's gross profit margin, EBITDA margin and EBIT margin in fiscal year 2021.

Second, fiscal year 2022 was impacted by special expenses that negatively impacted the margins in fiscal year 2022. These expenses amounted to €4,828 thousand and include consulting services relating to IFRS accounting and reconciliation to IFRS, the implementation of software following the acquisition and process optimization in the operating business to generate further efficiencies and increase profitability in subsequent years.

Both revenue and profitability developed in line with the pronounced seasonality of the business in the reporting period. Whereas the first and fourth quarters were marked by lower volumes due to weather and temperature factors (approximately 33%), high volumes of new business were generated in the warm months of the year, in the second and third quarters (approximately 67%).

In addition, the major portion of newly generated leases in Q1 2022 was securitized as a "Green Bond" and refinanced through a large German insurance company. This specific securitization structure allows Bikeleasing to obtain much cheaper, quicker and more flexible refinancing and therefore promotes strong growth. However, with unchanged cash inflows at point of selling the securitized leasing receivables, this source of financing does not meet the requirements for derecognition of the securitized lease receivables, which therefore remain on the Group's balance sheet. The reason for this is that based on the contractual terms, not essentially all risks and rewards related to the leasing receivables are transferred. Income from the leases is therefore recognized over their term, generally 36 months, employing the effective interest method. Even though this process is identical from a liquidity point of view, from the accounting perspective this is in contrast to a forfaiting transaction with derecognition of the lease receivable, which involves the realization of nearly all income from the corresponding lease at the time of the respective forfaiting. Therefore, lower income was reported in Q1 2022 to the benefit of higher income in the future. As a result, both revenue and EBITDA were significantly lower than in the remaining quarters of the fiscal year.

By contrast, in the remaining quarters of fiscal 2022, the vast majority of newly generated leases were sold on a conventional non-recourse basis or forfaited. This does not result in the recognition of financial liabilities in the statement of financial position, and income is generally recognized immediately.

With the goal of achieving an efficient capital structure, in line with its transaction-based business model, Bikeleasing intends to continue to focus in the future on financing options like this wherever possible.

Due to the high level of free cash flow, Bikeleasing made voluntary early repayments of €20,660 thousand in the reporting period on one of the acquisition loans from the acquisition of the company. This is evidence of the company's strong financial performance.

Security Technologies

After the revocation of many COVID-19 related travel restrictions and social distancing – especially in western industrialized countries – resulting in an increase of customer demand, the Security Technologies segment (IHSE and kvm-tec) generated growth of revenue before PPA of 10.4% to €36,086 thousand.

This was due in particular to the positive sales market development in the Americas region, which generated revenue growth of 61.4% versus the prior-year period to €12,475 thousand. Revenue in APAC decreased and amounted to €3,354 thousand (previous year: €4,566 thousand). A key factor in that was in particular the development of business in China, which continued to be severely impacted by the zero COVID policy. In the EMEA region, sales revenue was largely stable at €20,257 (previous year: €20,393).

Revenue by product group

€ thousand	2022	%	2021PF	%
Digital KVM extenders	27,066	75.0%	24,529	75.0%
KVM matrix switches	6,761	18.7%	6,470	19.8%
Converters & peripherals	804	2.2%	273	0.8%
Other	1,456	4.0%	1,416	4.3%
Revenue	**36,086**	**100.0%**	**32,688**	**100.0%**

At 73.0%, the gross profit margin before PPA was higher than in the prior-year period (68.9%). In the comparative period, there were adverse shifts in the product and customer mix in addition to foreign currency-related effects, which impacted the gross profit margin accordingly. High fluctuations in the gross profit margin during the year can be observed for IHSE regularly. This is explained by both different gross profit margins for large deliveries (customer and product mix) as well as significant reporting date-related fluctuations in the area of changes in inventory.

At 23.9%, the adjusted EBITDA margin was down on the previous year (25.5%). The same applies to the adjusted EBIT margin, which fell from 22.4% to 20.7%. This was due to higher costs for trade shows, direct sales and marketing activities, which were not incurred in the previous year because of the pandemic.

In addition, higher personnel expenses attributable to the inclusion of the still relatively small kvm-tec in the Group and the ramp-up of business activities in China led to a lower adjusted EBITDA margin compared with the previous year.

Central Functions (not an operating segment under IFRS)

In the Central Functions, a decrease in costs was recorded. This was a result primarily of lower due diligence activities compared with the comparative period.

Brockhaus Technologies focuses on acquiring high-margin, fast-growing technology and innovation leaders with B2B business models in the German Mittelstand. Within this focus, the shortlist last year included in particular those companies with "recurring revenue" business models. However, competition for these companies that are available for sale has become even more intense. This is also reflected in purchase price expectations because the valuations of some companies that were able to prove their resistance to crisis in the preceding months have even attracted a purchase price premium compared with pre-crisis levels.

Despite the challenging environment, a high number of potential acquisition opportunities, which were generated via the three-pronged sourcing approach consisting of contact with M&A consultants, proactive sourcing and Brockhaus Technologies' long-standing industry network, were analyzed in greater depth. However, no acquisition was made since no opportunity met Brockhaus Technologies' investment principles and price expectations.

Overall assessment of the Group's economic position

Brockhaus Technologies sees itself as a fast-growing group of technology companies which acquires highly profitable leaders in technology and innovation, helping them to grow organically and inorganically across product boundaries and national borders.

The result in fiscal year 2022, which involved a pro forma increase in revenue before PPA by 38.1% to €145.3 million and an adjusted EBITDA margin of 34.4%, is characteristic of Brockhaus Technologies even in a difficult economy, thanks to its consistent selection of new acquisitions and the continually high-margin performance of its subsidiaries. Brockhaus Technologies successfully withstood the tight overall economic situation in fiscal year 2022 and the associated disruptions in the global economic cycle. The Group was also able to mitigate the global supply bottlenecks through proactive management and forward-looking measures, which minimized the impact of this factor over the year as a whole. As a result, Brockhaus Technologies exceeded its guidance for both revenue and adjusted EBITDA.

The sale of Palas resulted in a significant increase in cash and cash equivalents and an accompanying reduction in net debt. This increases the Group's flexibility to swiftly implement further potential acquisitions, independently of the capital market.

The Executive Board of Brockhaus Technologies rates the business development and economic situation of the Group in the 2022 reporting period as extremely positive.

Economic development of Brockhaus Technologies AG

The Group parent Brockhaus Technologies AG (**BKHT**) is managed by an Executive Board with two members. Marco Brockhaus is the Chief Executive Officer and Chairman of the Executive Board and Dr. Marcel Wilhelm is Chief Operating Officer and Legal Counsel. The Group parent's head count, including the members of the Executive Board, came to 11 (previous year: 11). The employees report directly to the Executive Board. They are employed by BKHT and work at its head office.

BKHT's annual financial statements are prepared under Germany's GAAP (HGB) in accordance with German principles of proper accounting. The table shows a condensed version of these annual financial statements.

The revenue of €652 thousand in the reporting period (2021: €361 thousand) was generated by services provided to subsidiaries. Personnel expenses rose from €3,796 thousand in the previous year to €4,020 thousand during the reporting period. Other operating income increased from €9,516 thousand to €38,752 thousand. The principal driver of this increase was income from the sale of Palas at the end of November 2022. Other operating expenses decreased from €18,184 thousand to €6,159 thousand. The higher amount in the previous year resulted from one-time expenses in connection with the acquisition of Bikeleasing.

Net profit for the year came to €28,155 thousand, compared with a net loss for the year of €12.030 thousand in the comparative period.

The Company's financial assets amounted to €218,117 thousand (previous year: €225,398 thousand) and mainly comprise the investments in subsidiary companies. The decrease results from the sale of the shares in Palas Holding GmbH in November 2022. In addition, the financial assets item includes loans to subsidiaries amounting to €5,527 thousand (previous year: €7,223 thousand).

Income statement (German GAAP)

€ thousand	2022	2021
Revenue	652	361
Other operating income	38,752	9,516
Personnel expenses	(4,020)	(3,796)
Amortization of intangible assets and depreciation of property, plant and equipment	(76)	(29)
Other operating expenses	(6,159)	(18,184)
Interest and similar income	344	228
Interest and similar expenses	(1,400)	(126)
Earnings after tax	28,092	(12,030)
Other taxes	(63)	0
Net profit/ loss for the year	**28,155**	**(12,030)**

Balance sheet (German GAAP)

€ thousand	December 31, 2022	December 31, 2021
Intangible assets	57	90
Property, plant and equipment	4	9
Financial assets	218,117	225,398
Non-current assets	**218,179**	**225,496**
Receivables and other assets	377	727
Cash and bank balances	43,115	7,225
Current assets	**43,492**	**7,952**
Prepaid expenses	**255**	**137**
Assets	**261,926**	**233,585**
Subscribed capital	10,948	10,387
Capital reserves	248,463	236,021
Net accumulated losses	(6,873)	(35,028)
Equity	**252,537**	**211,379**
Provisions	**6,851**	**4,123**
Liabilities	**2,538**	**18,083**
Equity and liabilities	**261,926**	**233,585**

BKHT's cash and cash equivalents as at December 31, 2022, amounted to €43,115 thousand (previous year: €7,225 thousand). The increase in cash and cash equivalents is primarily the result of the sale of Palas at the end of November 2022. This increased cash and cash equivalents by €58,934 thousand. In December 2022, the vendor loan from the acquisition of Bikeleasing, including interest, was repaid in full, which reduced cash and cash equivalents by €16,508 thousand.

Including the net profit for the fiscal year, equity rose from €211,379 thousand to €252,537 thousand. This increase is primarily attributable to the sale of Palas and the associated income.

Provisions increased from €4,123 thousand to €6,851 thousand. The increase is due mainly to the increase in the provision for success fees.

Liabilities decreased from €18,083 thousand to €2,538 thousand. The main reason is the repayment in full of the vendor loan from the acquisition of Bikeleasing amounting to €15,000 thousand in early December 2022.

The German GAAP net profit for the fiscal year of €28,155 thousand of BKHT is carried forward to new account together with the accumulated losses of €35,028 thousand brought forward from the previous year. The German GAAP accumulated losses thus amount to €6,873 thousand

Events after the reporting period

Please refer to Note 40 to the consolidated financial statements for disclosures about significant events after December 31, 2022.

Forecasting Report

Economic and political conditions

In January 2023, the International Monetary Fund (IMF) forecasted growth of 2.9% for the whole economy in 2023 compared to growth of 4.4% in the year before. Global growth is still below the "historical average" compared with the past two decades. In this respect, China's abandonment of its zero-COVID strategy could produce a recovery in the global economic situation. All in all, experts do not anticipate that the global economy will slip into recession in fiscal 2023. This scenario could not be ruled out last fall.

Like the IMF, the management of Brockhaus Technologies rates its planning as still being uncertain due to the current economic and political environment, but looks to the future with optimism.

Brockhaus Technologies expects that the 2023 fiscal year will continue to be marked by the impacts of Russia's war of aggression, the energy shortage, supply chain bottlenecks, associated delays and price increases due to availability and inflation and interest rate expectations. These impacts add an extra degree of uncertainty to business planning.

No consideration of future acquisitions

Management expects to complete one or several acquisitions during the 2023 fiscal year. The Group's earnings figures have nonetheless been planned based on the assumption that there will be no change in the scope of consolidation. The reason for this approach is the difficulty in predicting the nature and scope of future acquisitions. Management of Brockhaus Technologies does not believe that any estimates in this respect are sufficiently reliable.

Change in performance measures

In the reporting period, Brockhaus Technologies still applied revenue before PPA, adjusted for the reduced income resulting from the value step-up, as a KPI. The adjustment led to higher revenue than revenue in accordance with IFRS. In order to avoid discrepancies between the key performance measures and IFRS best possible, the management of Brockhaus Technologies AG will no longer make these adjustments to revenue, both for corporate control purposes and in external reporting, from fiscal 2023.

Revenue and earnings forecast

Brockhaus Technologies expects revenue between €165 million and €175 million in the 2023 fiscal year, which would represent growth between 16% and 23% compared to the revenue in the 2022 reporting period.

This revenue forecast is underpinned by an assumption that the continuous acquisition of further corporate customers and the still-rising demand among employees for company bicycles will continue in the Financial Technologies segment. This is combined with a trend toward more outdoor activities, greater environmental awareness and political as well as trade union support for green transportation. High fuel prices might also continue to have a positive effect on demand. These revenue expectations for the Financial Technologies segment are conditional on bicycle availability being sufficient for growth. Leasing solutions, as a cheaper option compared with a cash purchase, are growing more attractive due to high inflation rates, which could additionally increase business volume. However, the ultimate impact on consumption as a result of possible changes in consumer behavior due to inflation and interest rates is too uncertain for this factor to be included with any reliability in the forecast.

We expect that business and sales activities in the 2023 fiscal year in the regions relevant to the Security Technologies segment will further normalize given the relaxations to travel and physical-distancing restrictions introduced in 2022. However, this will be conditional on critical components, particularly chips, being available.

As in the reporting period, the Group is planning an adjusted EBITDA margin of 35% for the 2023 fiscal year. This margin forecast implies an adjusted EBITDA of €57.75 million to €61.25 million based on the above sales forecast.

With regard to the financial figures of Brockhaus Technologies AG at the standalone entity level (German GAAP), we are expecting a significant net loss for the year. This assessment is based on the fact that the high net profit for the year pursuant to the German Commercial Code (HGB) in the reporting period was substantially impacted by the proceeds from the sale of Palas. Such items are not anticipated in the 2023 forecast period.

Disclaimer

This Annual Report, and in particular the report on expected developments, contain forward-looking statements that are based on the management's current estimation of the future development of the market environment and the future performance of the Group. This estimation was made on the basis of all information available at the time when this Annual Report was prepared. Forward-looking statements are subject to uncertainties – as described in the Risk and opportunity report within this Management Report – that are beyond the Group's control. This relates in particular to the Russian war of aggression on Ukraine, supply chain bottlenecks, the energy crisis, inflation and the rise in interest rates. If the assumptions on which these expected developments are based are not accurate, or if the risks or opportunities described were to materialize, the actual results may differ significantly from the statements made in the Forecast Report. If the underlying information changes in such a way that a significant deviation from the forecast is more likely than not, Brockhaus Technologies will provide notification about this in accordance with the statutory disclosure requirements.

Risk and opportunity report

Risk management system

Risks and opportunities relate to potential future developments and events that could result in a significant negative or positive deviation from Brockhaus Technologies' goals. Brockhaus Technologies is exposed to numerous risks in its business activities. The Group's goal is not to avoid risks in general, but to carefully weigh the opportunities and risks associated with its decisions and business activities on the basis of appropriate information. The aim is to establish an optimum balance between growth and profitability on the one hand and the associated risks on the other. Accordingly, opportunities that arise to increase enterprise value should be leveraged and risks should only be entered into to the extent that they are acceptable to the Group. A reasonable level of business risks must be accepted, but they must be managed by effective risk management that deploys suitable measures. Measures can be implemented to limit risks to an acceptable level, transfer them to third parties in part or in full or avoid them. All employees are expected to deal responsibly with risks within the scope of their areas of responsibility. The risk policy principles and risk strategy are coordinated with and closely linked to the corporate strategy. Risks to Brockhaus Technologies or individual subsidiaries as a going concern must be avoided in any case. The risks and opportunities presented in the following also apply largely to BKHT.

The concept, organization and functions of Brockhaus Technologies' risk management system are defined by the Executive Board and the Supervisory Board. Documentation is provided in the form of a risk management system manual (**RMS Manual**). The risk management requirements are regularly amended to reflect changes in the legal framework and are subject to a continuous improvement process.

The Finance department coordinates the implementation and enhancement of the risk management system and the Supervisory Board oversees its effectiveness, in particular to establish whether the early risk warning system is generally suitable for identifying risks and developments that could jeopardize the Group at an early stage so that suitable countermeasures can be taken without undue delay.

The risk management system consists of measures that enable Brockhaus Technologies to identify, assess and monitor material risks to the attainment of the Company's objectives at an early stage. The scope of consolidation for the Group's risks is the same as the scope of consolidation for the consolidated financial statements.

The risk management system complies with the requirements imposed on risk early warning systems by the Auditing Standard 340 issued by the Institut der Wirtschaftsprufer in Deutschland e.V. (IDW AuS 340, as amended) in the version in force since January 10, 2022. Mandatory components include in particular the definition and quantification of risk-bearing capacity and the systematic aggregation of risks. Risk-bearing capacity is defined as the maximum risk exposure that a company can bear without jeopardizing its continued existence. Aggregation serves to provide reliable information about whether or not any identified risk poses a threat to the company as a going concern, not only individually but also in combination with other risks.

A measure of the Group's risk-bearing capacity was defined in order to meet these requirements. A Monte Carlo simulation (stochastic method) was performed to aggregate risks. It is based on the risks identified and quantified in the course of the Group risk inventory. Risks were quantified by estimating the probability of occurrence and the extent of any losses, as well as the lowest and highest losses that could reasonably be expected. As well as a random simulation of the occurrence of a risk, this allows an equally random loss amount with the expected value of the most likely loss, but additionally with the possibility of a lower or higher loss incurred. Any identified interdependencies between individual risks were also taken into account.

The outcome of the aggregation model is a distribution of a large number of total extents of potential loss, each with a different frequency in a relevant loss interval. Based on these data points, the interactions between the risks can be identified on a Group-wide basis. For example, confidence levels can be used to establish the probability that the sum of all risks occurring will not exceed a certain loss value.

The data used in the aggregation model is based predominantly on the probabilities of occurrence and extents of loss reported by the relevant Group companies. These are based in part on estimates that can only be supported to a limited extent by historical or other data. Individual judgment therefore significantly affects the overall outcome of risk aggregation.

The aggregation model reflects all quantifiable risks reported across the Group. Risks not covered by the aggregation model include in particular compliance risks, whose impact cannot be quantified reliably.

Despite the limitations described above, we consider the results of the aggregation model to be suitable overall for allowing us to make an appropriate assessment of the risks.

Whereas overall responsibility for risk management lies with the Executive Board, the subsidiaries are responsible for the operational management of the individual risks relevant to them. This includes the early identification, assessment and definition of suitable measures, the management and monitoring of such measures, and appropriate documentation and reporting. The RMS Manual is intended to ensure a uniform approach and binding applicability in the Group.

All material risks are assessed using defined classes (1 to 5) for probability of occurrence and the impact on the Group's objectives. The probability of occurrence refers to the estimated probability of a risk occurring during the time horizon under observation and is expressed as a percentage. The allocation of probability intervals to classes 1 to 5 is presented in the following overview.

Value	Class and probability interval
75% < P	5 Highly probable
50% < P <= 75%	4 Probable
25% < P <= 50%	3 Possible
10% < P <= 25%	2 Unlikely
P <= 10%	1 Very unlikely

The assessment of the loss when a risk occurs can be either quantitative, which is the preferred method, or qualitative if risks cannot be quantified or qualitative aspects predominate (e.g., for compliance risk). Classification is also based on classes with values of 1 to 5. The quantitative classes are based on an estimated loss in euros relating to the potential impact on the Group's results of operations, net assets and financial position. The qualitative classes are based on criteria that consider damage to the Group's reputation or the impact of any prosecution, with a particular focus on compliance-related risk.

Impact	Assessment
5 Very high	Going-concern risks with a negative impact on business activities, results of operations, net assets and financial position, as well as reputation >=€10 million per individual risk
4 High	Significant negative impact on business activities, results of operations, net assets and financial position as well as reputation €1–€10 million per individual risk
3 Moderate	Some negative impact on business activities, results of operations, net assets and financial position as well as reputation €100–€1,000 thousand per individual risk
2 Low	Limited negative impact on business activities, results of operations, net assets and financial position as well as reputation €10–€100 thousand per individual risk
1 Insignificant	Immaterial negative impact on business activities, results of operations, net assets and financial position as well as reputation <€10 thousand per individual risk

All identified risks are assigned a risk score, based on the assessment of probability of occurrence and impact. This corresponds to the sum of the class for probability of occurrence and the class for impact if the loss occurs. The probability class is weighted at 30% and the impact class at 70%.

The following overview provides a color coding for the risk scores. It corresponds to the visualization in the risk matrix.

Color code	Risk score
	5 Going-concern risk
	4 Very high risk
	3 High risk
	2 Moderate risk
	1 Low risk

The risk matrix graphically presents the classification of the identified risks and is used to prioritize the most significant risks and enhance transparency across the Group's entire risk portfolio. The classification presented here corresponds to the net risk, i.e., the expected effect of control measures already effectively implemented has been taken into account in the quantification. This systematic and standardized risk analysis and assessment is conducted twice a year. It is the risk officers' responsibility to continuously monitor all changing risk situations within their departments or their company. In addition to regular risk reporting, a process has been implemented to ensure prompt reporting of newly emerging risks (ad hoc risk reports).

Risks

Brockhaus Technologies classifies its risks according to the designations markets/ technology, new acquisitions, business operations, compliance, finance and ESG.

With the sale of Palas, the companies of the Palas Group no longer fall within the basis of consolidation for the risk exposure of Brockhaus Technologies. This has a partially positive effect on the Group's risk situation.

Market/ technology risks

Economy | The general economic environment and other economic and political conditions significantly impact Brockhaus Technologies' markets.

The macroeconomic situation at both the domestic and the international level is currently characterized by distortions in the global economic cycle and generally high uncertainty about future developments. This situation is mainly the result of Russia's war of aggression against Ukraine, persistent supply bottlenecks in a wide variety of sectors, an acute energy crisis and rising inflation, which in turn led to a significant increase in interest rates in various economic regions. Some or all of these factors have an impact on the Group's risk situation and impact both its domestic and its foreign business.

A continued economic slowdown could have a negative impact on revenue and thus on the results of operations, net assets and financial position. This applies to all of the Group's segments. The Group rates the potential level of losses in the event of an economic slump as correspondingly high. However, due to the Group's niche strategy, the probability that this risk will occur is still considered to be low.

As a general rule, diversification due to the range of different products and the in some cases significant international presence of the operating segments serves to mitigate economic risks to a certain extent. However, the cyclical natures of the business models are not diametrically counterbalanced.

The Financial Technologies segment continues to be driven by the increasing attractiveness of bicycles and e-bikes as a means of transport as well as by support for company bicycle leasing through tax-privileged deferred compensation. Against the backdrop of long-term efforts towards sustainability, it is highly unlikely that these benefits will be discontinued, but if it were to happen, it would have a substantial adverse effect on the Group.

Customer concentration | Because of the niche strategy in the Security Technologies segment, it has significant customer concentrations. The loss or default of one or more key customers would therefore have a negative impact on revenue and thus on the results of operations, net assets and financial position of Brockhaus Technologies. To minimize this risk, Brockhaus Technologies actively manages a network of sector experts, entrepreneurs, managers and consultants to give it access to potential acquisition targets.

Technology | The success of the Group companies is rooted in their focus on technologies and innovative products that follow sustainable global trends such as digital transformation, automation, cybersecurity or sustainability. Changes in customer preferences, new or substitutive technologies or the emergence of industry standards and trends with negative consequences could make the Group's existing products obsolete or less attractive. To rule out this risk, the Group makes targeted investments in research and development.

Suppliers | Various disruptive factors such as financial, capacity or procurement-related bottlenecks at the Group's suppliers could lead to delays or even the collapse of supply chains. This would result in the impairment of Brockhaus Technologies' production and hence its revenue generation and would negatively impact the Group's results of operations, net assets and financial position. In order to mitigate this risk, the Group companies plan their future requirements in advance wherever possible and adjust their ordering behavior accordingly when circumstances dictate.

Supply bottlenecks in the Group make it difficult to service existing order backlogs and order intakes on time, which leads to the deferral of earnings recognition and hence directly impacts the Group's period-specific performance.

Risks from new acquisitions

Deal sourcing | Brockhaus Technologies' business model is based on its ability to identify companies as suitable acquisition targets and acquire them on attractive terms. If the Group is not able to conclude such acquisitions, this may adversely affect its future growth and the efficiency of the allocation of its cash resources. To minimize this risk, Brockhaus Technologies actively manages a network of sector experts, entrepreneurs, managers and consultants to give it access to potential acquisition targets. It also conducts its own prospecting activities, for example by attending trade fairs and systematically monitoring company awards.

Acquisition finance | In many cases, acquiring companies is associated with a substantial need for finance. Transaction processes could fail if Brockhaus Technologies is not able to obtain this through equity or debt within a reasonable time and on acceptable terms. To prevent such a situation, the Group has numerous potential financing partners, which include debt funds and coinvestors in addition to banks. The initial listing in the Prime Standard quality segment also represents a source of finance through capital increases. In addition, cash and cash equivalents were significantly increased by the sale of Palas, giving Brockhaus Technologies increased flexibility for acquisition financing.

Due diligence | It is possible that the Group might inaccurately estimate the value and future potential of target companies and that they will generate lower revenue, earnings and cash flows than assumed before the acquisition. This may happen if risks relating to the target company and/ or its markets are not communicated or not identified. To reduce the possibility of this risk occurring, the Group conducts comprehensive due diligence before each acquisition, involving experienced specialist advisers. Nevertheless, it cannot be ruled out that material risks are not identified or not accurately assessed in the course of due diligence.

Operational risks

Obstacles to growth | The subsidiaries of Brockhaus Technologies are relatively small organizations with ambitious growth targets. Therefore there is a risk that their management is not able to successfully address promising markets and customers, implement necessary product developments and develop scalable internal structures in good time. The Group manages this risk using proven tools such as the 100-day plan in which the initial initiatives resulting from the due diligence are documented, scheduled and implemented following the acquisition. There are also processes for strategic planning and stringent financial reporting. Furthermore, the members of the BKHT team have extensive experience in developing scalable structures in growing companies.

Key management | The Group's commercial success is critically sustained and driven by its ability to recruit, grow and retain experienced, talented managers and staff. There is a risk of inappropriate appointments when management structures are expanded to enable further expansion. If Brockhaus Technologies is unable to suitably fill future and existing positions and retain existing managers and staff, this could materially adversely affect commercial success and hence the Group's results of operations, net assets and financial position. To counter this risk, remuneration structures in line with market conditions are in place in the Group, together with a pronounced focus on equity components and long-term incentives. These consist of both direct investments at the level of subsidiaries and investments in BKHT in the form of shares and stock options.

The shortage of skilled workers remains a key issue on the labor market, which could challenge the Group in filling key positions. The Group categorizes this risk as correspondingly high.

IT | The Group's business processes are critically dependent on information technology (IT). As well as the opportunity to leverage operational efficiencies, this also entails risks. The Group's technical infrastructure could be impaired or fail due to accidents, disasters, technical failures, obsolete technology or cyberattacks. There is also a risk of unauthorized access by external parties to confidential business or personal data. Brockhaus Technologies has security systems that meet market standards in place to safeguard the availability, integrity and confidentiality of its data.

Risk matrix

Loss in the event of occurrence	<=10%	<=25%	<=50%	<=75%	>75%
>= €10 million	Liquidity	Economy Technology Due diligence	Key management & employees		
<€10 million	Obstacles to growth Compliance violation Credit risk Taxes	Customer concentration Suppliers IT		Interest rates	
<€1 million	Acquisition finance Financial planning		Deal sourcing		
<€100 thousand	Covenants Foreign currency				
<€10 thousand					

Probability of occurrence

Compliance risks

There are numerous legal risks from the scope of statutory and regulatory requirements, as well as the large number of contractual relationships and agreements that the Group enters into regularly. These relate in particular to the areas of patent, capital market and company law. These risks are reduced to a moderate level through extensive cooperation with experienced prominent law firms. The Group works with several law firms to avoid dependencies resulting from outsourcing and ensure an appropriate level of technical specialization.

Other compliance risks that may result from breaching laws and regulations, such as capital market or data protection rules, are identified and monitored by the Legal Counsel. Brockhaus Technologies has developed a code of conduct that contains essential guidance for correct behavior. There are also training events on specialized topics, such as the proper handling of inside information. Compliance risks are continuously monitored and appropriate measures are taken if risks materialize.

Financial risks

Financial planning | Brockhaus Technologies' financial planning is based on assumptions made by the management of the parent company and the subsidiaries. These assumptions relate to business performance and other external factors that are, in part, very difficult to predict or cannot be influenced by the Group and to measures, some of which still have to be implemented. Therefore, there is a risk that the assumptions underlying the planning could be incomplete or incorrect and that this may result in divergence between projected and actual earnings. There could also be opportunities if actual developments diverge positively from projections.

Covenants | Some of the Group companies' loan agreements contain arrangements on whose basis extensive early repayment obligations may be triggered. For example, the loans in question are repayable immediately if subsidiaries breach financial covenants. If one or more such cases were to arise, this would adversely affect the Group's liquidity. To manage this risk, the Group has established a comprehensive financial reporting system.

Interest rates |The most significant reported risk is the increased risk due to the rise in interest rates. Any further increase in interest rates could impact the future development of the Group for a variety of reasons and adversely affect its results of operations, net assets and financial position. The Group categorizes this risk as correspondingly high. On the one hand, rising interest rates would increase the Group's financing costs, but would also lead to higher acquisition financing costs for acquisitions. In the operating business, an increase in the level of interest rates would lead to increased refinancing costs for the future leasing business and have an adverse effect on Bikeleasing's margin. However, an increase in the leasing factor in respect of Bikeleasing's customers would offset increased financing interest rates. The leasing factor describes the monthly leasing rate in relation to the acquisition costs of the leasing object. The leasing factor is flexible for corporate customers who are currently being acquired, means the leasing factor per company bicycle fluctuates in line with the current level of interest rates. Existing customers will be switched to the variable leasing factor in the coming months.

Foreign currencies | Brockhaus Technologies executes certain transactions in foreign currencies, giving rise to foreign currency risk. The Group hedges foreign currency risk from its order backlog and from receivables and liabilities where this appears to be economically expedient. The inclusion of subsidiaries from countries outside the eurozone in the consolidated financial statements results in risks from currency translation. As a general principle, the Group does not hedge these risks using derivatives.

Credit risk | It is possible that customers of Brockhaus Technologies will be unable to settle their liabilities. This risk is mitigated by a stringent receivables management process and by agreeing advance payments in some cases. To the extent economically expedient, trade credit insurance is taken out to reduce the amount of potential credit losses.

Liquidity | Liquidity risk describes the risk that Brockhaus Technologies might not be able to meet its financial obligations to a sufficient extent. To safeguard liquidity, changes in liquidity are continuously monitored as part of detailed financial planning and financial reporting. For external financing purposes, the opportunities available on the financial markets are continuously monitored in order to ensure sufficient flexibility.

Taxes | Brockhaus Technologies is subject to income taxes and other taxes in various jurisdictions. Considerable discretion and significant estimates are needed to calculate obligations arising from income tax, value added tax and other taxes, including withholding taxes. In the case of various transactions and calculations in the course of the ordinary business activities, for example in the case of intercompany transactions and transfer prices across jurisdictions and transactions with special documentation requirements, the ultimate tax calculations or the timing of tax effects are uncertain. Brockhaus Technologies is subject to regular audits by tax authorities which may arrive at different results concerning tax estimates or the Group's discretionary judgment. Although Brockhaus Technologies believes that its tax estimates are appropriate, the final assessment of such tax audits may differ from the provisions and accruals. As a result, additional tax liabilities, interest, penalties or regulatory, administrative or other sanctions may be incurred.

ESG

For Brockhaus Technologies, sustainable business management and profitable growth go hand in hand. The Group stresses this with its subsidiaries and their product portfolios. These factors are also expected to play a central role in selecting potential acquisition targets in the future.

As part of our regular risk management process, we also seek to identify potential risks that could arise from environmental, social and governance-related issues. To date, such material risks have been identified in the form of key employee risks. As part of the ongoing further development of our RMS, we also plan to pay even greater attention to this issue in the future, e.g. through the use of appropriate frameworks.

Opportunities

In the management's opinion, Brockhaus Technologies has a large range of opportunities. We believe a pivotal task of management is to identify opportunities at an early stage as they arise and to be in a position to exploit them so as to increase enterprise value. The operating segments have strong cash flows that – in conjunction with the generally asset-light business models – enable them to finance growth investments from their own resources.

The sale of Palas and the resulting substantial increase in cash and cash equivalents offer further opportunities. First, Brockhaus Technologies is now in a position to respond even more flexibly to potential acquisition targets. Second, the significant increase in cash and cash equivalents increases the range of potential acquisition target sizes. With the extensive network and the comprehensive process that its three-pronged sourcing approach involves, consisting of contact with M&A consultants, proactive sourcing and a long-standing industry network, Brockhaus Technologies continues to have an appealing pipeline of potential acquisition targets. BKHT's technical expertise and extensive network, combined with its increased flexibility to make acquisitions in the market, provides Brockhaus Technologies with a tremendous opportunity to acquire additional cash flow-enhancing businesses to further increase the Group's enterprise value.

The Security Technologies segment has opportunities to record better business performance than planned in markets with strong growth drivers. Customer demand in this segment is driven by a high level of requirements for secure, fast data transmission. Continuously increasing data volumes and the need to visualize them, as well as the requirement to protect this data from unintended access, can offer substantial business opportunities in the future.

The Financial Technologies segment could benefit from an accelerated trend toward sustainable mobility through bicycles and e-bikes. The higher inflation that has emerged – related to fossil fuels, among other factors – may contribute to an increased avoidance of travel using cars and thus support Bikeleasing's business volume. In addition, current inflation and the consequent reduction in purchasing power could strengthen interest in leasing solutions and lead to an additional increase in the volume of business, as they are significantly cheaper than a cash purchase. The expansion of the product portfolio, e.g., with smartphones, tablets, etc., into a fintech platform for managing employee benefits may also open up substantial business opportunities.

To sum up, there are significant opportunities for Brockhaus Technologies from the activities of its subsidiaries, as well as from further acquisitions in the future.

Overall assessment of risks and opportunities

The Executive Board takes the view that the general economic environment and other current economic and political conditions will have a significant impact on the business of Brockhaus Technologies. This view is due in particular to the uncertainty about the course of Russia's war of aggression against Ukraine, continuing supply bottlenecks in a wide variety of sectors, an acute energy crisis and rising inflation, which in turn is leading to a significant increase in interest rates in various economic regions. This could significantly adversely affect the Group's results of operations, net assets and financial position.

Overall, Brockhaus Technologies is exposed to a high level of uncertainty that the Group can only partly influence itself. However, no risks have been identified that, individually or in combination with other risks, could affect the continued existence of the Group as a going concern.

Internal control system relevant for the consolidated financial reporting process

The internal control system (**ICS**) is an integral component of Brockhaus Technologies' risk management system. It aims to ensure regularity, completeness and reliability of the accounting system and the related financial reporting and compliance with the relevant legislation and standards. The ICS comprises all organizational arrangements and measures for identifying, assessing and managing all risks that could materially impact the consolidated financial statements. Nevertheless, even an effective, appropriate and properly functioning internal control system cannot guarantee that all irregularities or inaccurate disclosures will be avoided or identified.

The Group considers the following elements of the ICS to be significant with respect to the consolidated financial reporting process:

- Internal monthly reports consisting of an income statement, statement of financial position and statement of cash flows, including the presentation of year-over-year differences and differences versus the budget, as well as reporting on significant events
- Group-wide accounting manual
- Documentation of risks and controls in an ICS matrix, including risk description, control description, definition of documentation requirements, frequency of controls and definition of control owners
- Preventive and detective controls such as dual control principle, access authorizations and separation of duties
- Continuous analysis of new or amended accounting standards, legislation and other requirements and assessment of their impact on the financial statements
- Centralized overviews of quarterly, half-yearly and annual reporting, submission and publication requirements and their deadlines
- Enhancement of accounting processes and systems, for example by providing advice on consolidation and providing templates and checklists
- Centralized preparation of consolidated financial statements, including the combined management report

Support services provided by external service providers are used in the preparation of the consolidated financial statements. The same applies to the assessment of specific special issues, such as complex IFRS requirements.

If control weaknesses or opportunities for improvement are identified, they are assessed and countermeasures are developed with the responsible managers in order to continuously enhance the effectiveness of the internal control system. An ICS manual was adopted to ensure the Group-wide standardization and further development of the ICS. It describes the significance, relevance and components of Brockhaus Technologies' ICS. It addresses responsibilities, the ICS control cycle and the assessment of the effectiveness of implemented controls. In addition, the ICS manual contains a range of tools for supporting and efficiently designing the implementation and documentation of controls.

Internal audit

As in the previous year, the auditing and tax consulting firm of Barth Associates GmbH was engaged for fiscal year 2022 under the terms of an outsourced internal audit to ensure compliance with statutory requirements.

Brockhaus Technologies understands internal audit to be an in-house, process-independent audit, assessment and advisory activity. It is intended to support Group management in achieving its business objectives. Outsourcing the internal audit function is designed in particular to strengthen the independence of the internal audit function. Using a systematic, targeted approach, internal audit assesses the effectiveness of the risk management system, the management and monitoring system, including controls and helps to improve them.

The basis for internal audit's work is a multi-year audit plan coordinated with the Supervisory Board's Audit Committee. The plan is initially based in particular on the findings of the initial analysis of the key elements of the risk early warning system. Other areas of emphasis result from significant changes in the organization of the Group's business activities or in its economic and legal environment. Due to the acquisition of Bikeleasing in the previous fiscal year, the internal audit focus in 2022 was primarily on the Bikeleasing Group.

The following areas were audited in the course of the internal audit in the reporting period:

> Group risk management system
> Risk management system for regulated leasing sector (Bikeleasing Group)
> Integration of subsidiaries (Bikeleasing Group)
> Procurement and inventory processes at the subsidiaries

Recommendations for action were made in relation to the risk management system for the regulated leasing sector (Bikeleasing Group) to ensure appropriate compliance with supervisory requirements now and in the future and to further develop and optimize the integration of the risk management system at Hofmann Leasing GmbH into the Group's risk management system. A process plan for implementing the recommendations was drawn up by local management during the reporting period. A number of the recommendations were already successfully implemented and optimized by the end of fiscal year 2022. The outstanding points are expected to be resolved in the first quarter of fiscal year 2023.

The audit findings did not give rise to any objections with regard to the audit items Group risk management, integration of subsidiaries (Bikeleasing Group) and procurement and inventory processes at the subsidiaries. Accordingly, no need for action was indicated.

BKHT remains on schedule with the multi-year audit plan.

Remuneration report

The remuneration report does not form part of the combined management report. The remuneration report under section 162 of the AktG is made publicly available on our website (www.brockhaus-technologies.com) together with the auditor's report on the formal and voluntary review of the content of the report and is permanently available in the Corporate Governance subsection in the Investor Relations section.

Takeover-related disclosures

As required by AktG section 176(1) sentence 1, the Executive Board of Brockhaus Technologies AG ("BKHT" or the "Company") provides the following explanatory report on the disclosures relating to takeover law in accordance with HGB sections 289a(1) and 315a(1).

BKHT's subscribed capital was €10,947,637 as at December 31, 2022. It is composed of 10,947,637 no-par-value bearer shares, each with a notional value of €1.00. The capital stock is fully paid up. Each share conveys one vote at the Annual General Meeting. There are no other classes of shares.

To the knowledge of the Executive Board, there are no restrictions on the voting rights conveyed by shares.

There were restrictions on the transfer of shares in the form of lockup agreements entered into in connection with the Company's initial public offering in July 2020. The Company's founding team and the managing directors of IHSE AcquiCo GmbH and Palas Holding GmbH have made a commitment to the Company not to sell any of the shares they held at the date of the initial listing until July 4, 2022. These arrangements concerned a total of 2,905,293 shares in the Company, corresponding to 28.0% of the subscribed capital. The lockup agreement expired on July 4, 2022. As a result, there are no restrictions affecting the transfer of shares as of the reporting date as far as management is aware.

As at the reporting date, the Marco Brockhaus family (resident in Germany) directly and indirectly held 21.4% of the Company's shares. To the knowledge of the Executive Board, there are no further interests in the capital that exceed 10% of the voting rights.

Under Article 9(2) of the Company's Articles of Association, Falkenstein Heritage GmbH, whose registered office is in Wetzlar (Germany), is entitled to appoint one-third of the shareholder representatives on the Company's Supervisory Board. This right exists for as long as Falkenstein Heritage GmbH holds at least 10% of the Company's shares. Marco Brockhaus holds the majority of the shares in Falkenstein Heritage GmbH.

The statutory provisions relating to the appointment and dismissal of members of the Executive Board are governed by AktG sections 84 et seq. The Articles of Association include the following arrangements relating to the appointment and dismissal of members of the Executive Board.

"The Executive Board comprises one or more persons. The Supervisory Board determines the number of Executive Board members. The Supervisory Board can appoint a Chair of the Executive Board and a Deputy Chair."

The adoption of the Articles of Association is governed by AktG section 23. Under AktG section 179(1), any amendment to the Articles of Association requires a resolution at the Annual General Meeting. Under Article 12(2) of the Articles of Association, the Supervisory Board is entitled to make amendments to the Articles of Association that relate solely to the wording.

The Executive Board's powers to issue shares are described in Note 25 to the consolidated financial statements.

On June 22, 2022, the Annual General Meeting of the Company authorized the Executive Board to acquire up to a total of 10% of the share capital at the time of the authorization (corresponding to 1,094,763 shares) by the Company. This authorization continues to exist in full as of the reporting date. Further options for the Executive Board to issue shares of the Company are governed by AktG section 71.

The members of the Executive Board have a special right of termination in the event of a change of control. A change of control is deemed to exist:

- if a third party or several third parties acting in concert who, at the time the contract of service of the Executive Board member was entered into, did not hold or held less than 20% of the voting rights in the Company, acquire voting rights in the Company such that they account for more than 30% in the aggregate (existing and acquired) of the voting rights in the Company, irrespective of whether this produces an obligation to make a takeover bid (the relevant provisions of the German Securities Acquisition and Takeover Act (WpUG), in particular sections 29 and 30, apply to the calculation of the share of the voting power) or
- in the event of a merger (section 2 of the German Company Conversion Act [UmwG]) involving the transfer of the assets of the Company under UmwG section 174(1) or (2) sentence 1 or a legal transfer of the material assets to third parties who do not belong to the Company's group of companies or
- in the event that a control agreement and/ or a profit and loss transfer agreement is or are entered into by the Company in a role as a dependent controlled company

If this special right of termination is exercised, the Executive Board member is entitled to a severance payment limited to the total amount of the severance payment cap. Please refer to the remuneration report for a detailed explanation of the severance cap.

Corporate governance statement

For the 2022 fiscal year, the Company is exercising the option to make its corporate-governance statement pursuant to HGB sections 289f and 315d publicly accessible on its website. The corporate governance statement is permanently accessible on our website (www.brockhaus-technologies.com) in the section entitled Investor Relations, subsection Corporate Governance.

The declaration of compliance with the German Corporate Governance Code by the Executive Board and the Supervisory Board of Brockhaus Technologies AG pursuant to AktG section 161 is permanently accessible on our website (www.brockhaus-technologies.com) in the section entitled Investor Relations, subsection Corporate Governance.

Related-party transactions

Please refer to Note 39 to the consolidated financial statements for information on related-party transactions.

Consolidated Financial Statements

Consolidated Financial Statements

Consolidated statement of comprehensive income

€ thousand	Note	2022	2021 adjusted*
Revenue	8	**142,712**	**39,042**
Increase/ (decrease) in finished goods and work in progress		(243)	(1,117)
Other own work capitalized	9	986	5
Total output		**143,455**	**37,931**
Cost of materials	10	(51,734)	(7,757)
Gross profit		**91,721**	**30,174**
Personnel expenses excluding share-based payments	11	(25,953)	(14,817)
Personnel expenses from share-based payments	37	(673)	(196)
Other operating expenses	12	(19,542)	(23,280)
Impairment loss on receivables	21	(301)	(159)
Other operating income	13	1,475	1,419
Amortization of intangible assets identified in initial consolidation	14	(14,184)	(6,240)
Other depreciation of property, plant and equipment and amortization of intangible assets	14	(3,245)	(1,016)
Finance costs		(14,748)	(2,800)
Finance income		4,779	36
Financial result	15	(9,969)	(2,764)
Income from continuing operations before tax		**19,329**	**(16,880)**
Income tax expense	16	(8,862)	(2,090)
Income from continuing operations		**10,466**	**(18,970)**
Income from discontinued operations	34	47,995	209
Profit or loss for the period		**58,461**	**(18,761)**
of which attributable to BKHT shareholders		49,019	(15,881)
of which from continuing operations		1,024	(16,054)
of which from discontinued operations		47,995	173
of which attributable to non-controlling interests		9,442	(2,880)

* The prior-period amounts were adjusted due to the discontinuation of an operation (see Note 34 in the notes to the consolidated financial statements).

Consolidated statement of comprehensive income (continued)

€ thousand	Note	2022	2021
Foreign currency translation adjustments*		966	1,287
Total comprehensive income		**59,427**	**(17,474)**
of which attributable to BKHT shareholders		49,985	(14,594)
of which attributable to non-controlling interests		9,442	(2,880)
Earnings per share			
Weighted average number of shares outstanding		10,946,519	10,433,339
Earnings per share (€)**	17	**4.48**	**(1.52)**
of which from continuing operations		0.09	(1.54)
of which from discontinued operations		4.38	0.02

* Other comprehensive income that may be reclassified to profit or loss in subsequent periods

** Basic earnings per share is equal to diluted earnings per share.

Consolidated statement of financial position

€ thousand	Note	Dec. 31, 2022	Dec. 31, 2021
Assets			
Property, plant and equipment	18	7,629	16,156
Intangible assets and goodwill	19	356,936	398,872
Non-current trade receivables	21	13,883	8,411
Non-current leasing receivables	21	130,887	82,142
Prepayments		-	9
Deferred tax assets	16	534	544
Non-current assets		**509,870**	**506,133**
Inventories	20	10,914	12,568
Current trade receivables	21	15,434	11,611
Contract assets	21	100	155
Current leasing receivables	21	13,633	37,617
Other financial assets	22	26,165	15,280
Prepayments		1,214	811
Cash and cash equivalents	23	70,800	30,327
Assets held for sale	24	7,381	-
Current assets		**145,640**	**108,368**
Total assets		**655,509**	**614,501**

€ thousand	Note	Dec. 31, 2022	Dec. 31, 2021
Equity and liabilities			
Subscribed capital	24	10,948	10,387
Capital increase not yet implemented		-	13,003
Capital reserves	26	240,130	227,688
Other reserves	27	1,125	452
Currency translation differences		548	(418)
Retained earnings		19,950	(29,069)
Equity attributable to BKHT shareholders		272,700	222,043
Non-controlling interests		42,636	32,878
Equity		**315,337**	**254,920**
Non-current financial liabilities excluding leasing	28	93,590	123,945
Non-current financial liabilities from lease refinancing	28	143,612	115,654
Other provisions	31	57	4,765
Other liabilities	30	411	4,570
Contract liabilities	8	-	36
Deferred tax liabilities	16	52,590	52,189
Non-current liabilities		**290,261**	**301,159**
Current tax liabilities		5,726	5,556
Current financial liabilities excluding leasing	28	5,291	16,987
Current financial liabilities from lease refinancing	28	10,196	12,525
Trade payables	29	14,080	11,305
Other liabilities	30	13,129	10,531
Contract liabilities	8	1,391	1,394
Other provisions	31	98	123
Current liabilities		**49,912**	**58,422**
Liabilities		**340,173**	**359,581**
Total equity and liabilities		**655,509**	**614,501**

Consolidated statement of changes in equity

€ thousand	Note	Subscribed capital	Capital increase not yet implemented	Capital reserves	Other reserves	Currency translation differences	Retained earnings	Equity attributable to BKHT shareholders	Non-controlling interests	Equity
Jan. 1, 2022		**10,387**	**13,003**	**227,688**	**452**	**(418)**	**(29,069)**	**222,043**	**32,878**	**254,920**
Transactions with shareholders										
Entry of capital increases	24	561	(13,003)	12,442	-	-	-	-	-	-
Cost of capital increases		-	-	-	-	-	-	-	-	-
Profit or loss for the period		-	-	-	-	-	49,019	49,019	9,442	58,461
Other comprehensive income		-	-	-	-	966	-	966	-	966
Equity-settled share-based payment transactions	37	-	-	-	672	-	-	672	-	672
Transactions with non-controlling interests		-	-	-	-	-	-	-	316	316
Dec. 31, 2022		**10,948**	**-**	**240,130**	**1,125**	**548**	**19,950**	**272,700**	**42,636**	**315,337**
Jan. 1, 2021		**10,387**	**-**	**227,688**	**256**	**(1,705)**	**(13,188)**	**223,438**	**(1)**	**223,437**
Transactions with shareholders										
Capital increases	24	-	13,003	-	-	-	-	13,003	-	13,003
Cost of capital increases		-	-	-	-	-	-	-	-	-
Profit or loss for the period		-	-	-	-	-	(15,881)	(15,881)	(2,880)	(18,761)
Other comprehensive income		-	-	-	-	1,287	-	1,287	-	1,287
Equity-settled share-based payment transactions	37	-	-	-	196	-	-	196	-	196
Acquisition of subsidiaries with non-controlling interests		-	-	-	-	-	-	-	35,758	35,758
Dec. 31, 2021		**10,387**	**13,003**	**227,688**	**452**	**(418)**	**(29,069)**	**222,043**	**32,878**	**254,920**

Consolidated statement of cash flows

€ thousand	Note	2022	2021
Profit or loss for the period		58,461	(18,761)
(Income taxes paid)/ income tax refunds		(7,828)	(4,168)
Income tax expense/ (income tax income)	16	9,344	3,381
Expenses for equity-settled share-based payment transactions	37	673	196
Amortization, depreciation and impairment losses	14	20,065	9,683
Financial result excluding lease refinancing	15	8,944	5,550
(Gain)/ loss on sale of property, plant and equipment		(190)	(42)
(Gain)/ loss on sale of discontinued operations		(48,908)	-
Other non-cash expenses/ (income)		4,402	(8,673)
Additions of lease receivables		(286,707)	(8,842)
Payments from lessees		51,098	8,637
Disposals/ reclassifications of lease receivables at residual value		217,811	75
Interest and similar (income)/ expenses from leasing		(10,157)	(1,339)
(Increase)/ decrease in lease receivables		(27,954)	(1,469)
Addition of liabilities from lease refinancing		71,529	5,000
Payment of annuities from lease refinancing		(47,613)	(1,208)
Disposal of liabilities from lease refinancing		(810)	-
Additions/ (disposals) of liabilities from forfaiting		3,503	-
Interest expense for liabilities from lease refinancing		2,287	566
Increase/ (decrease) in liabilities from lease refinancing		28,896	4,358
(Increase)/ decrease in leased assets under operating leases		565	(1,467)
(Increase)/ decrease in inventories, trade receivables and other assets not attributable to investing or financing activities		(16,118)	(2,329)
Increase/ (decrease) in trade payables and other liabilities not attributable to investing or financing activities		4,590	7,589
Increase/ (decrease) in other provisions	31	(28)	(55)
Cash flow from operating activities		**34,914**	**(6,205)**

Consolidated statement of cash flows (continued)

€ thousand	Note	2022	2021
Payments to acquire property, plant and equipment	18	(1,250)	(1,173)
Proceeds from sale of property, plant and equipment		198	91
Payments to acquire intangible assets	19	(548)	(435)
Capitalized development costs	9	(1,357)	(861)
Acquisition of subsidiaries, net of cash acquired		-	(141,619)
Disposal of subsidiaries, net of cash and cash equivalents sold*		55,992	-
Interest received		-	40
Cash flow from investing activities		**53,035**	**(143,958)**
Proceeds from loans raised	28	10,000	63,400
Repayment of loans and other financial liabilities	28	(51,172)	(5,379)
Repayment of lease liabilities	28	(1,257)	(558)
Interest paid	28	(4,273)	(1,797)
Cash flow from financing activities		**(46,702)**	**55,666**
Change in cash and cash equivalents		**41,247**	**(94,497)**
Effect of exchange rate changes on cash and cash equivalents		202	285
Cash and cash equivalents at the beginning of the period	23	29,331	123,544
Cash and cash equivalents at the end of the period	23	70,780	29,331
Cash and cash equivalents			
Cash and cash equivalents	23	70,800	30,327
Overdraft facilities used for cash management		(19)	(995)
Total	23	**70,780**	**29,331**

* The Group reports all cash flows in the statement of cash flows, meaning including continuing and discontinued operations. Cash flows from discontinued operations are disclosed in Note 34 in the notes to the consolidated financial statements.

Notes to the consolidated financial statements

I. General information, methods and policies

1. Information on the Group

The registered office of Brockhaus Technologies AG (**BKHT**, the **Company** or the **parent company**, together with its subsidiaries **Brockhaus Technologies** or the **Group**) is Nextower, Thurn-und-Taxis-Platz 6, 60313 Frankfurt am Main, Germany, and the Company is registered in the commercial register at the Local Court in Frankfurt am Main under commercial register number HRB 109637.

The Company's purpose is to found companies and acquire, hold, manage and support investments in companies over the long term and, as the case may be, to sell such investments and to provide services relating to the aforementioned, such as support for sales, marketing, finance and general organizational and management matters and to acquire funding. The Company's purpose also includes performing business activities by a managing holding entity of investees and providing services for these entities (group services), granting loans to investees, to the extent that this does not require official approval and developing and implementing new business concepts for investees and third parties, as well as providing services and advisory services to companies, especially with regard to business strategy, business concepts, capital resources, funding options and capital investments (management consulting), to the extent this does not require official approval. The Company's purpose within the scope of the business strategy also includes investing free cash available to the Company that has not yet been committed to investments. Among things, this includes investing in listed securities, such as shares, participation certificates, other mezzanine instruments, debt securities, funds, certificates or derivatives. The Company's objective for its investees is long-term support and value growth.

2. Accounting policies

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), as adopted by the EU and supplementary requirements of section 315e(1) of the German Commercial Code (HGB). IFRS comprise the effective International Accounting Standards (IAS), International Financial Reporting Standards (IFRS) and the Interpretations issued by the Standing Interpretations Committee (SIC) and the International Financial Reporting Interpretations Committee (IFRIC).

3. Basis of preparation

The consolidated financial statements have been prepared on a historical cost basis. This does not apply to certain items that were recognized at the revalued amount or fair value at the reporting date. Corresponding explanations are provided in the relevant accounting policies.

The items of the consolidated statement of comprehensive income and the statement of financial position are aggregated to enhance clarity and disaggregated and explained in the notes.

The accounting policies, explanations and further disclosures are applied consistently. An exemption to this principle is the new accounting policies presented in Note 4.21.

Presentation in the statement of financial position distinguishes between current and non-current assets and liabilities. Assets and liabilities are classified as current if they are due or will be settled within twelve months of the reporting date.

The Company's fiscal year is the calendar year. These consolidated financial statements relate to the fiscal year from January 1, 2022 to December 31, 2022 (**reporting period**), with a **reporting date** of December 31, 2022. Additionally, comparative information is presented for the previous fiscal year from January 1, 2021 to December 31, 2021 (**previous year** or **prior-period**), with December 31, 2021 as the **prior-year reporting date**.

The consolidated financial statements are presented in euros, which is the Company's functional currency. The amounts disclosed are therefore rounded to the nearest euro (**€**), thousands of euros (**€ thousand**) or millions of euros (**€ million**) in line with standard commercial practice. Due to this rounding method, the individual amounts reported do not always add up precisely to the totals presented. Negative amounts are presented in parentheses and zero amounts are denoted as dashes (**-**).

Continuing activities are presented in the consolidated statement of comprehensive income down to the line item "Income from continuing operations." Income from discontinued operations after tax is presented in a separate line item. The prior-year figures were adjusted accordingly. Unless indicated otherwise, the disclosures on the statement of comprehensive income presented in the notes to the consolidated financial statements relate to continuing operations.

The Executive Board prepared these consolidated financial statements as of March 27, 2023 and approved them for distribution to the Supervisory Board.

4. Accounting policies

Recognition and measurement are based on the going concern assumption.

4.1 Consolidation methods

Brockhaus Technologies AG and all its controlled subsidiaries are included in the consolidated financial statements. The financial statements of all Group companies included in the consolidated financial statements are prepared as of the same reporting date using uniform accounting policies.

All Group entities were included in the consolidated financial statements as of December 31, 2022 by virtue of control. Please refer to Note 35 for a list of the consolidated entities.

4.2 Foreign currency

For practical reasons, an average rate is used to translate the financial statements of the subsidiaries included in the consolidated financial statements. All resulting exchange differences are recorded in a separate component of equity.

The following exchange rates were used for currency translation in the consolidated financial statements.

	Exchange rates 2022		Exchange rates 2021	
1 euro	Closing rate	Average	Closing rate	Average
CNY	7.358	7.079	7.195	7.634
HKD	8.316	8.245	8.833	9.199
USD	1.067	1.053	1.133	1.184

4.3 Revenue from contracts with customers

Revenue recognition

The table below provides information on the type and the point in time at which performance obligations from contracts with customers are satisfied and the associated revenue recognition policies.

Type of product/ service	Type and time of performance obligation and material payment terms	Revenue recognition under IFRS 15
Sale of KVM devices or KVM systems	Based on the standardized contractual and supply terms and conditions, customers obtain control when the products leave the company's premises (ex works) or were accepted by them there (transfer of risks and rewards). In some cases, control also passes on the basis of other Incoterms (e.g., DDP Delivery Duty Paid). The invoices are generated as of the date of transfer of risk, based on the underlying Incoterms. Invoices are generally payable within 14 to 30 days. For significant key accounts, longer payment terms (30-60 days, in exceptional cases up to 90 days) are granted in some cases. Price reductions and cash discounts are generally granted for the devices/ systems. The contracts do not permit the customer to return the purchased products. Advance payments or partial advance payments for part of the total purchase price are agreed for large volume orders, new customers or customers who are not covered by credit insurance.	Revenue is recognized when control is transferred. Revenue is recognized net of price reductions and cash discounts. Advance payments received are recognized under contract liabilities.
Repair of devices	The Group provides repair services for devices as required.	Revenue is recognized at a point of time after the service has been rendered.
Revenue from extended warranties	In some instances subsidiaries provide separate extended warranty services to their customers (distinct service to the customers).	Revenue is recognized over the period in which the warranty services are provided. Advance payments received for warranty services still to be rendered are recognized as contract liabilities.
Revenue from commissions	The Group's Financial Technologies segment generates commissions in connection with the signing of leases (accounted for according to IFRS 16): 1. Commissions in connection with arranging bicycle leases from a third-party lessor that conducts the leasing business in conjunction with the Group. 2. On behalf of a third-party insurance company, the Group brokers insurance policies to lessees to insure bicycles. For this service the Group receives a commission from the insurance company when an insurance policy is arranged. The Group also receives a margin from the premiums paid by customers in addition to the commission paid by the insurance company. Brokerage services are provided for the following types of insurance: a) Worker's compensation insurance in the event of an employee's unemployment, termination, long-term illness, death or parental leave b) Indemnity insurance for bicycles and e-bikes c) Wear-and-tear insurance for bicycles and e-bikes d) Liability and legal expense insurance for employees' private use of bicycles and e-bikes Since this activity constitutes transferring the insurance coverage from the insurance company, the Group only acts as an intermediary/ broker of insurance services with regard to the aforementioned types of insurance and is therefore an agent.	1. The commission from the third-party lessor is collected when the contract is signed. 2. The commission from brokerage services must be recognized as revenue when the policy is arranged, because the service is performed at the time the contract is signed. Two service obligations (brokerage and claims service) are fulfilled by way of the premium payment margin. The allocation to the two services is therefore made on the basis of the individual selling prices. The total transaction price (commission plus customer premium) is recognized as income from commissions after deduction of the claims service and insurance premiums paid to the insurance company. Revenue is therefore recognized for all of the insurance policies presented here in the amount of the net margin.
Customer/ claims service	The Group performs the following additional services for the aforementioned types of insurance: 1. In respect of third-party lessors: Claims settlement in connection with the liability and wear-and-tear insurance. The Group receives monthly fixed compensation for the services provided. 2. In respect of insurance companies: Claims service, i.e., settlement of claims reported under the liability and wear-and-tear insurance and activities such as providing support to the users of the bicycles (employees of the lessee) and suppliers as well as preparing, following up and reporting claims to the insurance company. The Group does not receive any separate compensation for this service.	1. The claims service for the third-party lessor is governed by a stand-ready agreement. Compensation is paid monthly and is recognized as revenue in this amount continually over the period. Revenue is reported as a gross amount. 2. The portion of the premium payments and commission paid as compensation for the customer and claims service is deferred upon payment and recognized proportionally over the term of the lease. The total transaction price is divided into the premium payments by the customer using the individual selling prices by applying the expected-cost-plus-margin method. The costs calculated directly are personnel expenses for the employees involved in claims settlement as well as the costs of the software licenses used. Revenue is recognized net.

Type of product/ service	Type and time of performance obligation and material payment terms	Revenue recognition under IFRS 15
Service packages	The Group sells inspection services for the maintenance of bicycles and e-bikes. Service packages permit the lessee's employees to take advantage of a specified number of inspections during the lease term. Customers pay a monthly fixed premium to the Group for this service. The Group acts as principal for this service and is therefore responsible for performing the inspections or arranging for performance of inspections by third parties. The initial inspection may be performed within 1 to 18 months and the second within 19 to 36 months. Users are entitled to a third inspection only when the term is 48 months. If the customer does not take advantage of the inspections within the periods specified above, the relevant performance obligation expires without refund of the premiums paid.	Advance payments received for inspections still to be rendered are recognized as contract liabilities. The proportional premiums paid are recognized as revenue when the customer takes advantage of the inspection or when a performance obligation expires. In the event of an inspection claim at the start of the term or during a period in which the contract liabilities recognized are not sufficient, a contract asset is recognized, which is reduced thereafter by the amount of the subsequent premium payments.
Sale of previously leased bicycles and e-bikes at the end of the lease term	At the end of the lease term, users of the leased bicycles and e-bikes are offered the opportunity to acquire the asset. Users receive the offer from the Group three months prior to expiration of the lease. If they agree, the purchase is invoiced at the halfway mark of the last month of the lease term. The invoice amount is obtained by direct debit a few days after the end of the lease term. If no sale is made to the user, the bicycles and e-bikes are offered for sale to a bicycle retailer or sold to third parties for recycling. The sale contracts do not permit the buyer to return the purchased products.	Revenues are recognized when the user agrees to the purchase at the time of termination of the lease because the user already controls the bicycle at this time. Revenues from the sale of bicycles to third parties are recognized at the time the bicycles are delivered to the retailer or recycler.
Sale of operating lease assets	After expiration of the lease term, the lessor exercises the option to sell, allowing the underlying asset to be sold to customers. The portfolio of underlying assets comprises a collection of various assets, such as vehicles, machines, equipment etc.	When the lessor exercises the option to sell, the revenues are recognized when the lease is terminated.

The Group generates revenue from the sale of KVM devices and KVM system in the Security Technologies operating segment. The Financial Technologies operating segment generates revenue from commissions, customer and insurance services and from the sale of bicycles, e-bikes and other leased assets at the end of their lease terms.

Revenue from product sales is recognized at the time of transfer of the significant risks and rewards of ownership of the goods sold to the buyer if it is reasonably certain that the economic benefits from the sale will flow to the Group. The amount of revenue recognized is based on the fair value of the consideration received or receivable, less any cash discounts and rebates.

Other revenue comprises revenue from leases in accordance with IFRS 16 and the associated refinancing of leases in accordance with IFRS 9. Please refer to Notes 8.2 and 38.2 for further information.

Contracts with customers do not stipulate the right to return the goods within a certain period of time. Goods returns are only permitted due to defects within the regular warranty period.

As a rule, the Group applies the practical expedient for current advance payments from customers. That means that the promised amount of consideration is not adjusted for the effects of a significant financing component if the period between the transfer of a promised good or service and payment is one year or less.

The Group receives advance payments from customers for arranging insurance policies with a lead time of 36 months from the date the policy is concluded and the payment is received. These policies contain an insignificant financing component in the period between payment by the customer and their transfer.

The Group generally issues a two-year warranty for general repairs of defects that existed at the date of the sale, as required by law. These warranties are recognized in accordance with IAS 37 Provisions (Note 31).

Contract balances

The contract assets relate to the Financial Technologies segment. With service packages, an inspection is performed at a time when the value of the service exceeds the amount invoiced up to this point. This surplus is deferred in the form of a contract asset. The net amount of this item varies depending on the contract month in which the inspection was performed.

The contract liabilities are realized as revenue in different periods depending on the segment. Contract liabilities in the Security Technologies segment include advance payments from customers that are expected to be collected in the form of revenue within 12 months of the reporting date. Advance payments are of short-term nature.

4.4 Employee benefits

Equity-settled share-based payments

The Group has a stock option program enabling it to issue rights to purchase shares of the parent company to Executive Board members and employees of the Company and to managing directors and employees of subsidiaries.

The total amount to be recognized as expense for employee services received is determined by reference to the fair value of the share-based payment at the grant date. The fair value of stock options is determined using a Monte Carlo simulation, taking the long-term performance targets into account. The fair value determined at the grant date is recognized as expense over the vesting period (the period during which all the specified vesting conditions must be satisfied). The offsetting entry is recorded in equity. The vesting period generally starts on the grant date of the stock options. However, the expense can be recognized at an earlier date if the employee starts rendering services before the formal approval of issuance of the options.

The Group recognizes the remuneration expense from the start of the period when the services are rendered even if the issue date is later than the start of employment. The expense for share-based payment is based on the estimated fair value of the stock options as of the grant date in the period between when the services start being rendered and the grant date. As soon as the grant date is known, the estimated fair value is adjusted to ensure that the expense is prospectively recognized based on the actual fair value at the grant date of the equity instruments granted.

No expense is recognized for share allocations that cannot vest, with the exception of equity-settled share-based payment plans where vesting is dependent on a market condition or a non-vesting condition. These equity instruments are treated as being exercisable regardless of whether a market condition or non-vesting condition applies, provided all other service or employment conditions are satisfied.

Based on the non-market-based vesting conditions, the Company estimates the number of options and shares that are expected to be exercisable at the end of each reporting period. Possible changes compared with the original estimates are recognized in profit or loss with a corresponding offsetting entry in equity.

If the contractual terms of an equity-settled payment arrangement are modified, expenses are recognized, as a minimum, at the fair value of the equity instruments granted at the grant date, unless those equity instruments cannot vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at the grant date. The Group also recognizes the effects of modifications that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee. These are measured at the date of the modification.

Expenses arising in connection with an equity-settled payment arrangement are recognized as personnel expenses.

4.5 Finance income and costs

Interest income and expense is recognized in profit or loss using the effective interest method. To calculate interest income and expense, the effective interest rate is applied to the gross carrying amount of the financial asset (if it is not credit-impaired) or to the amortized cost of the financial liability. By contrast, for financial assets that become credit-impaired after initial recognition, interest income is calculated by applying the effective interest rate to the amortized cost of the financial asset. If the asset is no longer credit-impaired, calculation of interest income returns to a gross basis.

4.6 Government grants

The government grants were awarded for research and development projects and are reported under other operating income. There are no unfulfilled conditions or contingencies attached to these grants.

4.7 Current and deferred income taxes

Current tax is measured as the amount expected to be reimbursed by, or paid to, the tax authorities. The amount is calculated on the basis of the tax rates and tax laws applicable as of the reporting date.

Deferred tax assets and liabilities are measured using the tax rates expected to apply to the period in which an asset is realized or a liability is settled. The amount is calculated on the basis of the tax rates and tax laws enacted as of the reporting date. The combined tax rate is 30% (previous year: 30%). Deferred tax assets and deferred tax liabilities are offset against one another if the Company has a legally enforceable claim to set off current tax assets against current tax liabilities and these amounts relate to income taxes levied on the same taxable entity by the same taxation authority.

4.8 Property, plant and equipment

Items of property, plant and equipment are depreciated on a straight-line basis over their estimated useful life. The useful lives applied are as follows.

	Years
Leasehold improvements	10
Office furniture	10 – 13
Other equipment, operating and office equipment	3 – 10
Technical equipment and machinery	3 – 10

Impairment testing and the recognition of impairment losses and reversals are performed using the approach for finite-lived intangible assets. Please refer to Note 4.9 for further information.

4.9 Intangible assets and goodwill

Goodwill is tested for impairment at least annually. Other intangible assets with finite useful lives and items of property, plant and equipment are tested for impairment if there are specific indications of impairment. An impairment loss is recognized in profit or loss in the item "Other depreciation of property, plant and equipment and amortization of intangible assets" in the statement of comprehensive income if an asset's recoverable amount falls below its carrying amount. 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. The recoverable amount is the higher of net realizable value and value in use. Net realizable value is equal to the recoverable amount less costs to sell arising from the sale of an asset on an arm's length basis. Value in use is calculated based on the estimated cash flows from the use and disposal of an asset using the discounted cash flow method. The cash flows are derived from the long-term corporate planning, which takes account of historical developments and macroeconomic trends. The value in use of the relevant groups of cash-generating units (**CGU**) is used to test the recoverability of goodwill. The annual goodwill impairment test is performed at the level of our operating segments, since there are no levels below that at which goodwill is monitored for internal management purposes.

Amortization

Intangible assets are amortized on a straight-line basis over their estimated useful lives. The useful lives applied are as follows.

	Years
Patents and trademarks	10
Capitalized development costs	5
Software	3
Licenses and other rights	3 – 10
Basic technologies	5 – 8
Customer base	10 – 15

Capitalized development expenses are amortized when the development is complete and series production has started.

Amortization methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

4.10 Inventories

Finished goods and work in progress are recognized at the lower of cost or net realizable value using individual calculations which are based on the current cost accounting.

4.11 Financial instruments

The Group's business model for the management of its financial instruments reflects how the entity manages its financial assets to generate cash flows. Depending on the business model, cash flows are realized through the collection of contractual cash flows ("hold to collect" business model), the sale of financial assets ("for sale" business model) or both ("hold to collect and for sale" business model).

In order to classify and measure a financial asset as at "amortized cost" or "fair value through other comprehensive income," the cash flows must comprise "solely payments of principal and interest" (SPPI) on the principal amount outstanding. This assessment is called an "SPPI test" and is conducted at the level of the individual financial instrument.

Initial recognition and measurement

As of the reporting date and the prior-period reporting date, the Group only had primary financial instruments and financial liabilities in the "amortized cost" category that are allocated to the "hold to collect" business model (cash flows are generated by the receipt of contractual cash flows).

The Group has entered into interest rate cap contracts. Please refer to Note 33.4 for further information on interest risks.

Subsequent measurement

The Group's financial instruments at amortized cost comprise trade receivables and payables, other financial assets and liabilities, cash and cash equivalents, as well as bank loans, securitized liabilities and other loans.

They are subsequently measured at fair value through profit or loss in particular if contingent consideration has been contractually agreed with the purchaser in the context of sales of operations. Please refer to Note 22 for further information.

Impairment

In addition to the general approach (three-stage model), IFRS 9 provides for a simplified model for trade receivables, contract assets and lease receivables falling within the scope of application of IFRS 16. Changes in credit risk are not tracked when applying the simplified approach. Instead, a risk provision is recognized in the amount of the lifetime expected credit loss upon initial recognition and at each subsequent reporting date. The Group applies this approach for trade receivables, contract assets and lease receivables.

The probabilities of default are calculated using third-party credit ratings by market data suppliers per debtor. The loss given default (LGD) model reflects historical losses and determines the loss given an actual default expressed as a percentage. Contract-specific components are used to calculate the LGD.

4.12 Subscribed capital

Ordinary shares

The costs directly attributable to the issuance of ordinary shares are recognized as a deduction from equity. Income taxes on equity transaction costs are recognized in accordance with IAS 12.

4.13 Provisions

Provisions are determined by discounting the expected future payment obligations at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is presented as finance cost.

Warranties

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

4.14 Leases – Group as lessee

The Group makes use of the practical expedients for low-value underlying assets and short-term leases (less than twelve months) and the payments are recognized as an expense. The Group exercises the option not to separate the components in the case of agreements that include lease components and non-lease components.

4.15 Leases – Group as lessor

Operating leases

In an operating lease, the lessor remains the beneficial owner of the leased asset and recognizes it as an asset at amortized cost under property, plant and equipment. The lease payments received in the period are reported as revenue.

Finance leases

Leases are treated as finance leases if the lessee receives substantially all of the risks and rewards associated with ownership of an asset. Cash lease payments are divided into an interest item recognized in profit or loss and a principal item not being recognized in profit or loss, with the interest item reported in revenue.

4.16 Fair value measurement

The Group uses valuation techniques that are appropriate for the relevant circumstances and for which sufficient data is available to measure fair value. This involves maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

In order to satisfy the requirements governing disclosure of fair value in the notes to the consolidated financial statements, the Group has defined groups of assets and liabilities based on their nature, characteristics and risks, as well as the levels of the IFRS 13 fair value hierarchy.

4.17 Other financial obligations

Rental and lease commitments are accounted for in accordance with IFRS 16. Exceptions represent rental and lease commitments outside of the scope of IFRS 16. Contingent liabilities are measured at their settlement value.

4.18 Discontinued operations

The Group reports discontinued operations if a component of the Group is designated as held for sale or has already been sold and the component of the Group represents a separate major line of business. Discontinued operations are reported in the consolidated statement of comprehensive income for both the reporting period and for the prior-year period. The Group does not report the cash flows from discontinued operations separately in the consolidated statement of cash flows, but discloses them in the notes.

4.19 Assets held for sale

The Group classifies non-current assets as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. In this case, the assets are no longer depreciated or amortized but measured at the lower of carrying amount and fair value less costs to sell. Immediately before classification as held for sale, the assets are tested for impairment using the applicable specific impairment rules. The impairment loss is reversed in the event of a subsequent increase in fair value less costs to sell. This is limited to the impairment previously recognized for the asset. The Group reports assets held for sale separately in the consolidated statement of financial position. The prior-period figures are not adjusted and are therefore reported unchanged.

4.20 Summary of the measurement policies

Provided there are no impairment losses, the Group's measurement policies are summarized and in simplified form as follows.

Statement of financial position item	Assessment
Assets	
Intangible assets	
with finite useful lives	Amortized cost
with indefinite useful lives	Impairment-only approach
Property, plant and equipment (including right-of-use assets)	Amortized cost
Lease receivables	Amortized cost
Trade receivables	Amortized cost
Inventories	Lower of cost and net realizable value
Cash and cash equivalents	Amortized cost
Accrued expenses	Amortized cost
Other financial assets	Amortized cost
Other non-financial assets	Amortized cost
Deferred tax assets	Measured (without discounting) at the tax rates that apply in the period when the asset is realized or a liability is settled
Liabilities	
Liabilities to banks	Amortized cost
Deferred tax liabilities	Measured (without discounting) at the tax rates that apply in the period when the asset is realized or a liability is settled
Income tax liabilities	Expected payment to tax authorities that is based on tax rates that apply at the reporting date or shortly thereafter
Trade payables	Amortized cost
Deferred income	Amortized cost
Other provisions	Expected discounted amount that will result in an outflow of resources
Other financial liabilities (including lease liabilities)	Amortized cost

4.21 New and amended standards

The accounting policies applied in the consolidated financial statements are generally the same as the policies applied in the previous year. New and amended standards adopted by the EU and effective for periods beginning on or after January 1, 2022 did not materially affect the Group's results of operations, net assets and financial position.

The Group voluntarily early-adopted the Changes in Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2) endorsed by the EU on March 3, 2022, under the comitology procedure.

There are no other new or amended standards that could materially affect future financial statements of the Group.

5. Use of judgments, estimates and assumptions

Judgments that affect the amounts in the financial statements are necessary in some instances to apply accounting policies. In addition, for the preparation of the financial statements, forward-looking assumptions and estimates must be made that may have an impact on the carrying amounts of items in the statement of financial position as well as the amount for income and expenses. Actual amounts may differ from these estimates. The most important forward-looking assumptions and other sources of estimation uncertainty that may require future material adjustments are explained below.

5.1 Judgments

Development costs

Development costs are capitalized in accordance with the described accounting policy. Initial capitalization of costs is based on the Group's assessment that technical and economic feasibility has been demonstrated. For instance, technical feasibility is assessed using the development of prototypes or feasibility studies. Economic feasibility is assessed using project planning, which includes the necessary material costs and personnel expenses and their financing.

Consolidation of structured entities

To refinance the leasing business, among other things, the Group uses an asset-backed security (ABS) program, under which lease receivables are securitized for investors using a structured entity. The structured entity is Debt Marketplace SARL. Companies can securitize receivables through this entity whereby the receivables are sold to various compartments of Debt Marketplace SARL. Compartment B of Debt Marketplace SARL is used to securitize lease receivables. Investors in Compartment B alone are exposed to the credit risk of the Group's lease receivables. Moreover, there are no cross-compartment credit enhancements by third parties.

The Group has no ability to influence the management of the structured entities. However, the Group handles a material activity of the structured entity by servicing the lease receivables and recovering them upon default by the lessee. The Group additionally assumes the credit risk associated with the lease receivables by way of a purchase price discount and participates substantially in the variable returns of the structured entity by receiving a share of the excess spread. In the overall assessment, the Group has control over Compartment B of Debt Marketplace SARL within the meaning of IFRS 10. The company must therefore be consolidated in accordance with IFRS.

The Group uses a GmbH & Co. KG (a German limited partnership in which a limited liability company is the general partner) structure for its management investment in KVM-TEC. The Group holds all shares in the general partner, but not in KVM-TEC MPP GmbH & Co. KG itself. Nevertheless, the Group controls KVM-TEC MPP GmbH & Co. KG by virtue of separate segregated agreements. Viewed overall, the Group exercises de facto control over KVM-TEC MPP GmbH & Co. KG within the meaning of IFRS 10. The entity therefore has to be consolidated in accordance with IFRS.

Assets from contingent consideration

The determination of fair values of assets from contingent consideration requires a high level of judgment. The contingent consideration with the most significant value is the future purchase price receivable from the sale of Palas.

5.2 Estimates and assumptions

The most important forward-looking assumptions and other major sources of estimation uncertainty on the reporting date that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next fiscal year are explained below.

Equity-settled share-based payments

The stock options issued by the Group are subject to conditions determining how the stock options may be exercised by the beneficiaries. There are two settlement scenarios. One scenario would be viewed as full cash settlement, the other scenario as full settlement using equity instruments. In light of the Executive Board's intention to settle by issuing new shares, the Group concluded that it does not have a present obligation to settle in cash and will settle the share-based payment arrangement using equity instruments. This assessment by management is made again at each reporting date. For further information, please refer to Note 37.

Within the Group, expenses arising from granting stock options of the Company to employees are measured at the fair value of these equity instruments at the grant date. In order to estimate the fair value of share-based payments, it is necessary to determine the most suitable valuation technique. The Group uses a Monte Carlo simulation for this purpose. This depends on the grant conditions. For this estimation, it is also necessary to determine suitable inputs for this valuation technique, in particular the expected volatility derived from comparable listed companies and BKHT and the expected term of the option, the dividend yield and the risk-free interest rate. The assumptions and techniques used to estimate fair value are presented in Note 37.

Deferred taxes

Deferred tax assets for unused tax loss carryforwards are currently not recognized in the Group as future taxable earnings in the relevant income tax consolidation groups were not sufficiently concrete at the date of preparing the financial statements. This assumption is reviewed by management on each reporting date.

Business combinations

The determination of the respective fair value of the acquired assets and liabilities on the acquisition date is subject to significant estimation uncertainty. For the identification of intangible assets, depending on the type of the intangible asset and the complexity of determining fair value, either opinions of external valuation experts are drawn upon or the fair value is determined in-house using an appropriate valuation method for the respective intangible asset, the basis of which is typically used for the forecast of overall expected future generated cash and cash equivalents. These measurements are closely related to management's assumptions and estimates made regarding the future development of the respective assets and the discount rate to be applied.

Goodwill impairment test

A cash-generating unit is impaired if its carrying amount exceeds its recoverable amount. The recoverable amount of a cash-generating unit is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell is calculated using the German income approach. Cash flows are derived from the financial budgets for the next five years. The discounted cash flow method is used to calculate value in use. Cash flows are also derived from the financial budgets for the next five years. The recoverable amount in both cases depends on the discount rate used in the German income method or discounted cash flow method as well as on the expected future cash flows and the growth rate used for extrapolation purposes. These estimates are the key factor for determining the fair value less the costs to sell and value in use. The basic assumptions used to determine recoverable amount for the various cash-generating units are presented and explained in more detail in Note 19.

Provisions

A provision is recognized when the Group has a legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation (Notes 4.13 and 31). Such estimates are subject to significant uncertainty.

Accounting for estimated residual value at the end of the lease in calculating the present value of lease receivables

In bicycle leasing, the unguaranteed (estimated) residual value is accounted for when calculating the present value of lease receivables in accordance with the definition in IFRS 16. The estimated residual value at the end of the lease term is calculated depending on the maturity category of the respective lease and includes the expected proceeds from recovery at the end of the term based on historical values. For lease receivables from bicycle finance leasing, historical values based on experience produce a weighted average residual value of 9.5% (previous year: 10.8%). The residual value for leasing other than bicycle leasing generally amounts to 5% and in exceptional cases up to 20% of the acquisition cost.

Calculating impairment losses on trade receivables, contract assets and lease receivables

For information on the assumptions and estimates involved in calculating impairment losses on trade receivables, contract assets and lease receivables, see Notes 4.11 and 33.4.

II. Notes to the statement of comprehensive income

6. Alternative performance measures

In addition to the information disclosed in the consolidated statement of comprehensive income, management uses additional performance measures to manage the Group. These comprise the **pro forma consolidated statement of comprehensive income** and **adjusted alternative performance measures**.

Pro forma consolidated statement of comprehensive income

In the comparative period, Bikeleasing's and kvm-tec's income and expenses were only included for December in the consolidated statement of comprehensive income because control was obtained (the acquisition was closed) at the end of November 2021 in each case. As the informative value of the consolidated statement of comprehensive income for the 2021 fiscal year is limited, particularly its suitability for deriving projections, the Executive Board analyses earnings figures on a pro forma basis. This presents the Group's statement of comprehensive income as if Bikeleasing and kvm-tec had already been acquired as of January 1, 2021.

To calculate the prior-year period pro forma income and expenses, management assumed that the preliminary fair value adjustments made as at date of acquisition of Bikeleasing and kvm-tec would also have applied if the acquisition had taken place on January 1, 2021 and that the post-acquisition financing structure would already have existed at the beginning of the year.

Pro forma consolidated statement of comprehensive income

€ thousand	2022	2021
Revenue before PPA	**145,318**	**105,244**
Decreased earnings due to value step-up	(2,606)	(6,215)
Revenue	**142,712**	**99,029**
Increase/ (decrease) in finished goods and work in progress	(243)	(1,117)
Other own work capitalized	986	5
Total output	**143,455**	**97,918**
Cost of materials	(51,734)	(30,223)
Gross profit	**91,721**	**67,695**
Gross profit before PPA	**94,327**	**73,910**
Gross profit margin	64.9%	70.2%
Personnel expenses excluding share-based payments	(25,953)	(21,695)
Personnel expenses from share-based payments	(673)	(196)
Other operating expenses	(19,542)	(28,647)
Impairment loss on trade receivables	(301)	(243)
Other operating income	1,475	2,206
EBITDA	**46,728**	**19,120**
Adjusted EBITDA	**50,006**	**40,819**
Adjusted EBITDA margin	34.4%	38.8%
Amortization of intangible assets identified in initial consolidation	(14,184)	(14,084)
Other depreciation of property, plant and equipment and amortization of intangible assets	(3,245)	(2,103)
Finance costs	(14,748)	(12,198)
Finance income	4,779	135
Financial result	(9,969)	(12,063)
Earnings before tax	**19,329**	**(9,129)**
Income tax expense	(8,862)	(8,019)
Income from continuing operations	**10,466**	**(17,148)**
Income from discontinued operations	47,995	209
Profit or loss for the period	**58,461**	**(16,939)**

Adjusted alternative performance measures

The Group discloses **revenue before PPA**, **gross profit before PPA**, adjusted earnings before interest, tax, depreciation and amortization (**adjusted EBITDA**), adjusted earnings before interest and tax (**adjusted EBIT**) and **adjusted earnings**. The percentage ratio of these indicators to revenue before PPA is calculated as the respective margin (**gross profit margin before PPA**, **adjusted EBITDA margin** and **adjusted EBIT margin**). **Adjusted earnings per share** are additionally disclosed. Management uses these performance measures to manage the Company and considers them to be significant for an understanding of the Group's financial performance. The alternative performance measures are not defined in IFRS and the Group's definitions are potentially not comparable with similarly designated performance indicators of other companies.

According to IFRS, lease receivables must be remeasured as part of the purchase price allocation in connection with the Bikeleasing acquisition. This remeasurement was chiefly based on the discounting of future lease payments at current market rates. As a rule, leases generated by Bikeleasing have internal rates of return significantly higher than the market rates applied here. This leads to a situation where the remeasured carrying amounts of the lease receivables significantly exceed the previous carrying amounts at amortized cost (known as a value step-up). As a result, the income from these lease receivables (particularly income from interest and disposals) after the remeasurement is substantially lower than before. The **decreased earnings due to value step-up** item relates to financial figures independent of the financial figures of the individual Group companies. This item is not found in any of the single-entity annual financial statements of the Group companies. The decrease in earnings is not a cash effect and does not affect the Group's ability to distribute dividends. The considerably lower earnings according to IFRS due to the value step-up result solely from the fact that an M&A transaction took place. The financial performance presented is thus considerably poorer solely because of the consolidation. For this reason, the Group additionally reports these figures before PPA. At issue here are lease receivables that existed as of November 30, 2021.

Management eliminates expenses from **share-based payments** under IFRS 2.51 (a) from the performance indicators relevant for managing the Company. The reason for this is that these are not attributable economically to the Company, but to its shareholders, when they are serviced using shares. The issuance of options and shares does not represent an outflow of resources for the Group. Consequently, management eliminates the relevant expenses from share-based payments for the analysis of the Group's financial performance. Please refer to Note 37 for further information.

The earnings figures for analyzing the Group's performance are also adjusted for the **cost of acquisition of subsidiaries** under IFRS 3.53. Such costs are only incurred when companies are successfully acquired. In terms of BKHT's business model, these costs are therefore of a recurring nature, but amount to zero in each case assuming no change in the scope of consolidation (meaning no companies bought or sold). In the opinion of management, such expenses would have to be recognized as acquisition costs if they were incurred in the course of acquisitions outside of business combinations.

Equally, amortization expenses of and impairment losses on intangible assets identified in the course of purchase price allocation for acquisitions (**PPA amortization expenses**) are eliminated from underlying the IFRS figures for the purposes of value-enhancing management of the Company. These amortization expenses and impairment losses relate – like the value step-up described before – to accounting entries that are independent of the financial figures of the individual Group companies. They are not found in any of the single-entity annual financial statements of the Group companies. These expenses are recognized solely at the level of consolidation. They are non-cash expenses and not relevant for the Group's ability to pay dividends and no replacement investment spending will also be incurred for them in future cash flows. The considerably lower earnings according to IFRS due to the PPA amortization expenses result solely from the fact that an M&A transaction took place. The financial performance presented is thus considerably poorer solely because of the consolidation. For this reason, the Group additionally reports these figures before PPA amortization expenses. It is also possible that a subsidiary will develop considerably more favorably than projected, but it is still required to recognize substantial PPA amortization expenses in the consolidated financial statements.

A future contingent purchase price payment (earnout) is a part of the consideration transferred for the acquisition of kvm-tec. The liability from these expected future earnout payments must be remeasured as of each reporting date. The change in the carrying amount is reported as income or expense in the consolidated statement of comprehensive income. This **earnout income and expense** is adjusted for the analysis of the Group's performance.

As part of the acquisition of Bikeleasing, the Group agreed a success fee with the intermediary of the M&A transaction. Under this agreement, the intermediary has the right to claim a proportional interest in a possible future increase in Bikeleasing's value. This claim comes due upon sale of the shares or, if no sale occurs, then 10 years after acquisition. The claim is reported as a liability and remeasured as of each reporting date. The change in the carrying amount is reported as income or expense in the consolidated statement of comprehensive income. This **success fee income and expense** is adjusted for the analysis of the Group's performance.

Income taxes on adjustments relate in part to adjusted items in the consolidated statement of comprehensive income. These are eliminated when the after-tax figures are calculated.

In addition to the adjusted earnings figures, the Group provides information on **cash flow from operating activities before tax** and **free cash flow before tax**. They are calculated as presented in the following.

Calculation of revenue before PPA

€ thousand	2022	As is 2021	Pro forma 2021
Revenue	**142,712**	**39,042**	**99,029**
Decreased earnings due to value step-up	2,606	6,215	6,215
Revenue before PPA	**145,318**	**45,257**	**105,244**

Calculation of gross profit before PPA

€ thousand	2022	As is 2021	Pro forma 2021
Gross profit	**91,721**	**30,174**	**67,695**
Decreased earnings due to value step-up	2,606	6,215	6,215
Gross profit before PPA	**94,327**	**36,389**	**73,910**
Gross profit margin before PPA	*64.9%*	*80.4%*	*70.2%*

Calculation of adjusted EBITDA

€ thousand	2022	As is 2021	Pro forma 2021
Earnings before tax	**19,329**	**(16,880)**	**(9,129)**
Financial result	9,969	2,764	12,063
Amortization, depreciation and impairment losses	17,430	7,256	16,186
EBITDA	**46,728**	**(6,860)**	**19,120**
Decreased earnings due to value step-up	2,606	6,215	6,215
Share-based payments	673	196	196
Cost of acquisition of subsidiaries	-	14,928	15,288
Adjusted EBITDA	**50,006**	**14,479**	**40,819**
Adjusted EBITDA margin	*34.4%*	*32.0%*	*38.8%*

Calculation of adjusted EBIT

€ thousand	2022	As is 2021	Pro forma 2021
Earnings before tax	**19,329**	**(16,880)**	**(9,129)**
Financial result	9,969	2,764	12,063
EBIT	**29,298**	**(14,115)**	**2,933**
Decreased earnings due to value step-up	2,606	6,215	6,215
Share-based payments	673	196	196
Cost of acquisition of subsidiaries	-	14,928	15,288
PPA amortization	14,184	6,240	14,084
Adjusted EBIT	**46,761**	**13,463**	**38,716**
Adjusted EBIT margin	*32.2%*	*29.7%*	*36.8%*

Calculation of adjusted earnings and adjusted earnings per share

€ thousand	2022	As is 2021	Pro forma 2021
Income from continuing operations	**10,466**	**(18,970)**	**(17,148)**
Decreased earnings due to value step-up	2,606	6,215	6,215
Share-based payments	673	196	196
Cost of acquisition of subsidiaries	-	14,928	15,288
PPA amortization	14,184	6,240	14,084
(Income)/ expenses from earnout	(4,452)	-	-
(Income)/ expenses from success fee	2,353	-	-
Income taxes on adjustments	(4,815)	(3,548)	(5,879)
Adjusted earnings	**21,016**	**5,061**	**12,755**
of which: attributable to BKHT shareholders	7,986	1,028	4,512
of which: non-controlling interests	13,030	4,033	8,243
Number of shares outstanding	10,946,519	10,433,339	10,946,536
Adjusted earnings per share (€)	**0.73**	**0.10**	**0.41**

A contribution-in-kind capital increase was implemented in February 2022 to finance the acquisition of Bikeleasing. The effect of this capital increase on the number of outstanding shares was reflected in the pro forma perspective for the prior-year period.

Calculation of cash flow from operating activities before tax and free cash flow before tax

€ thousand	2022	2021
Cash flow from operating activities	34,914	(6,205)
Income taxes paid/ (income tax refunds)	7,828	4,168
Cost of acquisition of subsidiaries	-	14,928
Cash flow from operating activities before tax	**42,742**	**12,891**
Cash flow from investing activities	53,035	(143,958)
Acquisition/ (disposal) of subsidiaries	(55,992)	141,619
Free cash flow before tax	**39,785**	**10,552**

7. Operating segments

The Group currently comprises two strategic divisions, which constitute the Group's reportable segments. The segments offer different products and services and are separately administrated since they operate in different markets and therefore require different technology and marketing strategies. BKHT's Executive Board reviews internal management reports for each segment on a monthly basis.

The **Financial Technologies** segment comprises companies specializing in developing and operating highly automated digital B2B finance platforms for arranging, financing and managing employee benefits through the employer. This segment comprises Bikeleasing, which the Group acquired at the end of November 2021. In the comparative period, only the December income and expenses were therefore included in the Group's earnings figures. The revenue of the Financial Technologies segment in the comparative period included an extraordinary disposal gain of €7.1 million. For this reason, the comparability and informative value of the prior-period figures are limited.

The **Security Technologies** segment includes companies that develop, produce and distribute KVM (keyboard, video and mouse) technology for high-security, reduced-latency and loss-free data transmission in mission-critical applications. The segment includes IHSE and kvm-tec, which the Group acquired in December 2019 and November 2021, respectively. In the comparative period, the income and expenses of kvm-tec were only included in the Group's earnings figures for December. For this reason, the comparability and informative value of the prior-period figures are limited.

The sale of Palas on November 24, 2022, means the former **Environmental Technologies** segment no longer exists in the Group. The segment information for the comparative period has been adjusted accordingly. The asset and financial data are shown in the reconciliation.

In addition, the reconciliation includes consolidation effects from the elimination of intragroup transactions and the gain or loss on the deconsolidation of Palas.

Please refer to Note 6 for information on the alternative performance measures presented here, including the reconciliations to revenue and earnings before tax.

The operating activities of the Group as well as their segment reporting substantially depends on further company acquisitions. There may therefore be substantial adjustments to both the definition of segments as well as the figures reported on a regular basis in the future. Please refer to Note 8 for information on the allocation of revenue to the groups of products and services. Segment performance measures are reported on the basis of the management accounting, which largely corresponds to IFRS. Non-current assets are located almost exclusively in Germany.

Key performance indicator by business segment

	Reportable segments											
	Financial Technologies		Security Technologies		Total		Central Functions		Reconciliation		Group	
€ thousand	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Revenue	106,623	10,117	36,086	28,924	142,709	39,040	652	361	(649)	(359)	142,712	39,042
Decreased earnings due to value step-up	2,606	6,215	-	-	2,606	6,215	-	-	-	-	2,606	6,215
Revenue before PPA	109,229	16,332	36,086	28,924	145,315	45,255	652	361	(649)	(359)	145,318	45,257
Gross profit before PPA	67,727	15,607	26,331	20,616	94,058	36,223	652	361	(382)	(195)	94,327	36,389
Adjusted EBITDA	**46,544**	**13,702**	**8,617**	**8,037**	**55,161**	**21,739**	**(5,158)**	**(7,222)**	**3**	**(39)**	**50,006**	**14,479**
Trade working capital**	14,052	8,844	13,294	8,936	27,346	17,780	(1,279)	(2,684)	14	6,189	26,081	21,285
Cash and cash equivalents	23,745	9,641	3,884	9,328	27,629	18,968	43,170	7,280	-	4,078	70,800	30,327
Financial liabilities excluding leases	61,449	74,550	39,013	42,476	100,462	117,026	3,893	16,745	(5,474)	7,162	98,881	140,933
Financial liabilities from lease refinancing	153,809	128,179	-	-	153,809	128,179	-	-	-	-	153,809	128,179
Revenue by region												
EMEA	**106,623**	**10,117**	**20,257**	**16,971**	**126,880**	**27,087**	**652**	**361**	**(649)**	**(359)**	**126,883**	**27,089**
Germany	105,557	10,117	6,500	4,143	112,057	14,259	652	361	(649)	(359)	112,059	14,261
Netherlands	-	-	4,677	5,804	4,677	5,804	-	-	-	-	4,677	5,804
United Kingdom	-	-	285	302	285	302	-	-	-	-	285	302
France	-	-	1,088	1,542	1,088	1,542	-	-	-	-	1,088	1,542
Italy	-	-	513	656	513	656	-	-	-	-	513	656
Other	1,066	-	7,194	4,524	8,260	4,524	-	-	-	-	8,260	4,524
Americas	**-**	**-**	**12,475**	**7,534**	**12,475**	**7,534**	**-**	**-**	**-**	**-**	**12,475**	**7,534**
USA	-	-	9,933	7,470	9,933	7,470	-	-	-	-	9,933	7,470
Other	-	-	2,542	64	2,542	64	-	-	-	-	2,542	64
APAC	**-**	**-**	**3,354**	**4,419**	**3,354**	**4,419**	**-**	**-**	**-**	**-**	**3,354**	**4,419**
China	-	-	1,727	1,325	1,727	1,325	-	-	-	-	1,727	1,325
Other	-	-	1,627	3,094	1,627	3,094	-	-	-	-	1,627	3,094
Total**	**106,623**	**10,117**	**36,086**	**28,924**	**142,709**	**39,040**	**652**	**361**	**(649)**	**(359)**	**142,712**	**39,042**

* Trade working capital comprises inventories and trade receivables (current and non-current), less trade payables.

** The presentation of revenue by region takes into account decreased earnings due to value step-up.

Key performance indicators by business segment (2022 v. 2021 pro forma)

	Reportable segments											
	Financial Technologies		Security Technologies		Total		Central Functions		Reconciliation		Group	
€ thousand	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Revenue	106,623	66,340	36,086	32,688	142,709	99,028	652	361	(649)	(359)	142,712	99,029
Decreased earnings due to value step-up	2,606	6,215	-	-	2,606	6,215	-	-	-	-	2,606	6,215
Revenue before PPA	109,229	72,555	36,086	32,688	145,315	105,243	652	361	(649)	(359)	145,318	105,244
Gross profit before PPA	67,727	51,243	26,331	22,502	94,058	73,744	652	361	(382)	(195)	94,327	73,910
Adjusted EBITDA	**46,544**	**39,765**	**8,617**	**8,315**	**55,161**	**48,080**	**(5,158)**	**(7,222)**	**3**	**(39)**	**50,006**	**40,819**
Trade working capital**	14,052	8,844	13,294	8,936	27,346	17,780	(1,279)	(2,684)	14	6,189	26,081	21,285
Cash and cash equivalents	23,745	9,641	3,884	9,328	27,629	18,968	43,170	7,280	-	4,078	70,800	30,327
Financial liabilities excluding leases	61,449	74,550	39,013	42,476	100,462	117,026	3,893	16,745	(5,474)	7,162	98,881	140,933
Financial liabilities from lease refinancing	153,809	128,179	-	-	153,809	128,179	-	-	-	-	153,809	128,179
Revenue by region												
EMEA	**106,623**	**66,340**	**20,257**	**20,393**	**126,880**	**86,733**	**652**	**361**	**(649)**	**(359)**	**126,883**	**86,735**
Germany	105,557	66,340	6,500	5,824	112,057	72,164	652	361	(649)	(359)	112,059	72,166
Netherlands	-	-	4,677	5,868	4,677	5,868	-	-	-	-	4,677	5,868
United Kingdom	-	-	285	302	285	302	-	-	-	-	285	302
France	-	-	1,088	1,549	1,088	1,549	-	-	-	-	1,088	1,549
Italy	-	-	513	841	513	841	-	-	-	-	513	841
Other	1,066	-	7,194	6,009	8,260	6,009	-	-	-	-	8,260	6,009
Americas	**-**	**-**	**12,475**	**7,729**	**12,475**	**7,729**	**-**	**-**	**-**	**-**	**12,475**	**7,729**
USA	-	-	9,933	7,470	9,933	7,470	-	-	-	-	9,933	7,470
Other	-	-	2,542	259	2,542	259	-	-	-	-	2,542	259
APAC	**-**	**-**	**3,354**	**4,566**	**3,354**	**4,566**	**-**	**-**	**-**	**-**	**3,354**	**4,566**
China	-	-	1,727	1,454	1,727	1,454	-	-	-	-	1,727	1,454
Other	-	-	1,627	3,112	1,627	3,112	-	-	-	-	1,627	3,112
Total**	**106,623**	**66,340**	**36,086**	**32,688**	**142,709**	**99,028**	**652**	**361**	**(649)**	**(359)**	**142,712**	**99,029**

* Trade working capital comprises inventories and trade receivables (current and non-current), less trade payables.

** The presentation of revenue by region takes into account decreased earnings due to value step-up.

8. Revenue

The Group generates revenue from contracts with customers according to IFRS 15 primarily from the following products and services.

- **Financial Technologies:** Brokering insurance policies and leases, as well as selling services and bicycles and e-bikes at the end of the lease term
- **Security Technologies:** Sale of KVM devices and KVM systems

Revenue is also generated from leases in accordance with IFRS 16.

- **Financial Technologies:** Interest income from finance leases, payments collected from operating leases and income from the disposal of lease receivables

Contract balances

The following table shows trade receivables, contract assets and contract liabilities from contracts with customers.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Non-current trade receivables	13,883	8,411
Current trade receivables	15,434	11,611
Trade receivables	**29,317**	**20,022**
Contract assets	100	155
Contract liabilities	(1,391)	(1,430)

The contract assets relate to inspections of bicycles and e-bikes that had already been performed as of the reporting date and for which not all related inspection installments had yet been paid by the customer.

The contract liabilities include prepayments received for service packages amounting to €967 thousand and advance payments of €424 thousand made by customers for extended warranty agreements.

The amount of €1,430 thousand contained in contract liabilities at the December 31, 2021 prior-year reporting date was recognized as revenue in the reporting period.

Unfulfilled performance obligations

The transaction price attributable to (unfulfilled or partly unfulfilled) remaining performance obligations for bicycle service packages is broken down as follows.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Within one year	982	267
In more than one year	2,034	1,981
Total	**3,015**	**2,248**

The Group expects revenue to be recognized for the remaining performance obligations/ claims service within one year or a fixed hourly rate will be billed. As per IFRS 15.B16, the Group does not report the transaction price for the unfulfilled performance obligations.

8.1 Revenue from contracts with customers

The following table classifies the Group's revenue from contracts with customers (IFRS 15) by the most important product and service lines and the timing of revenue recognition. For information on primary geographical markets, please refer to Note 7. No customer accounted for more than 10% of the Group's revenue in the reporting period.

Disaggregation of revenue

	Financial Technologies		Security Technologies		Group	
€ thousand	2022	2021	2022	2021	2022	2021
External customers						
Products sold	26,926	1,034	39,229	33,390	66,154	34,424
Services rendered	675	59	582	449	1,260	510
Customer/ claims service	325	(6)	-	-	325	(6)
Service packages	1,457	39	-	-	1,457	39
Commissions	35,147	431	-	-	35,147	431
External gross revenue	**64,529**	**1,558**	**39,811**	**33,839**	**104,343**	**35,399**
Sales allowances	-	-	(3,725)	(4,916)	(3,725)	(4,916)
Revenue from contracts with customers	**64,529**	**1,558**	**36,086**	**28,924**	**100,618**	**30,483**
Rental income	83	5	-	-	83	5
Interest income from finance leases	13,187	1,440	-	-	13,187	1,440
Payments from operating leases	503	1	-	-	503	1
Servicing of forfaited receivables	1,954	1	-	-	1,954	1
Income from the disposal of lease receivables	26,366	7,112	-	-	26,366	7,112
Revenue from leases	**42,094**	**8,559**	**-**	**-**	**42,094**	**8,559**
Revenue	**106,623**	**10,117**	**36,086**	**28,924**	**142,712**	**39,042**
Timing of revenue recognition from contracts with customers						
Point in time	64,205	1,386	35,504	28,474	99,709	29,860
Over time	325	172	582	449	909	623
Revenue from contracts with customers	**64,529**	**1,558**	**36,086**	**28,924**	**100,618**	**30,483**
Other revenue	42,094	8,559	-	-	42,094	8,559
Revenue	**106,623**	**10,117**	**36,086**	**28,924**	**142,712**	**39,042**

8.2 Revenue from leases

In addition to revenue from contracts with customers in accordance with IFRS 15, the Group generates various types of income from leases (IFRS 16 and IFRS 9). These result directly from the Group's original business activities, particularly in the Financial Technologies segment and are therefore also reported in revenue.

Revenue includes interest income from finance leases, payments collected from operating leases and income from the disposal of lease receivables.

Income from the disposal of lease receivables arises as a result of the non-recourse forfaiting of lease receivables. In the event of forfaiting, the right to receive future lease payments and/ or residual values of leases is sold to a third-party financing partner. If the terms of this sale result in substantially all of the risks and rewards of the lease receivable sold transferring to the buyer, then the Group must derecognize the lease receivables. Forfaiting takes place at a discount from the nominal value of the lease payments to be collected in the future. Despite this discount, the selling price is normally well over the amortized cost that the Group applied to generate the lease. This results in income, which must be recognized in profit or loss for the period and that the Group reports in revenue.

9. Own work capitalized

Of own work capitalized, €986 thousand (previous year: €- thousand) is attributable to development costs required to be capitalized under IAS 38. These development costs include in particular investments in the development of KVM solutions for extending and switching computer signals.

10. Cost of materials

Cost of materials is disaggregated as follows.

€ thousand	2022	2021
Cost of raw materials, consumables and supplies and purchased merchandise	22,615	6,913
Cost of purchased services	29,119	844
Cost of materials	**51,734**	**7,757**

The cost of purchased services relates mainly to the Financial Technologies segment and includes commission expenses of €10,928 thousand (previous year: €257 thousand), flat tax assumed by the Group of €6,328 thousand (previous year: €383 thousand) and interest expense of €3,029 thousand (previous year: €228 thousand) from the buyback obligation for bicycles at the end of the term from third-party leasing companies.

11. Personnel expenses

Personnel expenses break down as follows.

€ thousand	2022	2021
Wages and salaries	22,333	13,218
Social security and post-employment benefit costs	3,620	1,599
Personnel expenses excluding share-based payments	**25,953**	**14,817**
Share-based payments	673	196
Personnel expenses	**26,625**	**15,013**

Please refer to Note 37 for further information on share-based payment arrangements.

12. Other operating expenses

Other operating expenses break down as follows.

€ thousand	2022	2021
Advertising and travel expenses	4,316	1,662
Preparation and audit of financial statements	3,005	1,062
Other legal and consulting fees	2,575	1,356
IT costs	2,256	395
Insurance and contributions	745	572
Incidental transaction costs	317	53
Supervisory Board remuneration	289	276
Other lease expenses (incidental costs, service components)	229	90
Foreign exchange losses	111	52
Expenses for leases of low-value assets	21	117
Due diligence costs	2	1,102
Expenses for short-term leases	0	12
Costs from M&A transactions	-	14,528
Other costs	5,677	2,003
Other operating expenses	**19,542**	**23,280**

Costs from M&A transactions in the previous year had related to the acquisition of Bikeleasing and kvm-tec and mainly comprise a performance-based commission, expenses for due diligence and legal advice and notary costs. By contrast, the due diligence costs relate to the detailed examination of potential acquisitions that were either terminated in the reporting period or are still in progress as of the reporting date.

13. Other operating income

Other operating income breaks down as follows.

€ thousand	2022	2021
Vehicle benefits in kind	316	85
Investment grants under IAS 20	307	11
Prior-period income	263	264
Currency translation gains	184	214
Loan forgiveness (PPP loan)	-	213
Singapore support programs	-	21
Miscellaneous other operating income	405	611
Other operating income	**1,475**	**1,419**

14. Amortization, depreciation and impairment losses

Depreciation, amortization and impairment losses comprise depreciation of property, plant and equipment and amortization of intangible assets amounting to €17,430 thousand (previous year: €7,256 thousand). €2,286 thousand (previous year: €742 thousand) of this amount relates to depreciation of property, plant and equipment and amortization of intangible assets not identified in the course of the purchase price allocation for the acquisition of subsidiaries. Depreciation of right-of-use assets from leases amounts to €960 thousand (previous year: €274 thousand).

Amortization of intangible assets (PPA assets) identified in the course of acquisitions of subsidiaries are also included. These amounts are attributable to capitalized intangible assets as follows.

€ thousand	2022	2021
Basic technologies	3,122	2,721
Customer base	8,903	2,561
Trademarks	2,160	958
Total	**14,184**	**6,240**

15. Financial result

Finance costs are composed of the following items.

€ thousand	2022	2021
Interest on financial liabilities at amortized cost	12,246	2,225
Negative interest on bank balances	30	558
Interest on lease liabilities	119	17
Change in success fee recognized in profit or loss	2,353	-
Finance costs	**14,748**	**2,800**

Financial income amounts to €4,779 thousand (previous year: €36 thousand). Of this amount, €4,743 thousand (previous year: €- thousand) results from the remeasurement of the earnout liability from the acquisition of kvm-tec.

16. Income tax expense

Income taxes recorded in profit or loss for the period break down as follows.

€ thousand	2022	2021
Current tax expense		
Current year	6,240	2,031
Deferred tax expense		
Reversal of temporary differences	2,622	59
Total	**8,862**	**2,090**

The tax expense does not include the tax expense from discontinued operations amounting to €481 thousand (previous year: €1,291 thousand) or taxes on the disposal gain on the sale of Palas amounting to €- thousand (previous year: €- thousand). Both of these figures are presented in income from discontinued operations. Please refer to Note 34 for further information.

Change in deferred taxes

€ thousand	Jan. 1	Changes in basis of consolidation	Recognized in profit or loss	Net exchange differences	Dec. 31 Net	Dec. 31 Deferred tax assets	Dec. 31 Deferred tax liabilities
2022							
Goodwill	443	-	(50)	28	422	422	-
Other intangible assets	(44,098)	2,063	3,959	87	(37,988)	-	(37,988)
Property, plant and equipment	60,535	-	43,330	-	103,865	103,865	-
Inventories	72	-	2	-	75	72	3
Trade receivables	(1,365)	-	(1,702)	5	(3,062)	-	(3,062)
Contract assets	(46)	-	16	-	(30)	-	(30)
Lease receivables	(35,928)	-	(7,619)	-	(43,547)	-	(43,547)
Other non-financial assets	7,715	-	6,885	-	14,599	14,599	-
Contract liabilities	111	-	179	-	290	290	-
Financial liabilities	(39,100)	-	(47,612)	4	(86,708)	-	(86,708)
Trade payables	15	-	(11)	24	28	28	-
Tax assets (liabilities) before offsetting					**(52,056)**	**119,276**	**(171,332)**
Offsetting of taxes						(118,742)	118,742
Tax assets (liabilities), net					**(52,056)**	**534**	**(52,590)**
2021							
Goodwill	452	-	(45)	36	443	443	-
Other intangible assets	(16,296)	(29,447)	1,865	(220)	(44,098)	-	(44,098)
Property, plant and equipment	-	60,548	(13)	-	60,535	60,535	-
Inventories	90	-	(18)	-	72	72	-
Trade receivables	-	(5,168)	3,803	-	(1,365)	-	(1,365)
Contract assets	-	(44)	(2)	-	(46)	-	(46)
Lease receivables	-	(74,750)	38,823	-	(35,928)	-	(35,928)
Other non-financial assets	-	7,368	346	-	7,715	7,715	(0)
Contract liabilities	-	103	9	-	111	111	-
Financial liabilities	-	5,549	(44,649)	-	(39,100)	-	(39,100)
Trade payables	-	-	(9)	24	15	15	-
Tax assets (liabilities) before offsetting					**(51,645)**	**68,891**	**(120,537)**
Offsetting of taxes						(68,348)	68,348
Tax assets (liabilities), net					**(51,645)**	**544**	**(52,189)**

The deferred tax liabilities relate primarily to the customer bases, basic technologies and trademarks identified in the course of purchase price allocation for the acquisitions of the subsidiaries (PPA assets) and will be reversed through profit or loss (but with no effect on cash flow) in the future as these PPA assets are amortized. No tax payments are included in this figure and there is no outflow of cash.

Reconciliation of effective tax rate

The differences between the expected income tax expense based on the calculated tax rate and the actual income tax expense can be seen in the following table. The applied tax rate is based on the German Group income tax rate. The German Group tax rate comprises the corporate income tax rate of 15% (previous year: 15%), plus the solidarity surcharge of 5.5% (previous year: 5.5%) and a trade tax rate of 14.7% (previous year: 14.7%). The tax rate for trade tax is determined by the average trade tax multiplier of 420% (previous year: 420%).

Deferred taxes for the assets identified for acquisitions were recognized based on the following tax rates.

> IHSE: 17% to 28% (previous year: 17% to 28%).
> Bikeleasing: 30% (previous year: 30%)

Income tax reconciliation

€ thousand	2022	% of earnings	2021	% of earnings
Earnings before tax	**19,329**		**(16,880)**	
Tax based on German tax rate of the entity	**(5,799)**	**30%**	**5,064**	**30%**
Tax-exempt income	1,366	(7%)	86	1%
Tax rate effects	(104)	1%	(66)	(0%)
Permanent differences	(692)	4%	(475)	(3%)
Non-deductible operating expenses	(1,602)	8%	(3,190)	(19%)
Trade tax effects	1,415	(7%)	(25)	(0%)
Losses in the current year for which no deferred tax asset was recognized	(3,446)	18%	(3,744)	(22%)
Recognition of tax effects of previously unrecognized tax loss carryforwards	-	-	272	2%
Prior-period (taxable profit)/ tax loss	-	-	(12)	(0%)
Income tax expense	**(8,862)**	**46%**	**(2,090)**	**(12%)**

Unrecognized deferred tax assets

Group entities have tax loss carryforwards of €56,886 thousand at the reporting date (previous year: €45,466 thousand). This would result in a tax effect of €17,066 thousand (previous year: €14,264 thousand). No deferred tax assets were recognized for these tax loss carryforwards as future taxable earnings in the relevant income tax consolidation groups were not sufficiently concrete at the date of preparing the financial statements.

17. Earnings per share

The following table presents the calculation of earnings per share, based on the profit or loss attributable to the shareholders of BKHT. Basic earnings per share is equal to diluted earnings per share.

	2022	2021
Profit or loss for the period in € thousand	49,019	(15,881)
of which continuing operations	1,024	(16,054)
of which discontinued operations	47,995	173
Weighted average number of shares outstanding	10,946,519	10,433,339
Earnings per share (€)	**4.48**	**(1.52)**
of which continuing operations	0.09	(1.54)
of which discontinued operations	4.38	0.02

Adjusted pro forma earnings per share are shown as follows. Please refer to Note 6 for further information.

	2022	2021
Adjusted earnings attributable to shareholders of BKHT in € thousand	7,986	4,512
Weighted average number of shares outstanding	10,946,519	10,946,536
Adjusted earnings per share (€)	**0.73**	**0.41**

III. Notes to the statement of financial position

18. Property, plant and equipment

There were no indicators of any need to charge impairment losses on property, plant and equipment in the reporting period. Please refer to Note 28 for information on pledges of items of non-current assets as collateral for liabilities.

Please refer to Note 38.1 for further information on right-of-use assets under leases.

€ thousand	Land and buildings	Technical equipment and machinery	Operating and office equipment	Prepayments, construction in progress	Total
Cost					
Jan. 1, 2021	**8,085**	**2,076**	**1,475**	**10**	**11,646**
Acquisitions through business combinations	355	821	575	-	1,751
Additions	13	2,314	412	3	2,741
Disposals	-	(119)	(23)	-	(142)
Reclassifications	-	-	10	(10)	-
Net exchange differences	-	26	35	-	62
Dec. 31, 2021	**8,453**	**5,117**	**2,485**	**3**	**16,058**
Additions	29	1,533	849	91	2,503
Disposals	-	(2,432)	(691)	-	(3,122)
Disposals due to deconsolidation	(29)	(1,736)	(853)	-	(2,618)
Reclassification into assets held for sale	(8,046)	-	-	-	(8,046)
Reclassifications	-	-	93	(93)	-
Net exchange differences	-	12	26	-	38
Dec. 31, 2022	**407**	**2,495**	**1,909**	**1**	**4,815**
Accumulated depreciation					
Jan. 1, 2021	**233**	**430**	**501**	**-**	**1,164**
Amortization, depreciation and impairment losses	217	522	388	-	1,126
Disposals	-	(70)	(10)	-	(81)
Net exchange differences	-	7	24	-	31
Dec. 31, 2021	**450**	**888**	**903**	**-**	**2,241**
Amortization, depreciation and impairment losses	225	1,127	687	-	2,039
Disposals	-	(473)	(610)	-	(1,083)
Disposals due to deconsolidation	(0)	(808)	(493)	-	(1,302)
Reclassification into assets held for sale	(664)	-	-	-	(664)
Net exchange differences	-	2	22	-	24
Dec. 31, 2022	**10**	**735**	**510**	**-**	**1,255**
Right-of-use assets, January 1, 2021	893	341	-	-	1,233
Right-of-use assets, December 31, 2021	1,545	795	-	-	2,339
Right-of-use assets, December 31, 2022	**3,298**	**773**	**-**	**-**	**4,071**
Carrying amounts					
Jan. 1, 2021	8,744	1,986	974	10	11,715
Dec. 31, 2021	9,547	5,024	1,582	3	16,156
Dec. 31, 2022	**3,695**	**2,533**	**1,399**	**1**	**7,629**

19. Intangible assets and goodwill

€ thousand	Goodwill	Development expenses	Other intangible assets: IT licenses, software, website	Prepayments	Trademarks	Basic technologies	Customer base	Total
Cost								
Jan. 1, 2021	**91,358**	**1,186**	**379**	**-**	**10,200**	**25,100**	**33,522**	**161,746**
Acquisitions through business combinations	152,221	526	387	-	13,100	3,374	82,000	251,609
Additions	-	861	338	97	-	-	-	1,296
Disposals	-	-	-	-	-	-	-	-
Reclassifications	-	-	87	(87)	-	-	-	
Net exchange differences	-	-	3	-	-	-	1,220	1,223
Dec. 31, 2021	**243,579**	**2,573**	**1,194**	**10**	**23,300**	**28,474**	**116,743**	**415,874**
Additions	367	1,357	548	3	-	-	-	2,274
Disposals	-	(15)	(54)	-	-	-	-	(69)
Disposals due to deconsolidation	(22,010)	(2,418)	(225)	-	(1,700)	(3,500)	(4,800)	(34,653)
Reclassifications	-	-	3	(13)	-	-	-	(10)
Net exchange differences	-	-	-	-	-	-	980	980
Dec. 31, 2022	**221,936**	**1,497**	**1,465**	**-**	**21,600**	**24,974**	**112,923**	**384,395**
Accumulated depreciation								
Jan. 1, 2021	**-**	**163**	**117**	**-**	**1,275**	**4,383**	**3,074**	**9,012**
Amortization, depreciation and impairment losses	-	102	164	-	1,128	3,421	3,041	7,856
Disposals	-	-	-	-	-	-	-	-
Disposals due to deconsolidation								
Net exchange differences	-	-	0	-	-	-	134	134
Dec. 31, 2021	**-**	**265**	**281**	**-**	**2,403**	**7,804**	**6,249**	**17,001**
Amortization, depreciation and impairment losses	-	210	595	-	2,316	3,763	9,343	16,227
Disposals	-	-	(47)	-	-	-	-	(47)
Disposals due to deconsolidation	-	(336)	(109)	-	(680)	(2,800)	(1,920)	(5,845)
Net exchange differences	-	-	-	-	-	-	121	121
Dec. 31, 2022	**-**	**139**	**721**	**-**	**4,039**	**8,768**	**13,793**	**27,459**
Carrying amounts								
Jan. 1, 2021	91,358	1,024	262	-	8,925	20,717	30,448	152,733
Dec. 31, 2021	243,579	2,309	913	10	20,897	20,670	110,494	398,872
Dec. 31, 2022	**221,936**	**1,358**	**744**	**-**	**17,561**	**16,206**	**99,130**	**356,936**

The annual impairment tests of goodwill were conducted as of December 31, 2022 for all operating segments.

Long-term corporate planning in each case extends to the end of the detailed planning period of five years after the reporting date. The significant assumptions to which the long-term corporate planning is sensitive are growth in new business and the purchase price of materials. These developments were assessed and identified based on past experience, publicly available data and by using the existing sales pipeline and management's assessment of future market conditions. Planned future cash flows are discounted using risk-appropriate (pre-tax) discount rates on the reporting date. The cost of capital or cost of equity rates used for discounting are based on the risk-free rate and on a market risk premium. In addition, the beta factor, borrowing costs and the capital structure are taken into account. These were derived individually for the CGUs based on an appropriate peer group. The assumptions made are subject to a certain sensitivity.

The impairment test for the goodwill of the Security Technologies segment (€80,269 thousand) is based on the assumptions shown in the following table.

	Dec. 31, 2022	Dec. 31, 2021
Determination of recoverable amount	Value in use	Value in use
Discount rate	9.1%	8.5%
Pre-tax discount rate	9.6%	8.6%
Sustainable growth rate	1.3%	1.4%
Forecast EBITDA growth rate (average for the next five years)	19%	20%

The value in use of the Security Technologies operating segment determined on the basis of these assumptions exceeds the segment's carrying amount. No impairment loss is therefore recognized.

The impairment test for the goodwill of the Financial Technologies segment (€141,666 thousand) is based on the assumptions shown in the following table. The carrying amount of this goodwill increased by €367 thousand in the reporting period due to a change in the way it is calculated.

	Dec. 31, 2022	Dec. 31, 2021
Determination of recoverable amount	Fair value less costs to sell	Fair value less costs to sell
Discount rate	13.3%	10.3%
Pre-tax discount rate	13.3%	10.3%
Sustainable growth rate	1.1%	1.0%
Forecast EBT growth rate (average for the next five years)	43%	58%

The value in use of the Financial Technologies operating segment determined on the basis of these assumptions exceeds the segment's carrying amount. No impairment loss is therefore recognized.

20. Inventories

Inventories are composed of the following items.

	Dec. 31, 2022	Dec. 31, 2021
Raw materials and consumables	6,932	7,441
Work in progress	1,084	2,203
Finished goods	2,897	2,924
Inventories	**10,914**	**12,568**

All inventories are used to secure liabilities. Please refer to Note 28 for further information. No impairment losses or reversals of impairment losses were recognized in profit or loss in the reporting period.

21. Trade receivables, contract assets and lease receivables

	Dec. 31, 2022	Dec. 31, 2021
Non-current trade receivables	13,883	8,411
Current trade receivables	15,434	11,611
Trade receivables	**29,317**	**20,022**
Non-current leasing receivables	130,887	82,142
Current leasing receivables	13,633	37,617
Lease receivables	**144,520**	**119,759**

To improve comparability, the prior-period presentation was modified in respect to classification into current or non-current.

	Impairment losses according to the simplified approach		
€ thousand	Trade receivables	Contract assets	Lease receivables
Jan. 1, 2021	**583**	**-**	**-**
Utilization	(43)	-	(8)
Direct write-down	-	-	-
Acquisitions through business combinations	17	-	160
Addition	8	-	153
Reversal	(15)	-	-
Exchange rate-related and other changes	34	-	-
Dec. 31, 2021	**583**	**-**	**305**
Utilization	(2)	-	(153)
Direct write-down	-	-	-
Addition	183	-	118
Reversal	(90)	-	-
Exchange rate-related and other changes	19	-	-
Dec. 31, 2022	**694**	**-**	**270**

An impairment loss is expected when certain issues arise, such as late payment over time or the initiation of enforcement measures are in place. The table above shows changes in impairment losses relating to trade receivables and contract assets and lease receivables. Please refer to Note 4.11 for further information.

22. Other financial assets

Other financial assets amounted to €26,165 thousand (previous year: €15,280 thousand) and relate mainly to unavailable cash in the SPV of €8,411 thousand (previous year: €10,384 thousand) from the securitization of lease receivables and claims for reimbursement of VAT as well as security deposits paid. This item also includes the earnout receivable from the disposal of Palas amounting to €10,816 thousand (previous year: €- thousand).

23. Cash and cash equivalents

Cash and cash equivalents consist of the following items.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Bank balances	70,800	30,324
Cash in hand	0	3
Cash and cash equivalents in statement of financial position	**70,800**	**30,327**
Overdraft facilities used for cash management	(19)	(995)
Cash and cash equivalents presented in the statement of cash flows	**70,780**	**29,331**

Bank balances bear floating rates of interest for call deposits. The carrying amount of these assets corresponds to their fair value.

24. Assets held for sale

The Group, through IHSE, sold a commercial property at its headquarters in Oberteuringen to a German family office. The purchase agreement was signed on December 13, 2022 and closing (and thus realization of the disposal gain) is expected in the new fiscal year 2023. The sale proceeds of €10,000 thousand are considerably higher than the acquisition or construction cost of the property.

IHSE will continue to use the building and has signed a long-term lease with the new owner. The property is reported as an asset held for sale at the reporting date in the amount of €7,381 thousand.

25. Subscribed capital

BKHT's share capital as of December 31, 2022 amounts to €10,947,637 (previous year: €10,386,808) and is composed of 10,947,637 registered shares, each with a notional value of €1.00 per share.

As of December 31, 2021, a capital increase of 560,829 new shares at a value of €13,003 thousand had not yet been entered in the commercial register and was thus reported under the item "Capital increase not yet implemented". The capital increase was entered in the commercial register on February 10, 2022. As a result, the amount of €560,829 was reclassified to the subscribed capital and the remaining amount of €12,442 thousand to the capital reserve. This increased the Company's subscribed capital by €560,829 from €10,386,808 to €10,947,637.

The classification of and changes in equity during the reporting period are presented in the consolidated statement of changes in equity.

According to voting rights disclosures, the distribution of the shares among the shareholders as of the reporting date was as follows.

Shareholder	% interest
Marco Brockhaus family (direct and indirect)	21.4%
Kayne Anderson Rudnick Investment Management LLC (Virtus Investment Partners, Inc.)	9.5%
DWS Investment GmbH	6.9%
ABACON Invest GmbH	5.7%
ACUSTICA Zweite Verwaltungs GmbH	4.8%
Bastian Krause	3.9%
ORGENTEC Holding GmbH	3.7%
Dr. Liedtke Vermögensverwaltung GmbH	3.3%
Paladin Asset Management Investmentaktiengesellschaft	3.3%
VESTA GmbH	3.1%
Other free float	34.4%
Total	**100.0%**

Authorized and contingent capital

At the Company's Annual General Meeting on June 27, 2019, the share capital was contingently increased by up to €425,200 (**Contingent Capital 2019/I**). The contingent capital serves to grant rights to holders of share warrants from the stock option program. Please refer to Note 37 for further information.

On July 9, 2020, the Annual General Meeting authorized the Executive Board, with the consent of the Supervisory Board, to increase the share capital on one or more occasions until July 8, 2025, in exchange for cash and/ or contributions in kind up to a total of €4,959,029, with the option to exclude shareholders' preemptive rights (**Authorized Capital 2020/II**). At the same time, the remaining Authorized Capital 2017/I, 2019/I and 2020/I were revoked. On entry in the commercial register on February 10, 2022, the share capital was increased by €560,829 by way of a non-cash capital increase. As a result, €4,398,200 remains from Authorized Capital 2020/II as of the reporting date.

At the Company's Annual General Meeting on July 9, 2020, the share capital was contingently increased by up to €2,000,000 (**Contingent Capital 2020/I**). In connection with the creation of Contingent Capital 2020/I, the Executive Board was authorized, with the consent of the Supervisory Board, to issue bonds with warrants and/or convertible bonds in a maximum total amount of €75,000,000.

26. Capital reserves

The capital reserve includes the premiums arising from the issue of shares, less costs for the capital increases and distributable capital reserves.

27. Other reserves

Other reserves include the accumulated personnel expenses from equity-settled share-based payments under IFRS 2. Please refer to Note 37 for further information.

28. Financial liabilities

Financial liabilities are composed of the items below.

Financial liabilities

	Non-current		Current		Total	
€ thousand	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
Senior loans	**42,532**	**64,335**	**3,969**	**15,644**	**46,501**	**79,979**
Senior acquisition loans	32,532	64,335	3,939	5,644	36,471	69,979
Registered bond	10,000	-	30	10,000	10,030	10,000
Subordinated loans	**38,932**	**49,696**	**-**	**-**	**38,932**	**49,696**
Subordinated acquisition loans	38,932	34,571	-	-	38,932	34,571
Vendor loans	-	15,125	-	-	-	15,125
Real estate loans	**5,112**	**5,540**	**402**	**402**	**5,514**	**5,942**
Other financial liabilities	**7,014**	**4,375**	**921**	**941**	**7,934**	**5,316**
Lease liabilities	3,276	1,409	921	941	4,196	2,350
NCI put liability	-	1,581	-	-	-	1,581
Success fee liability Bikeleasing	3,738	1,385	-	-	3,738	1,385
Financial liabilities excluding leases	**93,590**	**123,946**	**5,291**	**16,987**	**98,881**	**140,933**
Lease refinancing	**143,612**	**115,654**	**10,196**	**12,525**	**153,809**	**128,179**
Securitized liabilities	71,047	65,000	126	110	71,173	65,110
Loans for lease financing	46,730	31,924	19	995	46,749	32,919
Financial liabilities from forfaiting	3,894	398	274	5,874	4,169	6,272
Buyback and servicing of third-party leases	21,941	18,332	9,777	5,546	31,717	23,878
Total financial liabilities	**237,202**	**239,600**	**15,487**	**29,512**	**252,690**	**269,112**

Senior loans

Senior acquisition loans | The senior acquisition loans were taken out at the time of the acquisition of Palas, IHSE and Bikeleasing. They serve the proportionate debt financing of the purchase prices of the interests in the M&A transactions and are fully secured by the assignment of non-current and current assets as collateral.

Registered bond | Bikeleasing uses a registered bond for its financing independently of acquisitions.

Subordinated loans

Subordinated acquisition loan | As part of the acquisition of Bikeleasing, a subordinated acquisition loan was assumed at the level of the intermediate holding company BCM Erste Beteiligungs GmbH. The purpose of the subordinated loan is the partial debt financing of the purchase price of the interest in the acquisition.

Vendor loan | In the same context, BKHT financed a portion of the purchase price payment for the interests in Bikeleasing not with cash but with a vendor loan from Bikeleasing's founders. This vendor loan was repaid in full at the beginning of December 2022.

Real estate loans

The real estate loans primarily relate to construction finance for IHSE's headquarters in Oberteuringen on Lake Constance. They are fully secured by land charges. Following the planned sale of the IHSE property at the beginning of 2023, the plan is to repay the Group's real estate loans almost in their entirety and to remove the relevant land charges. Following this, the only real estate loan remaining in the Group will be for a Bikeleasing office building in Vellmar. This amounts to €103 thousand as of the reporting date.

Other financial liabilities

Lease liabilities | The Group's lease liabilities represent the recognized present values of future lease payments discounted to the reporting date. Financial liabilities arising from leases in the amount of €1,257 thousand were repaid and €134 thousand was paid as interest expense for leasing in the reporting period. Future cash flows at the reporting date amounted to €5,397 thousand. Potential further future cash outflows were not recognized as lease liabilities as it is not reasonably certain that the leases will be extended or terminated. Disclosures on right-of-use assets from leases can be found in Note 38.1.

Success fee liability Bikeleasing | In the comparative period, the broker received a fee for brokering the Bikeleasing transaction. This was recognized in profit or loss for the comparative period. In addition, the broker has the right to claim a proportional interest in a possible future increase in Bikeleasing's value. This claim comes due upon sale of the shares or, if no sale occurs, then 10 years after acquisition. The claim is reported as a liability.

Lease refinancing

Securitized liabilities | In order to finance its robust growth, Bikeleasing launched a securitization program in August 2021 with a major German insurance company in parallel to its existing funding options. The securitization transaction involved selling lease receivables to a special purpose vehicle (SPV) in several tranches for a total volume of €100,000 thousand. The SPV issued a series of notes to the investor for the purchase of the lease receivables. The lease receivables held in the Group are the source and collateral for settling the notes. As of the reporting date, these totaled €57,607 thousand. The notes carry annual interest of 1.25%, and all of the tranches rank equally. Due to its contractual structure, the SPV must be consolidated by the Group, which is why both the lease receivables and the securitized liabilities (notes) are reported in the consolidated statement of financial position.

Loans for lease refinancing | Another form of refinancing in the leasing business is loan financing, i.e., the Group assumes loans from banks in the amount of the lease volume to be financed. The lease receivables and lease assets serve as collateral for the Group's loan liabilities. A total of €46,730 thousand in lease receivables are financed with loans.

Financial liabilities from forfaiting | In addition to the securitization transaction and conventional loans, the majority of the leasing business is refinanced through forfaiting. Forfaiting involves assigning the claims from leases along with all associated rights to banks. To the extent that the terms of the forfaiting agreement do not permit the forfaited lease receivables to be derecognized, they remain on the consolidated statement of financial position and must be reported as a liability in the amount of the amount received by way of forfaiting. In addition, the Group as a lessor provides additional services such as dunning, liquidating leased assets from terminated leases, document retention and reporting. In order to service the forfaited lease receivables from finance leases, the Group recognizes liabilities from administration and settlement obligations totaling €5,026 thousand. This generally relates to deferred future personnel expenses.

Calculation of net debt

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Senior loans	46,501	79,979
Subordinated loans	38,932	49,696
Real estate loans	5,514	5,942
Cash and cash equivalents*	(70,800)	(30,327)
Net debt from loans	**20,147**	**105,290**
Other financial liabilities	**7,934**	**5,316**
Lease refinancing	153,809	128,179
Lease receivables	(144,520)	(119,759)
Net debt from leasing	**9,289**	**8,420**
Net debt	**37,370**	**119,027**

* Cash and cash equivalents are deducted from the loan in this presentation for purposes of analysis. There is no corresponding ring fencing in place.

Buyback and servicing of third-party leases | Part of the leasing business is handled by non-Group leasing companies. The bicycles are sold to third-party leasing partners in return for a commission for this purpose. At the same time, the Group commits to buying back these bicycles at the end of the lease term at a price amounting to 10% of the original net purchase price. In accounting terms, this is not treated as a sale due to the fixed buyback agreement, but instead as a finance lease for which a residual value receivable and liabilities for the buyback obligation are recognized in the same amount, €26,691 thousand. This is a balance sheet extension based on special rules in IFRS 16. At the end of the lease term, approximately 91% of the bicycles are sold to the employees/ users of the bicycle. Around 9% of the bicycles are purchased by a specialist dealer, the employer or a third-party recycler. The remaining amount of the liability relates, as in the case of forfaiting, to future servicing.

Information on the extent to which the Group is exposed to interest rate and liquidity risks can be found in Note 33.4.

Reconciliation of changes in liabilities to cash flows from operating and financing activities

	Operating activities			Financing activities								
€ thousand	Financial liabilities used for refinancing	Securitized liabilities	Total	Senior loans	Subordinated loans	Real estate loans	Lease liabilities	Financial liabilities from forfaiting	Buyback and servicing of third-party leases	Success fee liability	NCI put liability	Total
Jan. 1, 2022	**32,919**	**65,110**	**98,029**	**79,979**	**49,696**	**5,941**	**2,350**	**6,272**	**23,878**	**1,385**	**1,581**	**171,083**
Loans and other borrowed funds raised	-	35,000	**35,000**	10,000	-	-	-	-	-	-	-	**10,000**
Repayment of lease liabilities	-	-	**-**	-	-	-	(1,257)	-	-	-	-	**(1,257)**
Repayment of loans and other borrowed funds	-	(29,063)	**(29,063)**	(35,743)	(15,000)	(429)	-	-	-	-	-	**(51,172)**
Interest paid	(1,242)	(919)	**(2,161)**	(2,547)	(1,508)	(84)	(134)	-	-	-	-	**(4,272)**
Total change in cash flows	**(1,242)**	**5,018**	**3,776**	**(28,290)**	**(16,508)**	**(512)**	**(1,390)**	**-**	**-**	**-**	**-**	**(46,701)**
New leases according to IFRS 16	-	-	**-**	-	-	-	3,582	-	-	-	-	**3,582**
The effects of changes in foreign exchange rates	-	-	**-**	-	-	-	3	-	-	-	-	**3**
Change in the basis of consolidation	-	-	**-**	(9,115)	-	-	(482)	-	-	-	(1,687)	**(11,284)**
Change in overdraft facilities	13,831	-	**13,831**	-	-	-	-	-	-	-	-	**-**
Other changes	-	-	**-**	-	-	-	-	(2,331)	7,734	-	-	**5,403**
Interest income	-	-	**-**	-	-	-	-	-	-	-	-	**-**
Interest expense	1,242	1,045	**2,287**	3,926	5,744	86	134	228	106	2,353	106	**12,682**
Dec. 31, 2022	**46,749**	**71,173**	**117,922**	**46,500**	**38,932**	**5,514**	**4,196**	**4,169**	**31,717**	**3,738**	**-**	**134,767**

Reconciliation of changes in liabilities to cash flows from operating and financing activities in the previous year

	Operating activities			Financing activities								
€ thousand	Financial liabilities used for refinancing	Securitized liabilities	Total	Senior loans	Subordinated loans	Real estate loans	Lease liabilities	Financial liabilities from forfaiting	Buyback and servicing of third-party leases	Success fee liability	NCI put liability	Total
Jan. 1, 2021	**-**	**-**	**-**	**45,376**	**-**	**6,180**	**1,253**	**-**	**-**	**-**	**1,451**	**54,260**
Loans and other borrowed funds raised	-	5,000	5,000	29,100	34,300	-	-	-	-	-	-	63,400
Repayment of lease liabilities	-	-	-	-	-	-	(558)	-	-	-	-	(558)
Repayment of loans and other borrowed funds	-	-	-	(4,583)	-	(607)	-	-	(189)	-	-	(5,379)
Interest paid	-	(17)	(17)	(1,578)	(97)	(87)	(35)	-	-	-	-	(1,797)
Total change in cash flows	**-**	**4,983**	**4,983**	**22,939**	**34,203**	**(694)**	**(593)**	**-**	**(189)**	**-**	**-**	**55,666**
New leases according to IFRS 16	-	-	-	-	-	-	481	-	-	-	-	481
Changes due to the acquisition of subsidiaries	31,820	60,000	91,820	10,000	15,000	368	1,175	5,839	20,885	1,385	-	54,653
Change in overdraft facilities	660	-	660	-	-	-	-	-	-	-	-	-
Other changes	-	-	-	-	-	-	-	433	3,182	-	-	3,614
Interest expense	439	127	566	1,664	493	87	35	-	-	-	130	2,409
Dec. 31, 2021	**32,919**	**65,110**	**98,029**	**79,979**	**49,696**	**5,941**	**2,350**	**6,272**	**23,878**	**1,385**	**1,581**	**171,083**

29. Trade payables

Trade payables amounted to €14,080 thousand (previous year: €11,305 thousand). Information on the Group's liquidity risks relating to trade payables can be found in Note 33.4.

30. Other liabilities

Other liabilities amount to €13,540 thousand (previous year: €15,100 thousand). The non-current portion amounting to €411 thousand is attributable primarily to the repayment obligation in connection with a management investment in kvm-tec. The current portion totaling €13,129 thousand (previous year: €10,531 thousand) relates primarily to outstanding invoices, personnel-related and other accruals and liabilities from taxes and duties.

At the prior-period reporting date, other liabilities contained contingent consideration (earnout) from the acquisition of kvm-tec. Under the agreement, the Group undertakes to pay the former owner additional consideration of up to €5,000 thousand if targets for agreed key indicators (EBITDA) are met in fiscal years 2022 and 2023. As of the reporting date, management does not believe that kvm-tec will achieve the target key indicators. Consequently, the liability is recognized at an amount of zero. The change in the liability was recognized as financial income in profit or loss for the period. The liability will be revalued if kvm-tec performs better than expected in the future and it becomes probable that the sellers will be entitled to payment of the earn-out. Any increase in the liability would be recognized as a finance cost in profit or loss for the period.

31. Other provisions

Other provisions developed as follows.

€ thousand	Warranties	NCI put provision	Total
Jan. 1, 2022	**288**	**4,599**	**4,887**
Provisions recognized	60	1,654	1,714
Provisions utilized	(88)	-	(88)
Provisions reversed	-	-	-
Disposal due to sale of business (Note 34)	(105)	(6,253)	(6,358)
Dec. 31, 2022	**155**	**-**	**155**
of which: non-current	57	-	57
of which: current	98	-	98
Jan. 1, 2021	**293**	**1,905**	**2,198**
Acquisitions through business combinations	50	-	50
Provisions recognized	96	2,694	2,790
Provisions utilized	(151)	-	(151)
Provisions reversed	-	-	-
Dec. 31, 2021	**288**	**4,599**	**4,887**
of which: non-current	165	4,599	4,764
of which: current	123	-	123

32. Contingent liabilities

Current and non-current assets have been assigned as security and land charges are in place as collateral for bank loans.

IV. Other disclosures

33. Financial instruments

33.1 Classification and fair values

The Group has financial instruments that are not measured at fair value in the statement of financial position. In the case of these instruments, the fair values do not differ significantly from the carrying amounts, as the interest receivables and interest payables either approximate current market rates or the instruments are short term.

The adjacent table shows the carrying amounts and fair values of financial assets and financial liabilities, including their level in the fair value hierarchy. It does not contain information on the fair value of financial assets and financial liabilities that are not measured at fair value if the carrying amount represents an appropriate approximation of the fair value.

Financial instruments not measured at fair value

Type	Valuation technique
Financial liability	Discounted cash flows: The measurement model takes account of the present value of the expected payments, discounted using the Group-specific current interest rate.

Carrying amounts and fair values

	Carrying amount			Fair value			
€ thousand	Financial assets at amortized cost	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
Dec. 31, 2022							
Trade receivables	29,317	-	29,317				
Other receivables	26,165	-	26,165				
Lease receivables (valued under IFRS 16)	144,520	-	144,520	-	144,520	-	144,520
Cash and cash equivalents	70,800	-	70,800				
Assets not measured at fair value	**270,802**	**-**	**270,802**				
Loans		90,947	90,947	-	90,947	-	90,947
Trade payables		14,080	14,080				
Lease refinancing		153,809	153,809	-	153,809	-	153,809
Success fee liability Bikeleasing		3,738	3,738	-	-	3,738	3,738
Other liabilities		13,540	13,540				
Financial liabilities not measured at fair value		**276,114**	**276,114**				
Contingent consideration		-	-				
Financial liabilities measured at fair value		**-**	**-**				

Carrying amounts and fair values as of the prior-year reporting date

	Carrying amount			Fair value			
€ thousand	Financial assets at amortized cost	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
Dec. 31, 2021							
Trade receivables	20,022	-	20,022				
Other receivables	15,280	-	15,280				
Lease receivables (valued under IFRS 16)	119,759	-	119,759	-	119,759	-	119,759
Cash and cash equivalents	30,327	-	30,327				
Assets not measured at fair value	**185,388**	**-**	**185,388**				
Loans		135,617	135,617	-	135,617	-	135,617
NCI put liability		1,581	1,581	-	-	1,581	1,581
Trade payables		11,305	11,305				
Lease refinancing		128,179	128,179	-	128,179	-	128,179
Success fee liability Bikeleasing		1,385	1,385	-	-	1,385	1,385
Other liabilities		10,648	10,648				
Financial liabilities not measured at fair value		**288,715**	**288,715**				
Contingent consideration		4,452	4,452	-	-	4,452	4,452
Financial liabilities measured at fair value		**4,452**	**4,452**				

33.2 Net profits and losses

The following table shows the net profits and losses from financial assets and financial liabilities at amortized cost.

€ thousand	2022	2021
Financial assets		
Impairment losses	(301)	(159)
Profit or loss from disposal	26,366	7,112
Net profit or loss	**26,065**	**6,953**
Financial liabilities		
Interest	(12,246)	(2,225)
Amortization	1,954	1
Net profit or loss	**(10,292)**	**(2,224)**

Profit or loss from the disposal of forfaited lease receivables in the amount of €26,366 thousand is included in the profit or loss from financial assets carried at amortized cost (previous year: €7,112 thousand).

Liabilities from administration and settlement obligations for servicing forfaited lease receivables are amortized over the remaining term of the relevant lease in the amount of €1,954 thousand (previous year: €1 thousand), which is reported in revenue.

The unwinding of the discount on liabilities for the obligation to transfer future lease and premium payments from operating lease forfaiting totaling €228 thousand (previous year: €0 thousand) is recognized as finance cost.

33.3 Credit risk exposure

The following overview outlines trade receivables, contract assets and lease receivables categorized according to the three-stage model. The simplified approach was applied to calculate the risk provision in accordance with IFRS 9 for all trade receivables, contract assets and lease receivables.

Assignment to the risk classes is based on third-party rating information. A heightened risk is assumed when the underlying credit risk index exceeds a certain threshold. Another increase over a second threshold then results in assignment to the “non-performing” category.

	Dec. 31, 2022			Dec. 31, 2021		
€ thousand	Low risk	Heightened risk	Non-performing	Low risk	Heightened risk	Non-performing
Simplified Approach						
Trade receivables	31,690	348	495	20,475	149	504
Contract assets	100	-	-	155	-	-
Lease receivables	143,839	357	594	119,608	225	239

33.4 Financial risk management

The Company's Executive Board is responsible for developing and monitoring the risk management system. At the level of the subsidiaries, the managing directors are responsible for risk management. Appropriate processes for payables and receivables management, liquidity planning, monthly reporting etc., are implemented for this purpose.

The Executive Board defines the principles and goals of the Group's financial management. The primary goals are to safeguard liquidity and limit financial risks. Our goal is therefore not to enter into any risks from the investment of the Group's cash funds. To ensure this, these funds are held in bank accounts at domestic credit institutions until they are needed to finance acquisitions.

For the time being, it is not intended to pay dividends under BKHT's dividend policy. The aim is to invest existing cash funds to acquire high-margin, fast-growing technology companies. Assuming that our business development remains largely unchanged, we expect to be able to pay a regular dividend in the medium term.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. Credit risk essentially arises from trade and lease receivables. The carrying amounts of financial assets represent the maximum exposure to credit risk. On December 31, 2022, the Group had cash and cash equivalents of €70,800 thousand (previous year: €30,327 thousand). This amount thus represents the maximum exposure to credit risk relating to these assets. The Executive Board continuously monitors the financial situation of the banks where credit balances are held.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, the Executive Board also considers the characteristics of the overall customer base, including the credit risk of the industry and countries in which customers operate, as these factors can also have an influence on credit risk. Detailed disclosures on the concentration of revenue in certain areas can be found in Note 8.

The general economic conditions in Germany, in the eurozone and in Asia and America are actively observed. The Group limits its credit risk exposure from trade receivables by taking out trade credit insurance or by agreeing advance payments for larger orders.

In the leasing business, counterparty risk is limited because the bulk of the lease portfolio is refinanced through the sale of receivables by way of forfaiting and securitization. This transfers the risk of default to third parties. The remaining counterparty risk attributable to company-financed and loan-financed leases is diversified thanks to a cross-industry debtor group with low exposures per individual debtor.

To determine any necessary loss allowances, the Group has introduced a process that enables an assessment of expected losses on trade receivables. Please refer to Note 21 for further information.

The maximum exposure to credit risk from trade receivables on the reporting date is as follows. Trade credit insurance and letters of credit are deducted for trade receivables or taken into account as part of the loss given default.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Trade receivables	29,317	20,022
Secured by trade credit insurance and letters of credit	-	(734)
Maximum exposure to credit risk on trade receivables	**29,317**	**19,288**
Lease receivables	144,520	119,759
Hedging with matching sale and leaseback liabilities	(26,691)	(21,209)
Maximum exposure to credit risk on lease receivables	**117,829**	**98,550**

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. A distinction is made between three categories of risk: currency risk, interest rate risk and other market risk.

Currency risk | The Group is exposed to a range of currency risks because of its global operations. A distinction is made here between transaction and translation risk.

Transaction risks: Transaction risks arise due to exchange rate-related changes in value of primary financial instruments and entering into transactions with international counterparties that result in future cash flows in currencies other than the functional currency of the Group company in question. As part of financial risk management processes within Group management, currency risks are monitored and, where needed, managed by the finance departments of the relevant entities using appropriate mitigating measures. The objective of risk management is to limit to an acceptable level the effects of currency risk on future cash flows. Currency risk is partially mitigated by procuring goods and services in the relevant foreign currencies. Group entities are responsible for identifying, assessing and monitoring their transaction-related foreign currency risks.

Translation risk: Some group entities are outside of the eurozone. As the consolidated financial statements are prepared in euros, the financial statements of these entities are translated into euros, which can result in exchange rate-related differences. Hedging these differences is not the primary objective of currency risk management. A sensitivity analysis is performed for each currency that represents a significant risk to the Company, based on the following assumptions: All of the Group’s monetary financial instruments that are not denominated in the functional currency of the relevant individual entities can be used in the sensitivity analysis. As a result, translation risks are not taken into account. The hypothetical effects on profit or loss and equity for each primary line item included in the sensitivity analysis are determined by comparing the carrying amount (measured using the closing rate) with the translation value obtained using a hypothetical exchange rate. If the EUR/USD exchange rate were 10% higher, earnings before tax would be €131 thousand (previous year: €42 thousand) lower. If the EUR/USD exchange rate were 10% lower, earnings before tax would be €161 thousand (previous year: €45 thousand) higher. If the EUR/CNY exchange rate were 10% lower, earnings before tax would be €0 thousand (previous year: €45 thousand) higher. If the EUR/CNY exchange rate were 10% higher, earnings before tax would be €1 thousand (previous year: €55 thousand) lower. The Group holds financial assets and financial liabilities solely in the functional currency.

Interest rate risk | Interest rate risk arises if the fair value of financial instruments fluctuates due to changes in market interest rates. To assess interest rate risk, financial instruments are classified into fixed- and variable-rate instruments under IAS 32. Interest rate risks arise in the case of floating-rate liabilities to banks. The loans taken out by the Group are subject in part to interest rates that are linked to changes in EURIBOR. There is no interest rate risk associated with the securitization transaction because the notes carry a fixed interest rate of 1.25%.

Other market risks: There are no material other market risks in the Group.

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with its financial liabilities. The Executive Board monitors the liquidity position and current and future expected outflows of funds as part of budget planning and ongoing financial control.

The Group has secured bank loans that include covenants. Any future breach of the covenants can lead to the loans being subject to early repayment. In line with the agreements, the covenants are systematically monitored by the Group and regularly reported to the Executive Board in order to ensure compliance with the loan agreements.

The liquidity risk arising from leases is countered with a high rate of forfaiting and securitization. Lease receivables are sold at present value or at a purchase price discount for an increase in liquidity. They are sold to banks or to an investor through the SPV, generally at the start of the lease.

As part of the securitization transactions, the securitized liabilities are repaid from payments received from lease receivables. The liquidity risk of the securitization transactions totals only the amount of the residual credit risk associated with the purchase price discounts.

The remaining financial liabilities in connection with lease refinancing are matched by the corresponding lease receivables. The expected cash flows from lease receivables exceed the corresponding liabilities.

The contractual remaining terms of financial liabilities at the end of the reporting period, including estimated interest payments, are presented in the following table. These are undiscounted gross amounts including contractual interest payments, though the effects of offsetting are not presented.

Contractual cash flows from non-derivative financial liabilities

		Contractual cash flows				
€ thousand	Present value	Total	Up to 12 months	1 to 2 years	2 to 5 years	more than 5 years
Dec. 31, 2022						
Senior loans	46,501	(51,745)	(5,571)	(15,265)	(30,909)	-
Subordinated loans	38,932	(69,818)	-	-	-	(69,818)
Real estate loans	5,514	(5,957)	(462)	(457)	(1,339)	(3,700)
Other financial liabilities	7,934	(10,904)	(1,455)	(1,231)	(1,452)	(6,766)
Lease refinancing	153,808	(160,434)	(65,217)	(76,575)	(18,642)	-
Trade payables	14,111	(14,111)	(14,111)	-	-	-
Total	**266,802**	**(312,969)**	**(86,815)**	**(93,528)**	**(52,342)**	**(80,284)**
Dec. 31, 2021						
Senior loans	79,979	(92,295)	(17,798)	(7,225)	(36,213)	(31,059)
Subordinated loans	49,696	(87,818)	-	(18,000)	-	(69,818)
Real estate loans	5,942	(6,571)	(613)	(462)	(1,355)	(4,141)
Other financial liabilities	5,316	(6,049)	(1,011)	(2,650)	(615)	(1,773)
Lease refinancing	128,179	(137,780)	(44,771)	(45,407)	(47,601)	-
Trade payables	11,305	(11,305)	(11,305)	-	-	-
Total	**280,417**	**(341,818)**	**(75,498)**	**(73,744)**	**(85,784)**	**(106,791)**

34. Sale of Palas

Effective November 24, 2022, Brockhaus Technologies sold all shares it held in Palas Holding GmbH to Indutrade group, Sweden. The underlying contractual transaction took place on signature of the purchase agreement on the same day. As a result, the Palas companies are no longer controlled by BKHT and were required to be deconsolidated as of the end of November 2022.

Gains and losses attributable to Palas are reported separately in the consolidated statement of income as income from discontinued operations. The prior-period figures in the consolidated statement of comprehensive income were restated accordingly.

Unless indicated otherwise, the disclosures on the statement of comprehensive income presented in the notes to the consolidated financial statements relate to continuing operations.

There were no further transactions between the Group and Palas following the disposal date.

In the consolidated statement of financial position, the assets and liabilities of Palas have been disposed of in the course of deconsolidation as of the end of November 2022. In accordance with IFRS, the statement of financial position figures for the prior-period reporting date are presented in line with the previous method of presentation and were not adjusted.

Assets and liabilities disposed of in the course of deconsolidation

After deduction of directly attributable transaction costs of €1,608 thousand and the realization of other reserves of €106 thousand (including foreign exchange losses) through profit or loss, there was a deconsolidation gain of €48,908 thousand. This is included in income from discontinued operations.

The carrying amounts of the derecognized assets and liabilities at the disposal date are presented in the table below. The derecognition was presented as a non-cash transaction.

€ thousand	
Property, plant and equipment (including right-of-use assets)	1,652
Intangible assets	28,802
Deferred tax assets	14
Inventories	5,960
Trade receivables	1,991
Other assets	761
Cash and cash equivalents	2,129
Current tax liabilities	(24)
Deferred tax liabilities	(2,063)
Provisions for guarantees	(105)
Financial liabilities	(9,115)
Lease liabilities	(482)
Contract liabilities	(183)
Trade payables	(738)
NCI put liability	(1,686)
NCI put provision	(6,253)
Other liabilities	(2,532)
Net assets	**18,127**

Income from discontinued operations

Income from discontinued operations comprises the income of Palas up to the deconsolidation date and the gain on disposal of Palas after deduction of directly attributable transaction costs. The following table presents the composition of income from discontinued operations.

€ thousand	2022	2021
Revenue	**16,393**	**21,279**
Increase/ (decrease) in finished goods and work in progress	739	908
Other own work capitalized	551	1,390
Cost of materials	(5,065)	(6,482)
Personnel expenses	(6,337)	(6,741)
Other operating expenses	(2,411)	(3,606)
Other operating income	179	531
Amortization/ depreciation of assets identified in initial consolidation	(1,238)	(1,350)
Other depreciation of property, plant and equipment and amortization of intangible assets	(1,097)	(1,078)
Finance costs	(2,151)	(3,356)
Finance income	5	4
Financial result	(2,147)	(3,352)
Earnings before tax	**(431)**	**1,500**
Income tax expense	(481)	(1,291)
Earnings after tax	**(913)**	**209**
Gain on sale of Palas	48,908	-
Income taxes on gain on sale of Palas	-	-
Income from discontinued operations	**47,995**	**209**
of which attributable to BKHT shareholders	47,995	173
of which attributable to non-controlling interests	-	36

Income from discontinued operations contains the income and expenses relating to assets and liabilities of the former Environmental Technologies segment that have been sold.

Consolidated statement of cash flows disclosures

The consolidated statement of cash flows presents the consolidated cash flows from continuing and discontinued operations for the reporting period and prior-year period. The following table presents the cash flows of the discontinued operations.

€ thousand	2022	2021
Cash flow from operating activities	364	2,424
Cash flow from investing activities	(488)	(1,954)
Cash flow from financing activities	(1,817)	(1,881)
Changes in cash and cash equivalents	**(1,941)**	**(1,411)**

35. List of subsidiaries

In addition to the parent company, 22 indirect and direct subsidiaries as well as two structured entities are included in the consolidated financial statements. The following table shows the ownership interest, the equity at the reporting date and the profit or loss for the period of the consolidated entities.

The adjacent disclosures on equity and profit were not subject to a separate financial audit.

Subsidiaries

Company	Registered office	Equity interest	Equity (IFRS)	Profit (IFRS)
IHSE AcquiCo GmbH	Oberteuringen	100.00%	107,682	2,562
IHSE Beteiligungs GmbH	Oberteuringen	100.00%	23,408	-
IHSE GmbH	Oberteuringen	100.00%	14,918	4,119
IHSE Immobilien GmbH	Oberteuringen	100.00%	2,209	98
IHSE USA LLC	Cranbury, NJ, USA	100.00%	5,073	1,293
IHSE GmbH Asia Pacific Pte Ltd	Singapore	100.00%	1,869	32
IHSE China, Co. Ltd.	Guangzhou, China	100.00%	216	2
KVM-TEC Electronic GmbH	Tattendorf, Austria	93.14%	745	238
KVM-TEC MPP Verwaltungs GmbH	Oberteuringen	100.00%	23	(2)
KVM-TEC MPP GmbH & Co. KG*	Oberteuringen	0.00%	(12)	(12)
BT Erste Beteiligungs GmbH	Frankfurt am Main	100.00%	20	(6)
BT Zweite Beteiligungs GmbH	Frankfurt am Main	100.00%	20	(5)
BCM Erste Beteiligungs GmbH	Frankfurt am Main	94.87%	118,290	(4,406)
BLS Beteiligungs GmbH	Frankfurt am Main	52.09%	274,664	(4,651)
MFK Holding GmbH	Vellmar	52.09%	10,666	4,080
TIROX Holding GmbH	Uslar	52.09%	21,410	9,012
Iragon Grundstücks GmbH & Co. KG	Vellmar	52.09%	7	(6)
BLS Bikeleasing-Service GmbH & Co. KG	Vellmar	52.09%	110	14,021
Iragon Verwaltungs GmbH	Vellmar	52.09%	17	(6)
BLS Bikeleasing-Service Verwaltungsgesellschaft mbH	Vellmar	52.09%	9	(5)
BLS Verwaltungsgesellschaft mbH	Vellmar	52.09%	3	(6)
BLS Versicherungs GmbH & Co. KG	Vellmar	52.09%	3	5,052
Hofmann Leasing GmbH	Freiburg	52.09%	17,537	17,353
Compartment B der Debt Marketplace SARL	Luxembourg, Luxembourg	0.00%	(1,447)	(1,128)

* Structured entities

36. Research and development expenses

The Group's research and development expenses amounted to €2,459 thousand in the reporting period (previous year: €1,940 thousand), of which €2,330 thousand (previous year: €1,930 thousand) was attributable to research expenses and development expenses not eligible for capitalization and €129 thousand (previous year: €10 thousand) was attributable to amortization of capitalized development expenses.

37. Share-based payments

The total expense for share-based payment transactions is disaggregated as follows.

€ thousand	2022	2021
Equity-settled	673	196
Total	**673**	**196**

Equity-settled share-based payments

The Annual General Meeting resolved on June 27, 2019 to launch a stock option program for the Group's employees. The reason behind the stock option plan is that Group management assumes that this represents a suitable performance incentive for the beneficiaries by enhancing the value of the Group. In line with the stock option conditions, holders of exercisable options have the right to acquire shares at the share price at the grant date of the options. The options are subject to a vesting period of four years after issuance and expire if the beneficiary stops being an employee of the Group. A share of 1/48 of the options granted vest each month. Vesting of options is conditional on a long-term performance target, which requires a minimum 15% increase in the share price (including dividends) between the date of issuance of the options and the exercise date. They are settled in the form of new shares of the parent entity (equity instrument) against payment of the exercise price by the beneficiary. The Group is entitled, but not obligated, to pay a cash settlement to the beneficiaries instead of equity settlement.

The resolution of the Annual General Meeting authorized the Executive Board, with the consent of the Supervisory Board, to issue a total of 425,200 stock options from authorized capital. Changes in outstanding options in the reporting period were as follows.

	Number	Exercise price* in €
Outstanding options on Jan. 1, 2022	130,000	29.90
In the reporting period		
options granted	180,000	18.85
options forfeited	(13,854)	30.00
options exercised	-	-
options expired	-	-
Outstanding options on Dec. 31, 2022	**296,146**	**23.18**
Exercisable options on Dec. 31, 2022	-	-

* Weighted average exercise price

Outstanding options at the reporting date have exercise prices between €17.44 and €32.00. The average weighted remaining term is 2.5 years.

Options are measured at the issue date using a Monte Carlo simulation. The parameters used to measure the options are shown in the following.

Measurement parameters	
Weighted average share price	€22.78
Weighted average exercise price	€23.38
Term of options	4 years
Expected volatility	19.5% - 41.2%
Expected dividend yield	0.0%
Risk-free rate	0.0%

A percentage rate of zero was defined for the dividend yield as the option conditions include an adjustment mechanism. This mechanism provides for a reduction in the exercise price in the amount of the dividends paid per share over the term of the option. Early exercise of options was not taken into account in the measurement as this is not generally anticipated. The expected volatility was determined using the historical volatility of the share prices of comparable companies and BKHT. The expected volatility is based directly on historical volatility in this respect. To determine the fair value of options, the performance target of a 15% increase in the share price over the term of the options was considered as an additional feature by eliminating the option proceeds on simulated prices below the performance target in the Monte Carlo model.

38. Leases

38.1 Group as lessee

The Group leases land and buildings primarily as office space and as production and storage space. As of the reporting date, there were leases for real estate with a remaining term of up to ten years. Other leases have a remaining term of up to three years. Leases can include extension and termination options. The terms and conditions are negotiated individually and include a number of differing arrangements.

A number of real estate leases contain prolongation options that can be exercised by the Group. The extension options can only be exercised by the Group and not by the lessor. The Group assesses at the commencement date whether the exercise of extension options is reasonably certain. The Group reassesses whether the exercise of extension options is reasonably certain when a significant event or change in circumstances occurs that is within its control.

Right-of-use assets relating to leased real estate and vehicles are reported in property, plant and equipment (see Note 18). The following table shows right-of-use assets from leases that are reported in non-current assets.

Right-of-use assets

€ thousand	Land and buildings	Technical equipment and machinery	Total
Balance on January 1, 2021	893	341	1,233
Acquisitions through business combinations	807	369	1,176
Additions to right-of-use assets	336	290	626
Depreciation of right-of-use assets	(495)	(206)	(701)
Exchange differences	5	-	5
Balance on December 31, 2021	**1,545**	**795**	**2,339**
Additions to right-of-use assets	2,879	692	3,571
Depreciation of right-of-use assets	(1,096)	(402)	(1,498)
Disposals due to sale of business	(26)	(311)	(337)
Exchange differences	(4)	-	(4)
Balance on December 31, 2022	**3,298**	**773**	**4,071**

38.2 Group as lessor

Finance leases

The Group acts as a lessor under finance leases. The Group is acting as a lessor to a significant extent for the first time since the acquisition of Bikeleasing Group in the comparative period, which forms the Financial Technologies segment. This business largely entails leasing bicycles and e-bikes for use by the employees of corporate customers. The Group recognizes a receivable in the amount of the net investment value from leasing. The lease payments paid by the lessees are divided into an interest and a principal portion by applying the effective interest method.

The receivable from leasing is amortized by deducting the principal amounts received. The interest portion of the payments is recognized in revenue in the profit or loss for the period. In the reporting period, interest income from the net investment in the leases accrued in the amount of €13,187 thousand (previous year: €1,440 thousand).

The Financial Technologies segment refinances part of the finance lease business through forfaiting to banks. In the forfaiting process, the Group assigns the claims in respect of the lessee arising from the leases with all of the associated rights. Depending on the way each lease is structured, these comprise the lease payments, the residual value, the right of termination, receivables and claims arising from termination. Please refer to Note 33.4 for further information on forfaiting of lease receivables. Moreover, at the end of the lease term, approximately 91% of the bicycles are sold to the employees/users. Around 9% of the bicycles are purchased by a specialist dealer, the employer or a third-party recycler. This is also true of bicycles leased under operating leases.

The following table contains a reconciliation of outstanding lease payments from finance leases to the net investment value.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Lease payments by maturity		
Up to 12 months	56,698	38,633
1 to 2 years	45,998	34,150
2 to 3 years	15,618	22,645
3 to 4 years	2,280	3,506
4 to 5 years	279	1,063
> 5 years	117	91
Total	**120,990**	**100,088**
Unguaranteed residual value	45,963	35,509
Gross investments	**166,953**	**135,597**
Interest income not yet realized	(22,164)	(15,525)
Net investments	**144,790**	**120,072**

Lease receivables of €279,405 thousand were added during the reporting period. Lease receivables of €212,120 thousand were disposed of during the reporting period due to forfaiting. This resulted in a disposal gain of €29,631 thousand. Interest income amounted to €12.633 thousand.

Operating leases

Assets leased under operating leases amount to €1,086 thousand at the end of the fiscal year (previous year: €2,454 thousand) and are reported under technical equipment and machinery in property, plant and equipment.

Income from operating leases was €503 thousand (previous year: €1 thousand) in the reporting period.

In the coming years, the following incoming payments are anticipated from the expected, outstanding, undiscounted lease payments from operating leases.

€ thousand	Dec. 31, 2022	Dec. 31, 2021
Lease payments by maturity		
Up to 12 months	589	387
1 to 2 years	198	214
2 to 3 years	42	23
3 to 4 years	0	1
4 to 5 years	-	-
> 5 years	-	-
Total	**829**	**625**

39. Related party transactions

Key management personnel

In respect of the Group, key management personnel include the members of the Executive Board and Supervisory Board of BKHT and the managing directors of the subgroup parent companies (Palas Holding GmbH (until its deconsolidation at the end of November 2022), IHSE AcquiCo GmbH and BLS Beteiligungs GmbH).

In fiscal year 2021, the Group acquired all of the shares of kvm-tec. The Group has sold shares of kvm-tec to executives in the Security Technologies segment in the course of a management co-investment program in the reporting period.

Please refer to Note 44 for further information on the remuneration of members of governing bodies.

Other related parties

Executive Board members hold positions in other entities in which they are able to control or significantly influence the financial and business policies of those entities. Some of those entities conducted transactions with Brockhaus Technologies in the reporting period.

Brockhaus Private Equity GmbH (registered office in Frankfurt) is controlled by the Chairman of the Executive Board of BKHT. There was a service relationship with Brockhaus Private Equity GmbH in the reporting period resulting from a sublease agreement.

Transactions between the Group parent and subsidiaries

There were business relationships between BKHT and its subsidiaries in the reporting period arising from management service contracts.

BKHT also granted loans to subsidiaries.

	Value of transactions		Outstanding balances	
€ thousand	2022	2021	Dec. 31, 2022	Dec. 31, 2021
Key management personnel				
Due diligence costs	-	11	-	-
Co-invest kvm-tec	58	58	-	58
Other related parties				
Sublease	179	110	-	-
Transactions between BKHT and subsidiaries				
Management services	652	361	128	182
Loans granted	50	6,995	5,527	6,995
Interest income on loans	335	228	-	-
Commissions	-	9,269	-	-

40. Events after the reporting date

No significant events occurred between the reporting date and the publication of these consolidated financial statements.

41. Auditor's fees

The auditor's fees show the fees of KPMG AG Wirtschaftsprüfungsgesellschaft recognized as an expense for the services provided to BKHT and to the consolidated subsidiaries. They are disaggregated as follows.

€ thousand	2022	2021
Financial statement audits	494	646
Other assurance services	61	419
Other services	-	12
Total	**555**	**1,077**

In the reporting period, the financial statement audit services relate to the audit of the consolidated financial statements and the annual financial statements, as well as to all services required for the audits of the financial statements. The other assurance services in fiscal year 2022 relate to the substantive review of the remuneration report and the performance of other assurance services (voluntary audit services).

KPMG AG Wirtschaftsprüfungsgesellschaft has been the auditor of Brockhaus Technologies AG as a public interest entity since its initial public offering in 2020.

42. Employees

The following overview shows the average number of employees in the Group.

Average number	2022	2021
Full-time	323	201
Part-time	71	57
Other	41	20
Total employees	**435**	**278**

The number of employees as of the reporting date was as follows.

Number	Dec. 31, 2022	Dec. 31, 2021
Full-time	278	327
Part-time	54	83
Other	40	37
Total employees	**372**	**447**

43. Governing bodies of the Company

The members of BKHT's Executive Board are.

> Chairman of the Executive Board (CEO): Marco Brockhaus
> Member of the Executive Board (COO/ Legal Counsel): Dr. Marcel Wilhelm

The Supervisory Board of BKHT consists of six members, unless otherwise required by law and was composed of the following members in the reporting period.

> Chairman: Dr. Othmar Belker, Managing Director of Murnauer Markenvertrieb GmbH
> Deputy Chairman: Michael Schuster, lawyer in private practice
> Member of the Supervisory Board: Martin Bestmann, managing director of a consulting firm
> Member of the Supervisory Board: Prof. Dr. Christoph Hütten, independent management consultant
> Member of the Supervisory Board: Dr. Natalie Krebs, Supervisory Board member (since June 22, 2022)
> Member of the Supervisory Board: Dr. Cornelius Liedtke, entrepreneur and investor (until June 22, 2022)
> Member of the Supervisory Board: Andreas Peiker, entrepreneur (until December 31, 2022)

44. Total remuneration of members of governing bodies

The Chairman of the Supervisory Board receives annual fixed remuneration of €90 thousand, the Deputy Chairman receives €60 thousand and the other members of the Supervisory Board each receive annual fixed remuneration of €30 thousand. Members of the Supervisory Board (but not the Chairman or Deputy Chairman) receive an additional €2 thousand each year for membership in a committee and an additional €20 thousand for chairmanship of a committee. In addition, the members of the Supervisory Board are reimbursed for their out-of-pocket expenses and any value added tax payable on their remuneration. The remuneration of the Supervisory Board amounted to €292 thousand in the reporting period (previous year: €276 thousand).

The remuneration of the members of the Executive Board under IAS 24.17 is composed of the following items.

€ thousand	2022	2021
Short-term benefits	1,931	2,337
Termination benefits	-	-
Share-based payments	-	-
Other long-term benefits	-	-
Total	**1,931**	**2,337**

The amount outstanding relating to short-term benefits as of the reporting date was €990 thousand (previous year: €1,544 thousand).

The remuneration of members of the Executive Board under section 314 of the HGB amounted to €1,931 thousand in the reporting period (previous year: €2,337 thousand).

The basic principles behind the remuneration system and disclosure of the remuneration of individual Executive Board and Supervisory Board members are presented in the remuneration report.

45. Appropriation of net profit

BKHT's net profit for the reporting period, together with the accumulated losses brought forward from the previous year, are carried forward to new account. As of December 31, 2022, the parent entity reported accumulated losses brought forward under German GAAP of €6,873 thousand.

46. 2022 Declaration of conformity with the German Corporate Governance Code

The declaration by Brockhaus Technologies AG's Executive Board and Supervisory Board on conformity with the German Corporate Governance Code for fiscal year 2022 under section 314 no. 8 of the HGB in conjunction with section 161 of the AktG was issued. The statement is permanently accessible on the Company's website www.brockhaus-technologies.com in the section entitled Investor Relations, subsection Corporate Governance.

Frankfurt am Main, March 27, 2023

Brockhaus Technologies AG
The Executive Board

Marco Brockhaus Dr. Marcel Wilhelm

Responsibility statement

To the best of our knowledge and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and the combined management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Frankfurt am Main, March 27, 2023

Brockhaus Technologies AG
The Executive Board

Marco Brockhaus Dr. Marcel Wilhelm

Independent Auditor's Report

To Brockhaus Technologies AG, Frankfurt am Main

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of Brockhaus Technologies AG, Frankfurt am Main, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 January to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the management report of the Company and the Group (combined management report) of Brockhaus Technologies AG for the financial year from 1 January to 31 December 2022.

In accordance with German legal requirements, we have not audited the content of those components of the combined management report specified in the "Other Information" section.

The combined management report contains cross-references that are not provided for by law. In accordance with German legal requirements, we have not audited the cross-references referred to in the "Other Information" section or the information to which the cross-references refer.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2022, and of its financial performance for the financial year from 1 January to 31 December 2022, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of those components of the combined management report specified in the "Other Information" section of the auditor's report. The combined management report contains cross-references that are not provided for by law. Our audit opinion does not extend to the cross-references in the "Other Information" section or to the information to which the cross-references refer.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(f) of the EU Audit Regulation, we declare that, with the exception of the services presented below, we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation and that we maintained our independence while performing the audit of the financial statements. In 2022, minor non-audit services as defined in Article 5 (1) subsection 2 (a) (vii) of the EU Audit Regulation were performed for an immaterial foreign permanent establishment of a domestic subsidiary by the local KPMG member firm. These services are of minor significance for the audited consolidated financial statements and, after evaluation for their qualitative and quantitative significance, they did not compromise our independence.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2022. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Disposal of the Environmental Technologies operating segment

Please refer to Note 4.18 of the notes to the consolidated financial statements for more information on the accounting policies applied and to Note 5.1 of the notes to the consolidated financial statements for more information on the significant judgements made. For information on the disposal of the Environmental Technologies operating segment, please refer to Note 34 in the notes to the consolidated financial statements and to Note 22 for information on the earn-out component.

THE FINANCIAL STATEMENT RISK

On 24 November 2022, Brockhaus Technologies AG concluded an agreement on the disposal of the Palas Holding GmbH business unit and its subsidiaries (Environmental Technologies operating segment). The Environmental Technologies operating segment was classified as a discontinued operation. The disposal of the discontinued operation was completed on the same day on 24 November 2022. Brockhaus Technologies AG reported an after-tax profit from discontinued operations of KEUR 47,995 for financial year 2022.

The purchase agreement for the acquisition of the shares in Palas Holding GmbH from 2018 contained an option agreement with the co-shareholder that would have been exercisable during 2024 (NCI put option). In this context, the Group had applied the method of anticipated acquisition, with the result that the option's underlying shares were already considered to have been acquired at the time of the majority acquisition in 2018. Therefore, no non-controlling interests relating to Palas Holding GmbH were recognised in the consolidated financial statements. The obligation arising from the NCI put option was partly recognised as a provision and partly as a financial liability.

The agreement on the disposal includes, among others, variable purchase price components due in the future, the amount of which depends on specific success factors being achieved in the future by the buyer. For this purpose, financial assets are recognised in the amount of EUR 10,816.

The presentation of the Environmental Technologies operating segment as a discontinued operation pursuant to IFRS 5 is complex and subject to judgement owing to the NCI put option and the method of anticipated acquisition that has been used since acquisition. The assumptions underlying the measurement of the financial assets with respect to the variable purchase price components included in the agreement on the disposal are subject to judgement. Additionally, the disclosures in the notes to the consolidated financial statements concerning the discontinued operation are extensive.

There is the risk to the consolidated financial statements that the presentation as a discontinued operation in the consolidated statement of comprehensive income is incorrect. In addition, there is the risk for the consolidated financial statements that the measurement of financial assets for the variable purchase price components included in the sales contract is not appropriate. As regards the explanatory notes on the discontinued operation in the notes to the consolidated financial statements, there is a risk that the explanations are not complete or appropriate.

OUR AUDIT APPROACH

We initially assessed whether the Environmental Technologies operating segment was appropriately presented as a discontinued operation pursuant to IFRS 5. For this purpose, we made inquiries of management, assessed internal and external reporting and inspected the contracts concluded. We also assessed whether the allocation of income and expenses to the discontinued operation was correct.

Furthermore, we assessed whether the variable purchase price components included in the sales contract, which are reported as other financial assets, were measured appropriately. In this context, we reviewed, among other things, the underlying method, the assumptions and the data regarding the achievement of future success factors, and compared the assumptions made with market expectations and historical data.

We evaluated whether the disclosures in the notes to the consolidated financial statements regarding the discontinued operation were complete and appropriate.

OUR OBSERVATIONS

The presentation of the Environmental Technologies operating segment as a discontinued operation is appropriate pursuant to IFRS 5. The procedure underlying the measurement of the financial assets and the assumptions underlying the measurement of the financial assets from the variable purchase price components included in the sales contract are appropriate. The disclosures in the notes to the consolidated financial statements regarding the discontinued operation are complete and appropriate.

Impairment testing of goodwill

Please refer to Note 4.9 of the notes to the consolidated financial statements for more information on the accounting policies applied. Disclosures on the amount of goodwill and the assumptions made are provided in Notes 5.2 and 19 of the notes to the consolidated financial statements. Explanatory notes on the economic development of the Security Technologies and Financial Technologies operating segments are provided in the combined management report in the "Segment reporting" section.

THE FINANCIAL STATEMENT RISK

In the consolidated financial statements of Brockhaus Technologies AG as at 31 December 2022, EUR 80.3 million of goodwill is attributable to the Security Technologies operating segment and EUR 141.7 million to the Financial Technologies operating segment, which corresponds to approx. 12.3% and approx. 21.6% of total assets respectively.

Goodwill is tested for impairment annually at the level of the Security Technologies and Financial Technologies operating segments. If impairment triggers arise during the financial year, an event-driven impairment test is also carried out during the year. For impairment testing, the carrying amount is compared with the recoverable amount of the respective operating segment. If the carrying amount exceeds the recoverable amount, an impairment loss is recognised. The recoverable amount of the operating segment – as the higher of fair value less costs to sell and value in use – is determined as value in use using a discounted cash flow method based on the expected cash flows of the cash-generating units. The reporting date for impairment testing is 31 December 2022.

The goodwill impairment test is complex and based on a number of assumptions requiring judgement. These include the expected revenue and earnings development of the operating segments for the next five years, the assumed long-term growth rates and the discount rate used. The COVID-19 pandemic and component shortages had a particularly negative impact on the revenue and earnings of the Security Technologies operating segment in financial year 2022. There is a risk that the expected future cash flows will continue to be affected by this.

In the course of annual impairment testing as at 31 December 2022, there was no requirement to recognise an impairment loss.

There is the risk for the consolidated financial statements that an existing need to recognise impairment losses is not identified. There is also a risk that the related disclosures in the notes are not appropriate.

OUR AUDIT APPROACH

In the course of our audit procedures on the internal control system and as part of our test of design and implementation, we first obtained an understanding of the Company's underlying process used for impairment testing of goodwill by means of written documentation and follow-up discussions on processes with employees from Finance. We also assessed the appropriateness of relevant controls relating to the identification of impairment indicators.

For the annual impairment test, with the involvement of our valuation experts we also evaluated the appropriateness of the discount rates used for the impairment test of the operating segments and compared the assumptions and data underlying the respective discount rate, especially the risk-free interest rate, the market risk premium and the beta factor, with our own assumptions and publicly available data. Furthermore, we discussed the expected revenue and earnings performance as well as the assumed long-term growth rates with those responsible for planning. We also reconciled this information with the budget prepared by management and approved by the Supervisory Board, as well as with the medium-term planning.

We also tested the Company's forecasting quality for the respective operating segment by comparing the budgets of previous financial years with actual results and analysing deviations. In addition, we selected elements based on risk for orders received in the Security Technologies operating segment for the first two months of financial year 2023 and reconciled these with the relevant orders.

To assess the methodically and mathematically correct implementation of the valuation method, with the involvement of our valuation experts we verified the Company's valuation using our own calculations and analysed deviations. To this end, we also assessed whether the valuation methods are consistent with the applicable accounting policies. In order to take account of forecast uncertainty, we examined how changes in assumptions on revenue, the EBITDA margin and/or the EBT margin and investments in perpetuity, as well as the long-term growth rate, affect value in use by calculating alternative scenarios and comparing them with the values stated by the Company (sensitivity analysis).

Finally, we assessed whether the disclosures in the notes regarding impairment of goodwill are appropriate.

OUR OBSERVATIONS

The calculation method used for impairment testing of goodwill is appropriate and in line with the accounting policies to be applied. The assumptions and data used for measurement are reasonable.

The related disclosures in the notes are appropriate.

Other Information

Management and/or the Supervisory Board are/is responsible for the other information. The other information comprises:

> the combined corporate governance statement for the Company and the Group referred to in the combined management report,

We did not audit the contents of the cross-references in the combined management report not required by law as well as the information to which the cross-references refer:

> Cross-reference to the remuneration report.

The other information also includes the remaining parts of the annual report. The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

> is materially inconsistent with the consolidated financial statements, with the combined management report information audited for content or our knowledge obtained in the audit, or

otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken or safeguards applied to eliminate independence threats.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Combined Management Report Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We have performed assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the combined management report (hereinafter the "ESEF documents") contained in the electronic file "5299007DQ4OLATJQIX97-2022-12-31-de.zip" (SHA256 hash value: e93d549d346d59a5bbdc72500b4d6f9cd9c87e8fa90495151378e4988980311a) made available and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the combined management report contained in the electronic file made available, identified above and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying combined management report for the financial year from 1 January to 31 December 2022, contained in the "Report on the Audit of the Consolidated Financial Statements and the Combined Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

We conducted our assurance work on the rendering of the consolidated financial statements and the combined management report contained in the file made available and identified above in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (06.2022)). Our responsibility in accordance therewith is further described below. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's management is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the combined management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the Company's management is responsible for such internal control that they considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The Supervisory Board is responsible for overseeing the process of preparing the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgement and maintain professional scepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e. whether the file made available containing the ESEF documents meets the requirements of the Commission Delegated Regulation (EU) 2019/815, as amended as at the reporting date, on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and the audited combined management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Commission Delegated Regulation (EU) 2019/815, as amended as at the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the Annual General Meeting on 22 June 2022. We were engaged by the Supervisory Board on 18 February 2023. We have been the group auditor of Brockhaus Technologies AG since its initial public offering in 2020.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Other Matter – Use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited combined management report as well as the examined ESEF documents. The consolidated financial statements and combined management report converted to the ESEF format – including the versions to be entered in the company register – are merely electronic renderings of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the examined ESEF documents made available in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Markus Fox.

Frankfurt am Main, 28 March 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

Fox	Anders
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Supplementary information

Supplementary information

Basis of reporting

The **reporting period** for this Annual Report is the period from January 1, 2022, to December 31, 2022. The **reporting date** is December 31, 2022.

This Annual Report has been translated from German to English. In the case of any discrepancies between the two language versions, the German version takes precedence.

Rounding

The performance metrics appearing in this report have been rounded in line with standard commercial practice. This rounding method does not necessarily preserve totals, so that it is possible that the amounts in this report do not add up precisely to the total shown.

Financial calendar

May 15, 2023	Quarterly Statement Q1 2023
June 21, 2023	Annual General Meeting
August 14, 2023	Publication of Half-Year Report 2023
November 14, 2023	Quarterly Statement 9M 2023

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