HUMBOLDT WEDAG

Innovation by tradition

GROUP ANNUAL REPORT

2022

khd.com

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Key figures at a glance

in million EUR	2022	2021
Ordner intake	**218.6**	231.7
Revenue	**210.4**	226.3
Adjusted gross profit	**27.6**	19.3
Adjusted gross profit margin (in %)	**13.1**	8.5
Adjusted EBIT	**-0.9**	-5.2
Adjusted EBIT margin (in %)	**-0.4**	-2.3
Earnings before taxes (EBT)	**2.2**	0.7
Group net profit/loss for the year	**0.3**	-1.1
EPS (in EUR)	**0.01**	-0.02
Operating cash flow	**-22.0**	-12.6
Cash flow from investing activities	**0.4**	9.1
Cash flow from financing activities	**-2.2**	-2.0

in million EUR	2022	2021
Equity	**92.4**	90.7
Equity ratio (in %)	**36.4**	29.9
Cash and intercompany loans *	**137.0**	160.3
Net working capital **	**-16.6**	-37.5
Order backlog	**254.6**	252.1
Employees	**791**	737

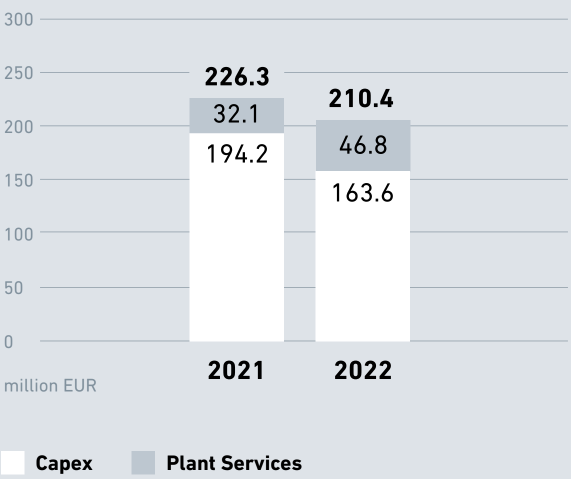
* Including intercompany loan of 35 million EUR with entitlement to call for early repayment by giving 30 days' notice
** Balance of current assets (less cash and cash equivalents and current loans granted) and current liabilities (less current borrowings

Facts & figures

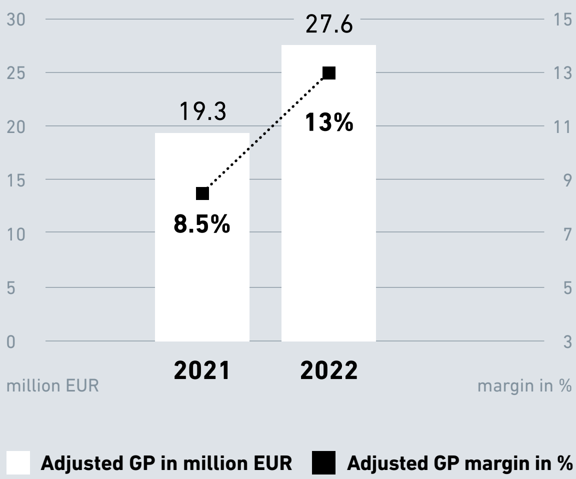
Order intake in million EUR	Order backlog in million EUR
218,6	254,6

- \+ Consequences of the war in Ukraine well managed
- \+ Significant improvements in gross profit and earnings before taxes (EBT)
- \+ Solid liquidity and equity ratio

Revenue



Adjusted gross profit from revenue



Employees
by region

231	Europe
27	Americas

791
worldwide

India	492
China	23
Russia	18

Foreword by the Management Board

Dear shareholders, customers, business partners, and friends of KHD,

As good news at the beginning: In 2022, KHD achieved a Group net income for the first time since the 2013 financial year! After having achieved positive earnings before taxes (EBT) in the 2021 financial year, the Group net income is another milestone of KHD's sustainable economic recovery.

Despite all the joy about our success, we must not forget the profound turning point associated with Russia's invasion of Ukraine. First and foremost, our sympathy and moral support go out to the people in the war zone who are being subjected to unimaginable suffering. However, we are all affected. Inflation is at record levels and we have had to deal with massive disruptions in global supply chains and unplanned price increases in procurement markets – not just energy prices.

The knock-on effects of the war in Ukraine, not least a € 1.6 million impairment of goodwill for our Russian subsidiary, prevented a significantly better result. It is therefore particularly remarkable that we were able to largely cushion the negative impacts on our net assets, financial position and results of operations.

The continuing high level of investment in research and development underpins our claim to be the technology leader in the cement industry. With innovative products and solutions, KHD helps the cement industry to meet the goals of emission reduction, energy efficiency, and reduction of operating costs, as well as the ever-increasing commitment to carbon neutrality. At KHD, we are proud of our process engineering know-how and innovative strength. Still, our engineering skills always serve one overriding goal: To be able to offer our customers the solutions today that will meet the challenges of tomorrow. Whether in sales, project execution, or research and development – our customers are the focus of our business activities.

The 2022 financial year was particularly burdened by geopolitical uncertainties, price increases on the procurement markets, and inflation, resulting in reluctance of customers to make investment decisions. However, the Indian market, which is very important for us and where we were able to further expand our position as market leader, once again showed what will be possible for KHD in other markets in the future.

The cement industry in China accounts for well over 50% of global production capacity. In cooperation with our majority shareholder AVIC, we are well positioned to exploit the potential in the modernization of existing cement plants. Following the easing of the very strict travel restrictions, we expect progress in the successful implementation of our 'Go China' strategy in the 2023 financial year.

Overall, KHD's business development in 2022 was fully satisfactory in terms of the key performance indicators order intake and revenue. With a volume of € 218.6 million (€ 166.2 million for Capex and € 52.4 million for Plant Services), order intake in the 2022 financial year exceeded our internal planning. Due to the good order intake, KHD was able to fully utilize existing capacities and selectively increase the headcount. With 791 employees, we have the highest number of employees since many years. When building up our workforce, we always observe the necessary balance between safeguarding technological expertise at our headquarters in Cologne and expanding our capacities in India and China in a way that makes economic sense.

Revenues amounted to € 210.4 million (previous year: € 226.3 million) and show that, in close coordination with our customers, we were largely able to achieve the progress on current projects in line with our planning.

As a result of the successful completion of the reorganization in the 2019 financial year, a leaner and at the same time more effective organization has laid the foundations for being able to generate sustainable positive results. Unfortunately, the disruptive factors mentioned above prevented a return to operating profitability, which would otherwise have been possible in the 2022 financial year.

Earnings before taxes (EBT) improved significantly in the financial year 2022, and were once again positive at € 2.3 million (previous year: € 0.7 million). With a group net income of € 0.3 million, a positive result was also achieved after taxes. Nevertheless, profitability remained at an unsatisfactory level. Increasing the performance and competitiveness of all KHD companies remains a top priority. We are convinced that our targeted measures for further improvement will be reflected in the figures in the current 2023 financial year. Our reputation as a technology leader, our innovative strength, and the close cooperation with our majority shareholder AVIC give us the confidence to be able to lead KHD into a successful future despite persistently challenging general conditions.

KHD's equity ratio of 36% and high liquidity (including bank deposits and financial investments with affiliated companies) of € 137 million provide a good basis for the successful implementation of our ambitious innovation program as well as sustainable growth. Sales activities are focused both on projects involving new technology (e.g. oxyfuel) and on expanding our position in our core markets. A balanced opportunity/risk profile for new projects and further improvements in all operating areas are the basis for a possible return to operating profitability in the current 2023 financial year.

We would like to thank our customers and business partners as well as our employees for their trust and support in the past 2022 financial year. Special thanks go to our shareholders – not least our majority shareholder AVIC – and the Supervisory Board for supporting our transformation process in challenging and uncertain times.

We look forward to reporting on further successes at KHD next year!

Yours sincerely,

The Management Board – KHD Humboldt Wedag International AG

Report of the Supervisory Board

Dear Shareholders,

The 2022 financial year of KHD Humboldt Wedag International AG was a year full of (unplanned) challenges. The start of the war in Ukraine on February 24, 2022 is not only to be seen as a turning point in geopolitical terms, its indirect effects – not least in the form of impairment of goodwill for our Russian subsidiary – unfortunately also left deep marks on the financial statements of KHD Group. Massive disruptions in the supply chain, a significant increase in procurement costs, and the very sharp rise in inflation can also be seen in connection with the war in Ukraine.

Especially in times of crisis, it becomes clear how important the efforts of the past were and still are in terms of improving the economic situation. In a difficult environment, the KHD Group once again achieved positive earnings before taxes (EBT) and, for the first time since the 2013 financial year, a Group net income!

In the 2022 financial year, the Supervisory Board of KHD Humboldt Wedag International AG comprehensively performed supervisory and advisory functions as required by law, the articles of association, and the rules of procedure. In doing so, the Supervisory Board was guided by the German Corporate Governance Code. It monitored and advised the Management Board on a continual basis and consulted with the Management Board in meetings and in numerous discussions outside of these meetings. The Supervisory Board requested the Management Board to report regularly, in a timely manner, and comprehensively, both in writing and verbally, about intended business policy and strategy, fundamental issues concerning financial, investment, and personnel planning, the course of business and the profitability of the Group and of the material Group companies. The Management Board also reported on the strategic alignment of the Group and the status of strategy implementation.

The Supervisory Board was involved in all decisions of fundamental importance to the KHD Group.

Cooperation between the Management Board and the Supervisory Board has always been constructive. The Chair of the Supervisory Board was in regular contact with the Management Board and particularly the Chief Executive Officer over and above the regular meetings and discussed the Group's strategy, risk situation, and risk management. The Chief Executive Officer immediately notified the Chair of the Supervisory Board of any important events, which were essential for assessing the situation and development of the KHD Group.

Meetings and Resolutions of the Supervisory Board

The restrictions on the granting of visas to Chinese members of the Supervisory Board, combined with the restrictions on travel to and from China, did again not allow for meetings in person in the 2022 financial year. In 2022, the Supervisory Board therefore convened for the four meetings by video conference. It dealt extensively with all issues of fundamental importance to the KHD Group. In addition, 14 resolutions were passed by telephone/video conference. The Supervisory Board also exchanged views on individual topics in video or telephone conferences without members of the Management Board. All members of the Supervisory Board participated in the meetings by video conference and in the resolutions. The participation rate of the members of the Supervisory Board was 100% overall in the reporting year.

Individualized disclosure of Supervisory Board members' attendance at meetings

	Supervisory Board Meetings		Supervisory Board Resolutions	
	Number	Participation Rate	Number	Participation Rate
Mr. Jiayan Gong (Chairman)	4/4	100%	14/14	100%
Mr. Gerhard Beinhauer (Vice Chairman)	4/4	100%	14/14	100%
Mr. Xiaodong Wu	4/4	100%	14/14	100%
Mr. Jingnan Yang	4/4	100%	14/14	100%

The Supervisory Board concerned itself with the monitoring of the financial reporting process and, in the presence of the auditors and the Management Board, with the annual and consolidated financial statements for 2021. At the meeting convened to approve the financial statements on March 8, 2022, the Supervisory Board held a thorough discussion of the annual and consolidated financial statements of KHD Humboldt Wedag International AG for the financial year ended December 31, 2021 and approved the financial statements. In addition, the Supervisory Board discussed its proposal for the selection of the independent auditors by the Annual General Meeting of shareholders.

The agendas of the Supervisory Board meetings via video conference in March, June, August, and October covered reports on business development, deviations of the actual business development from the budget and forecasts, the 2023 budget and the medium-term planning for 2024-27, discussions of the half-year report prior to publication, setting bonus targets for the Management Board, assessing the performance of the Management Board members and other Management Board matters, the discussion of the agenda for the Annual General Meeting of shareholders, the internal control system, the risk management system, as well as discussions related to Corporate Governance and organizational matters of the Supervisory Board. Particular focal points in the 2022 financial year were the research and development program and KHD's strategy relating to major tenders.

The resolutions passed by telephone/video conference concerned transactions requiring approval by the Supervisory Board, determination of the bonus for Management Board members, proposed resolutions for the Annual General Meeting, as well as the approval of the Declaration of Compliance with the German Corporate Governance Code and the separate non-financial Group report (CSR report) for 2021.

Responsibilities as Defined by Section 107 Paragraph 3 of the German Stock Corporation Act (AktG)

Responsibilities that would otherwise be passed on to an Audit Committee have been carried out by the full Supervisory Board. The Supervisory Board issued the audit mandate to the auditors and discussed and agreed upon the focal points of the audit as well as the audit fees. Furthermore, the Supervisory Board monitored the independence, qualification, rotation, and efficiency of the auditors as well as the services provided in addition to the audit of financial statements. The Supervisory Board also dealt with issues of corporate governance, including the preparation of the Declaration of Compliance with the German Corporate Governance Code. Based on reports from the Management Board, the Supervisory Board concerned itself with the internal control system and was informed about the effectiveness and further development of the Group-wide risk management system. Significant opportunities and risks, including the risk situation, risk identification, and risk monitoring as well as the compliance structure and compliance issues within the KHD Group were discussed. The Supervisory Board assessed the effectiveness of the internal control system and the risk management system.

Corporate Governance and Declaration of Compliance

There were no conflicts of interest among the members of the Supervisory Board or Management Board during the reporting year. According to its own assessment, the Supervisory Board included an appropriate number of independent members as defined by the German Corporate Governance Code at all times during the reporting year.

The Supervisory Board monitors the development of corporate governance standards on a continual basis, as well as the implementation of the recommendations of the German Corporate Governance Code at KHD Humboldt Wedag International AG. The Management Board and Supervisory Board issued the annual declaration of compliance pursuant to Section 161 of the German Stock Corporation Act (AktG) in February 2023. This was published on February 6, 2023 and made permanently available to shareholders on the Company's website at **www.khd.com/ir/corporate-governance/#declaration-of-compliance**. Further information on corporate governance can be found in the Corporate Governance Statement (within the meaning of the German Corporate Governance Code as amended on April 28, 2022), which has also been published on the Company's website.

KHD supports the members of the Supervisory Board upon their appointment by explaining a list of key tasks and handing over important core documents, for example the Rules of Procedure for the Supervisory Board as well as for the Management Board and the list of transactions requiring Supervisory Board approval. The Company generally supports the members of the Supervisory Board in training and development measures. In the 2022 financial year, new developments were explained in particular. The focus was on implications of the amended German Corporate Governance Code and the Corporate Sustainability Directive (CSRD).

Separate Non-financial Group Report

The Management Board prepared the separate non-financial Group report for the 2022 financial year in accordance with Section 315b Paragraph 3 of the German Commercial Code (HGB). Before its publication, the Supervisory Board audited the separate non-financial Group report in accordance with Section 171 Section 1 of the German Stock Corporation Act (AktG).

Annual and Consolidated Financial Statements

The Management Board prepared the annual financial statements of KHD Humboldt Wedag International AG as of December 31, 2022 and the consolidated financial statements as of December 31, 2022 in a timely manner and in accordance with principles set out in the German Commercial Code (HGB), in accordance with IFRS as adopted by the European Union, including the combined management report for the 2022 financial year. The annual financial statements and the consolidated financial statements, including the combined management report, were audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Cologne office, who were appointed by the Annual General Meeting of shareholders on May 27, 2022. The auditors issued an unqualified audit opinion on both sets of financial statements. Furthermore, the auditors confirmed that the early risk recognition system complies with the legal requirements set out in Section 91 Paragraph 2 of the German Stock Corporation Act (AktG); no risks that might affect the viability of the Company as a going concern were identified.

The documents relating to the financial statements were already discussed in detail in the Supervisory

Board meeting on March 8, 2023. The documents relating to the financial statements and the audit reports were subject to extensive deliberations in the Supervisory Board meeting convened to approve the financial statements on March 15, 2023. Both the meeting on March 8, 2023 and the Supervisory Board’s meeting to approve the financial statements on March 15, 2023 were attended by the auditor and the Management Board. The auditors reported on the scope, the focus, and the main findings of the audit, addressing in particular the key audit matters. During the Supervisory Board meeting, the auditors were available to provide further information and answer questions.

The Supervisory Board conducted its own examination of the annual financial statements for the 2022 financial year and of the consolidated financial statements, including the combined management report, for the 2022 financial year, taking into account the auditors’ reports. In its audit, the Supervisory Board concerned itself in particular with the key audit matters. After considering the final results of the Supervisory Board’s review of the documents submitted by the Management Board and the auditors, the Supervisory Board has no objections to raise and concurs with the result of the audit carried out by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft. The Supervisory Board approves the annual financial statements and the consolidated financial statements as of December 31, 2022, as prepared by the Management Board. The annual financial statements of KHD Humboldt Wedag International AG are therefore adopted.

Compensation Report

The Management Board and Supervisory Board have jointly prepared the compensation report in accordance with the requirements of Section 162 of the German Stock Corporation Act (AktG). The compensation report was separately audited by the auditor in accordance with the formal audit required by law (pursuant to Section 162 (1) and (2) AktG). The compensation report together with the auditor's report is published on the Company's website.

Management Board’s report on the relationships with affiliated companies

The Management Board’s report on the relationships with affiliated companies (Dependent Company Report) was audited by the auditors and issued with the following unqualified audit opinion:

“Based on our audit performed in accordance with professional standards and our professional judgment, we confirm that:

1. The factual statements contained in the report are correct.
2. The consideration paid by the Company for the legal transactions stated in the report was not excessive."

The Management Board presented the Dependent Company Report to the Supervisory Board, which also reviewed the Dependent Company Report. After considering the final results of its own review, the Supervisory Board has no objections to raise with respect to the Management Board's final declaration in the Dependent Company Report or with respect to the result of the audit by the auditors.

Expression of Thanks

The Supervisory Board would like to thank all employees for their successful work in a challenging business environment. Equal thanks are due to the Management Board, which has led KHD with great commitment through a year full of challenges, which could be concluded with a Group net income.

Cologne, March 15, 2023

Jiayan Gong
(Chairman of the Supervisory Board)

Members of the Supervisory Board

Jiayan Gong
Chair of the Supervisory Board
Chairman of the Board of Directors of AVIC International Beijing Co. Limited

Gerhard Beinhauer
Vice Chairman of the Supervisory Board
Managing Director of BBI Beteiligungs- und Handelsgesellschaft mbH
Membership in supervisory boards and other governing bodies:

- BIEGLO Holding GmbH & Co. KGaA, Hamburg, Chair of the Supervisory Board
- Gold Cache Inc., Thunder Bay, Canada, non-executive Member of the Board

Xiaodong Wu
Chief Financial Officer of AVIC International Beijing Co. Limited

Jingnan Yang
President of AVIC International Beijing Co. Limited

COMBINED MANAGEMENT REPORT

This management report comprises both the Group Management Report and the Management Report of KHD Humboldt Wedag International AG (“KHD AG”). This report addresses business development, including the business performance, as well as the position and expected development of the Group and of KHD AG. The information about KHD AG is presented in the economic report in a separate section, with disclosures pursuant to the German Commercial Code (HGB). The German Accounting Standard 20 (DRS 20) "Group Management Report" was applied.

The Guidelines Implementation Law concerning corporate social responsibility (CSR) became effective on April 19, 2017. This law governs the reporting on non-financial information for certain capital market-oriented companies. KHD is subject to these non-financial reporting requirements and complies with its obligation by preparing a special non-financial report in accordance with Section 315b, Paragraph 3 of the German Commercial Code (HGB). In accordance with the specifications of Section 315b, Paragraph 3 HGB, the Management Board decided not to integrate the non-financial report for the 2022 financial year into the Group Management Report, but instead to create a separate report that is published on the KHD website at **www.khd.com/ir/news-reports/#sustainability**.

On November 14, 2019, the German Bundestag adopted draft legislation by the German federal government for the implementation of the second Shareholder Rights Directive II (ARUG II). The Bundesrat ratified it on November 29, 2019. The law took effect with its publication in the German Federal Law Gazette. One significant change is the Compensation Report specified in Section 162 of the German Stock Corporation Act (AktG), which must be applied for the first time for the financial years following December 31, 2020. The Compensation Report for KHD for the 2022 financial year is publicly available on the Group’s website (**www.khd.com/ir/news-reports/#compensation-reports**).

FUNDAMENTAL PRINCIPLES OF KHD GROUP

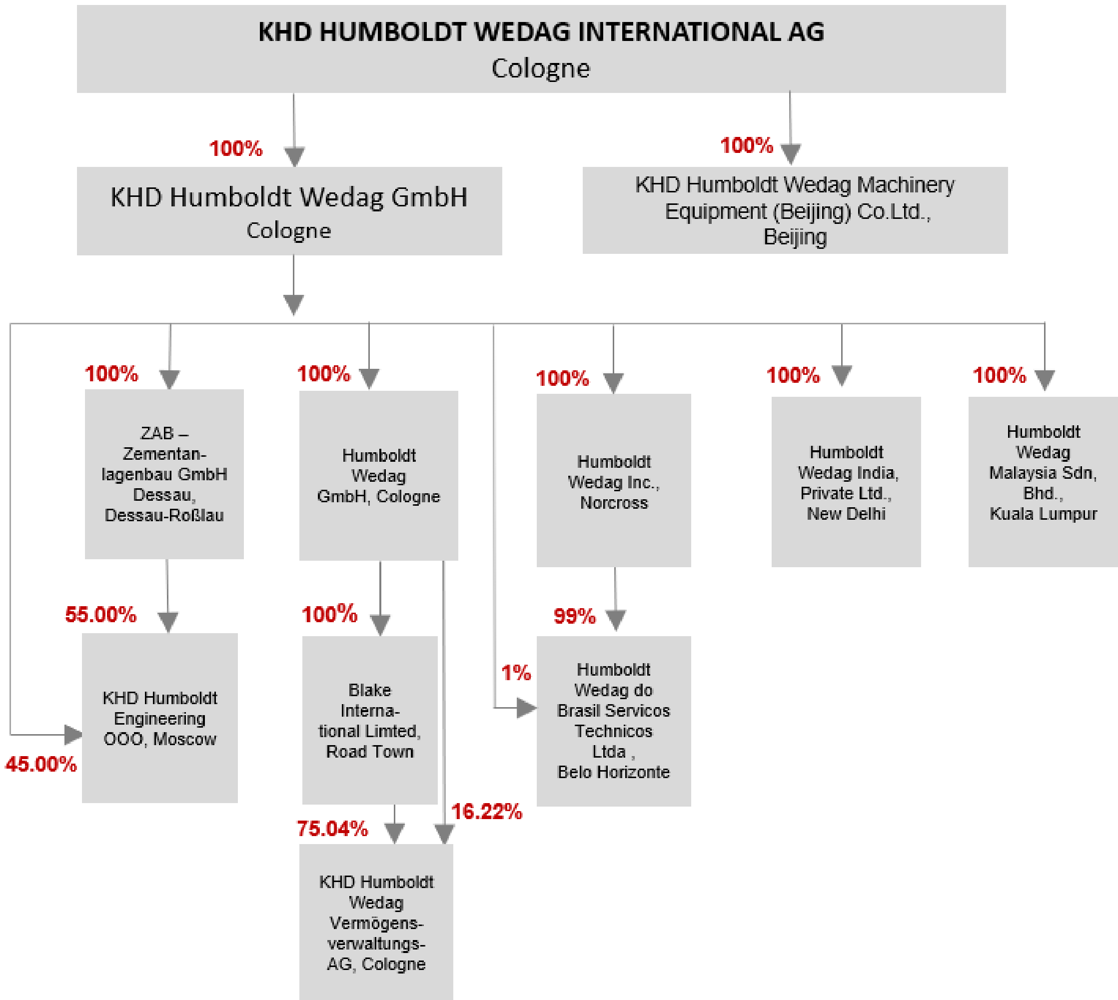
Business Model

Organizational Structure and Locations

With its subsidiaries in Europe, the Americas, and Asia, KHD Humboldt Wedag International AG (hereafter also referred to as “KHD” or “Group”) based in Cologne, Germany, ranks as one of the world’s top equipment suppliers and service companies for the cement industry. The scope of services encompasses process know-how and design, engineering, project management, the supply of technology and equipment as well as supervising the erection and commissioning of cement plants and related equipment. It also includes customer services such as supplying spare parts, optimizing, maintaining and repairing cement plants and training plant personnel. KHD focuses mainly on knowledge-intensive areas. The manufacturing of plant equipment is largely outsourced to quality-certified, external manufacturers who work in accordance with KHD’s specifications. Selected products are manufactured with the Group’s own production capacities in Faridabad, India. In its capacity as the ultimate holding company of the Group, KHD AG holds a 100% investment in KHD Humboldt Wedag GmbH ("KHD GmbH”), Cologne, Germany, which functions as a holding company with no operating business activities. The eleven KHD Group companies primarily focus on the business segment of industrial plant engineering as well as related services. KHD Humboldt Wedag Vermögensverwaltungs-AG (“KHD VV”), located in Cologne, focuses exclusively on managing its own assets. Humboldt Wedag Do Brasil Servicos Technicos Ltda. and Humboldt Wedag Malaysia Sdn., Bhd. did not undertake any operational business in the 2022 financial year. A decision has been taken to liquidate Humboldt Wedag Malaysia Sdn.

KHD AG has been a group company of the Beijing-based AVIC International Beijing Co. Limited ("AVIC Beijing") since January 2014. AVIC Beijing is part of the Aviation Industry Corporation of China, a corporate group owned by the People's Republic of China. AVIC International Engineering Holdings Pte. Ltd. ("AVIC Engineering"), and Max Glory Industries Limited ("Max Glory"), directly hold a 69.02% stake and a 20.00% stake in KHD AG, respectively.

Group Structure



KHD's customer base is made up of cement producers from around the world. Maintaining close contact with this target group is one of the keys to the success of the Group's business activities. Through our targeted sales, we ensure that our customers are served in accordance with their individual needs. We ensure direct customer care through our KHD subsidiaries in the respective sales territories.

The advantage of our structure is the technological leadership by **Humboldt Wedag GmbH** ("HW GmbH") in Cologne, the operating company at the Cologne headquarters, combined with the proximity of the regional subsidiaries to the respective customers and their knowledge of the local market environment. In order to tap into markets in which the Group is not represented by its own sales force, the KHD Group also employs sales agents.

Within the KHD Group, in addition to technological leadership through the Center of Excellence (CoE), HW GmbH assumes important central functions and serves as a contact for specialist and organizational matters. The markets in Europe, the Middle East and North Africa as well as the Asia-Pacific region (with the exception of China) are managed directly from Cologne by HW GmbH. The other regions – Russia/CIS, India, the Americas and China – are managed locally by the respective subsidiaries.

KHD GmbH operates a **representative office in Nanjing,** China. The office in Nanjing is not an independent company, but is legally part of KHD GmbH. The office in Nanjing performs important tasks in the implementation of Group strategy and supports efforts to make use of the cost and efficiency advantages of the Chinese employment and supply market to the benefit of KHD.

Humboldt Wedag India Private Ltd. ("HW India") in New Delhi is responsible for the important Indian market and the neighboring countries of Nepal, Bangladesh, Bhutan, and Sri Lanka as well as East Africa. With about 297 engineers as of December 31, 2022, HW India not only executes its own orders, but it also increasingly supports the other KHD subsidiaries. HW India has its own workshop in Faridabad, near New Delhi, for producing some key components and for refurbishing roller presses.

ZAB – Zementanlagenbau GmbH Dessau ("ZAB") in Dessau-Roßlau, Germany, together with its subsidiary in Moscow, **KHD Humboldt Engineering OOO** ("KHD OOO"), covers the 11 states of CIS plus Mongolia. In addition to new plants, the focus is on taking advantage of the huge potential in the region for modernization and expansion investments. Large projects are executed in cooperation with HW GmbH. Even if business activities in Russia are severely limited due to the war of aggression against Ukraine and the resulting sanctions, KHD has neither withdrawn from the Russian market nor separated from its Russian subsidiary. Business relationships with Russian customers were not completely broken off, but all of the KHD companies are strictly adhering to existing restrictions and sanctions.

Humboldt Wedag, Inc. ("HW Inc."), with its headquarters in Norcross, near Atlanta, Georgia in the USA, is responsible for both North and South America. For large project execution, HW Inc. is supported by HW GmbH, HW India, and KHD Beijing.

KHD Humboldt Wedag Machinery Equipment (Beijing) Co. Ltd. („KHD Beijing"), in Beijing, China, plays a critical role in the increasing development of the Chinese market. Many activities are currently being undertaken together and with support from HW GmbH and HW India. Employees of KHD Beijing support other KHD companies in terms of engineering and making use of the cost and efficiency advantages of the Chinese employment and supply market.

Range of Products and Services

The range of KHD products and services includes the segments Project Business (Capex) and Plant Services.

Capex (Project Business)

The scope in the Capex business unit encompasses process technology, design, engineering, project management, and the supply of technical equipment (grinding, pyro process, system automation). The supervision of the erection and commissioning of cement plants and related equipment (also called Field Services) that is directly connected with the project business is also classified under this segment. The KHD Group also organizes training for cement plant personnel. For this purpose, KHD draws on its own e-learning program, SIMULEX®, with which all processes in a cement plant can be simulated and controlled by the course participants. Specialized e-learning programs about the pyro process expand the training options. The Capex segment comprises all of the deliveries and services directly connected with an EP (Engineering and Procurement) project.

The core product range supplied by KHD includes equipment for grinding and pyro processing, which represent essential elements of every cement plant. Our grinding technology is utilized in raw material, clinker and clinker substitute grinding, and comprises crushing, grinding, and separation equipment as well as fans. The KHD Group's pyro processing equipment covers all of the key components of the kiln line, such as preheaters, calciner systems, burners, process fans, rotary kilns, and clinker coolers. With the PYROROTOR®, a further development of traditional calciner technology, KHD is also providing technological solutions with which very coarse and poorly prepared secondary fuels can be used in the cement production process. The PYROREDOX® is KHD's gasification reactor for reducing emissions. Nitrogen oxide emissions (NO_X) can be reduced considerably without extensive catalytic technology or the use of ammonia. Moreover, KHD has developed a number of system automation products which are used together with process control systems to optimize plant performance.

Our products are characterized by their low energy consumption, low maintenance costs, reduced vibrations and noise emissions, as well as low wear.

Plant Services

KHD's services include the supply of spare and wear parts as well as various plant services. These include maintenance services such as refurbishing roller presses, technical inspections and audits, as well as consulting and assistance services. In this respect, consulting on energy efficiency, as well as emissions reduction and reduction of operating costs (e.g. fuel substitution by alternative fuels) when modernizing plants are important subjects.

Management and Supervision

KHD is governed by the provisions of the German Stock Corporation Act (AktG), capital market regulations, and the rules set out in its articles of association. Pursuant to the dual board system, the Management Board is responsible for managing KHD, while the Supervisory Board carries out advisory and supervision functions. Both boards cooperate closely for the benefit of the Company. Their common goal is to ensure sustainable value, while taking the interests of the shareholders, employees, and other stakeholders into account.

Management Board

The rules of procedure implemented for the Management Board by the Supervisory Board govern the fundamental principles of the Management Board's work. The assignment of functional responsibilities for individual Management Board members is laid out in the schedule of responsibilities. As of December 31, 2022, the Management Board of KHD consisted of five members, unchanged from the previous year.

Supervisory Board

The Supervisory Board also remained unchanged in the financial year under review.

Corporate Governance

The Company is managed and controlled in accordance with the standards set out in the German Corporate Governance Code ("GCGC"). The main aspects of corporate governance at KHD are listed in the Corporate Governance Statement that also includes the Declaration of Compliance pursuant to Section 161 of the German Stock Corporation Act (AktG). The Declaration of Compliance and the Corporate Governance Statement are available on KHD's website at **www.khd.com/ir/corporate-governance/#declaration-of-compliance** and **www.khd.com/ir/corporate-governance/#corporate-governance-statement**. The Corporate Governance Statement also includes the information required by Section 289f, Paragraph 2, Number 1a of the German Commercial Code (HGB). The Compensation Report for the 2022 financial year, including the Auditor's Report in accordance with Section 162 AktG is available at **www.khd.com/ir/news-reports/#compensation-reports**. A complete description of the compensation system of the Management Board in accordance with Section 87a, Paragraph 1 and Paragraph 2, Sentence 1 AktG is publicly available as part of the invitation to the Annual General Meeting in the 2021 financial year at **www.khd.com/ir/annual-general-meeting/#2021** and the most recent resolution regarding the compensation system in accordance with Section 113, Paragraph 3 AktG is publicly available at **www.khd.com/ir/annual-general-meeting/#2021**.

Objectives and Strategies

KHD is a full service provider for cement plants and can offer the material key components of a complete cement plant or a separate grinding facility with its own products.

Since its establishment more than 160 years ago, KHD has set itself apart with technologically superior machines and equipment developed in Germany. In product development, KHD focuses strongly on energy efficiency, clean plants with minimal polluting emissions, long service life and very easy maintenance in addition to the paramount issue of CO_2 reduction.

The “Go China” initiative continues to be a significant building block of our strategy. With this initiative, KHD is both increasing its development of the Chinese sales market and making much better use of the Chinese supply market than before. KHD certifies/qualifies production companies in China, adapts core KHD products specifically with regard to local requirements, and is increasing its use of engineering experience available in China (e.g. plant engineering). By actively marketing technologically leading products such as PYROREDOX® and PYROROTOR® (particularly with regard to environmental requirements in China) and with our expertise in improving the performance of cement plants as well as modernizing them, KHD has access to significant market potential. The “Go China” initiative is being implemented in close cooperation with AVIC Beijing.

With our lean organization, we have flexibility in dealing with individual customer requirements and can create efficient solutions.

Management and Control System

The strategy of KHD also manifests itself in the way the Group is managed. A uniform system of key financial targets across the Group ensures a common understanding of how to measure success. The primary financial indicators KHD uses to determine target achievement are calculated monthly on the basis of key figures. These performance indicators are determined consistently and continuously to ensure comparability across various periods. In part, these performance indicators are alternative performance measures, which are not defined according to the International Financial Reporting Standards (IFRS).

The primary financial performance indicators used for managing and controlling are defined and derived as follows:

- **Order intake and order backlog**
  Order intake is recorded once the conditions to commence with project execution are fulfilled. Here, in addition to the legally binding implementation a customer contract, other conditions must also be routinely met. These conditions include, for example, receipt of a down payment or the effective opening of a letter of credit. If the respective prerequisites are met, the contract value is recorded as order intake. With this recording in order intake, the order backlog increases accordingly. This means that the order backlog represents the portion of the binding, concluded contracts which is still to be executed by KHD. It changes continually based on the recorded order intake and progressing execution of the existing backlog (revenue recognition according to the stage of completion). Reductions of order values or cancellations of orders as well as effects due to exchange rate fluctuations are shown as changes in the order backlog. In this way, the order intake directly represents the new business gained in the financial year.
- **Group revenue**
  Group revenue is determined in accordance with generally accepted accounting principles pursuant to the regulations of IFRS 15.

- **Adjusted Group earnings before taxes and interest (adjusted EBIT) as well as the ratio to revenue (adjusted EBIT margin)**
  The EBIT provides information about the Group's operating profitability and includes all of the components of the income statement that refer to operating performance. It is determined as the Group net result for the year plus the net finance result and income taxes. The EBIT margin is a relative indicator used to compare operational profitability. A ratio of EBIT to revenue is used to determine this figure. For Group management purposes, KHD adjusts EBIT as necessary with regard to special effects. Special effects are one-time-items or effects that are special in nature and/or magnitude, e.g. expenses for restructuring, reorganization or litigation, expenses related to under-utilization of capacity or, as in this reporting year, impairment of goodwill. The adjusted EBIT is more suitable for comparing the operating performance across several periods and is determined for the 2022 financial year as follows:

in € million	**2022**	**2021**
EBIT prior to adjustments	**-2.5**	**-5.2**
Impairment of Goodwill	1.6	0.0
Adjusted EBIT	**-0.9**	**-5.2**

- **Operating cash flow**
  Operating cash flow (or cash flow from operating activities) is determined in accordance with generally accepted accounting principles as defined by IAS 7 and includes all cash flows that are not associated with investing and financing activities.

Research and Development

In the 2022 financial year, the following trends – driven by costs and legislation – continued to define the cement industry:

- Reduction of the CO_2 emissions of cement plants,
- Digital solutions and applications for improving operating performance,
- Use of alternative fuels,
- Need for energy-efficient plants to reduce operating costs,
- Higher requirements for emission controls.
- Improvements in cement quality due to better grinding technology.

Research and development activities at KHD are focused on the development of convincing responses to the trends listed above. The expenses for research and development in the 2022 financial year amounted to € 2.9 million (previous year: € 2.8 million). This corresponds to 1.4% (previous year: 1.2%) of revenue.

A total of 16 intellectual property rights – including one registered design – (previous year: 16 intellectual property rights) were applied for in the reporting year. At the end of the year, KHD owned the rights to a total of 912 intellectual property rights, of which 326 were patents (previous year: 355), 577 were brands (previous year: 558), and nine were registered designs (previous year: 13).

The development of convincing concepts for drastically reducing the CO_2 emissions of cement plants remains tremendously important for the future of the cement industry. To minimize the CO_2 footprint, KHD continues to invest in the development of new technologies. In addition to the traditional concepts of energy efficiency, alternative fuels and clinker substitution, these essentially include the following new technologies:

- Techniques for the calcination of alternatives to limestone, such as clay, which are more advantageous with respect to CO_2,
- Oxyfuel plants,
- Recarbonization of used concrete,
- CCUS (carbon capture, utilization and storage of CO_2).

As a supplier of machinery and plants for one of the most climate-relevant industries, our research and development efforts target not only the creation of the most efficient and affordable solutions possible for cement production, but also, and increasingly, the development of environmentally sound technologies.

In the area of digital solutions and applications, we are focusing in the RunTimeOptimizer ("RTO") – artificial intelligence for improving the operating performance of cement plants, IIOT/Cloud solutions for data utilization and the digitization of engineering lifecycle management. With PROMAX®, KHD can provide customers with a digital twin of the entire cement plant that can be used to optimize production as well as maintenance and spare part management.

Increasingly, our customers are requesting solutions that use alternative raw and residual materials as substitutes for limestone, which is carbon dioxide-intensive. Since the PYROCLON® calciner was introduced, KHD has been offering a solution for the calcination of alternative substances, such as clay. In addition to the energy-related benefits, the admixture of calcined clay drastically reduces the CO_2 footprint of cements, which provides a significant contribution to climate protection. In the context of our research and development program we are developing and improving more solutions for the thermal treatment of residual materials such as slag and ash.

With numerous efficiency enhancing measures, modernization concepts, and improvements as well as services for plants, KHD continues to orient itself, based on customer requirements, toward environmentally sensitive solutions that simultaneously reduce operating expenses for its customers. We are continuing to adapt our product range in order to meet the special needs of the Chinese market.

In particular, we meet market requirements with regard to reducing nitrogen oxide emissions with our PYROREDOX® gasification reactors. With this innovation, which does not require extensive catalytic technology or the use of ammonia, KHD offers a significantly more affordable alternative to other conventional catalytic solutions. The continuous further development of this technology, based on increasing knowledge, is among our development efforts along with the improvement and development of new sizes of our PYROROTOR® combustion reactor. With the PYROROTOR®, KHD is already meeting growing market demand for using a wide scope of even very coarse and poorly prepared secondary fuels in cement plants.

ECONOMIC REPORT

Macroeconomic and sector-related Conditions

According to the International Monetary Fund (IMF), in 2022 the global economy grew by an estimated 3.4% (IWF: World Economic Outlook Update January 2023), following an increase in economic output of 6.1% in 2021. The (indirect) effects of the Russian war of aggression in Ukraine, high rates of inflation and the weakening economies in China, the USA and the European Union are currently the three most significant challenges for the global economy.

Industry Environment

According to CW Research ("Global Cement Volume Forecasts Report 2H2022 extended update", published in November 2022), a decrease of 3.4% in global cement demand is forecast for 2022, or an expected volume of 4.1 billion tons for this period.

The KHD Group depends indirectly on the development of global cement production and cement consumption. KHD's key markets demonstrated the following tendencies in relation to cement consumption in the 2022 financial year:

- For Western Europe, following a considerable increase in cement demand in 2021, CW Research is now forecasting an increase of just 1.5%. For Germany, an increase of 0.2% in cement demand is expected because residential construction is not taking place here to the anticipated extent. In Italy, following an increase of 15.0% in cement demand in the previous year, a figure of just 1.0% is expected and for Spain 2.5%.
- Because the construction sector in Turkey is weak, CW Research expects a decrease of 6.0% in cement demand for 2022. In 2021, at 7.5%, demand was still increasing.
- Due to the invasion of Ukraine and the resulting sanctions against Russia, it is expected that cement demand in Russia will decrease by 6.0% in 2022. In the medium term, however, a recovery in cement demand is anticipated.
- In India, cement demand increased by 19.9% in 2021. For the 2022 reporting year, CW Research expects demand to increase by 7.5%. The construction sector in India is undergoing positive development and the Indian government has planned expenditures totaling USD 1.2 trillion for infrastructure projects in the period from 2020-2025
- For the USA, cement demand is expected to grow in 2022 by 1.5%, an increase to 108.7 million tons, spurred on by the passage of the spending package amounting to USD 1.5 trillion.
- The outlook for the ASEAN countries for 2022 is varied: For Indonesia and the Philippines, the increase in cement demand is expected to continue unchanged when comparing 2022 to 2021 (Indonesia +4.0%; the Philippines +7.0%). In contrast, for South Korea CW Research is forecasting a considerably weaker increase in cement demand of 2.0% in 2022 in comparison with 6.0% in 2021.
- For China, a decrease of 8.5% in cement consumption is expected for 2022, particularly due to high procurement costs for construction materials and a tense real estate market. In 2021, China was responsible for 56% of the global demand for cement. This proportion will decrease to 53% in 2022.

Financial Market Environment

Because of KHD’s global presence, its business performance is subject to currency effects, among others. Particularly relevant for the KHD Group is the development of the Indian rupee and the US dollar and, to a lesser degree, the development of the Chinese yuan and the Russian ruble.

Compared with the closing rate for the previous year, as of December 31, 2022, the Indian rupee fell 4.6% with regard to the euro. However, at 82.80 rupees to the euro, the average rate was greater than the previous year’s level (87.20 rupees to the euro). At the end of the year, the US dollar increased in value against the euro by 6.14% At 1.05 US dollars per euro, the average rate was considerably higher than that of the previous year (1.18 US dollars per euro). The year-end rate of the Russian ruble recovered in comparison with the previous year by 8.7%. The average rate of 73.5 rubles per euro was also greater than that of the previous year (87.3 rubles per euro). The rate of the Chinese yuan against the euro as of December 31, 2022 was 2.43% lower than the figure at the end of the previous year. In contrast, the average rate increased by 6.7% with respect to the previous year. Due to converting local financial statements into euros, the exchange rate changes in the reporting year have had an overall positive impact on KHD Group’s income statement.

Overall Assessment of the Results of Operations and Economic Position of the Group

Due to the effects of the Russian war of aggression against Ukraine, the 2022 financial year was negatively affected by a sharp increase in inflation as well as by the COVID-19 pandemic, albeit in a considerably diminished form. Significant disruptions in the supply chain and a sharp increase in the price level in supply markets adversely affected business activities. For this reason, in most of the key markets for KHD, the reluctance of customers to make investment decisions is still noticeable. Nevertheless, the business development of the Group in 2022 as measured by the performance indicators of order intake and revenue is satisfactory overall. The adjusted EBIT improved from € -5.2 million in the previous year to € -0.9 million in the 2022 financial year. EBT totaled € 2.2 million, following a figure of € 0.7 million in the previous year, and for the first time in several years, the KHD Group achieved a Group net profit in the amount of € 0.3 million. Nevertheless, profitability remained at an unsatisfactory level.

Although order intake, at a volume of € 218.6 million, was lower than the previous year’s figure of € 231.7 million, it did exceed the forecast in last year’s management report (less than € 200.0 million).

Order backlog as of December 31, 2022 was € 254.6 million, which is about the same level as the previous year (€ 252.1 million). Because order intake was greater than expected and due to the delay in revenue recognition for specific projects, order backlog did not decline as indicated in the forecast. Due to good order backlog and high order intake in the 2022 reporting year, existing capacities were utilized to their full extent.

Revenue totaled € 210.4 million (previous year: € 226.3 million) which was slightly lower than the previous year's figure. According to the forecast, revenue at about the level of the previous year was expected.

Overall, the Group achieved EBIT of € -2.5 million (previous year: € -5.2 million) and an adjusted EBIT of € -0.9 million (previous year: € -5.2 million). The EBIT margin was -1.2% (previous year: -2.3%) and the adjusted EBIT margin was -0.4% (previous year: -2.3%). Although both EBIT and adjusted EBIT are slightly negative, they have improved significantly in comparison with the previous year, which corresponds with our forecast.

Cash flow from operating activities amounted to € -22.0 million, which was considerably lower than the previous year's figure (€ -12.6 million). In our forecast we still expected negative cash flow from operating activities in the single-digit millions. Despite the relatively high cash outflow, the financial and net assets position of KHD remains fully satisfactory due to adequate liquidity and a high equity ratio.

In the Capex segment, order intake of € 166.2 million, following a figure of € 178.5 million in 2021, exceeded the forecast (considerably below the level of the previous year). Revenue for the 2022 financial year in the amount of € 163.6 million remained, as expected, below the level of the previous year's figure of € 194.1 million (forecast: revenue below the level of the previous year). EBIT in the amount of € -8.5 million (previous year: € -9.0 million) were negatively affected in the 2022 financial year by impairment of goodwill attributable to the segment in the amount of € 1.1 million. After adjusting for this impairment, EBIT amounts to € -7.3 million (previous year: € -9.0 million). This means that the Capex segment met the forecast for adjusted EBIT (negative, but a considerable improvement over the previous year).

In the Plant Services business unit, order intake of € 52.3 million was nearly at the level of the previous year (€ 53.1 million). This result clearly exceeded the submitted forecast (considerable reduction in order intake). In line with our forecast, considerably higher revenue in the amount of € 46.8 million was generated than in the same period in the previous year (€ 32.1 million). EBIT in the amount of € 6.0 million (previous year: € 3.8 million) also corresponded with our forecast (significantly positive and considerably above the previous year). Adjusted for the impairment of goodwill (€ 0.5 million), EBIT for the Plant Services segment amounts to € 6.5 million.

Business and Earnings Position

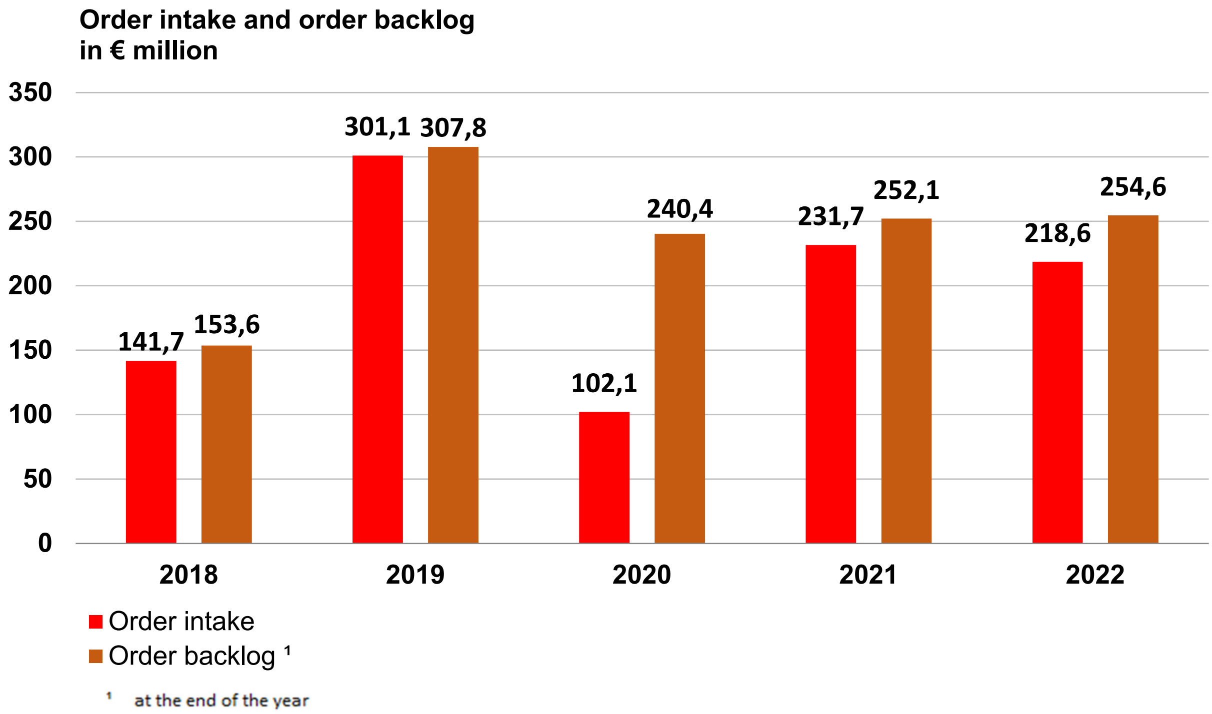
Order Intake and Order Backlog

KHD achieved order intake of € 218.6 million in the 2022 financial year, which was, in accordance with planning, below the volume of the previous year (€ 231.7 million).

In the Capex segment, KHD achieved order intake of € 166.2 million, which was, as expected, below the previous year's figure for new business (€ 178.5 million). In this context, the markets of HW India (in particular India, Nepal, Bangladesh) made a significant contribution to order intake in amounts that were considerably above the planned figures. The EMENA and Asia-Pacific regions nearly met the expectations with respect to order intake in the 2022 financial year. Order intake in the Americas remained below expectation, similar to the Russia/CIS region. Due to the ongoing travel limitations in the 2022 financial year, the targets for order intake in China were not achieved in the 2022 financial year.

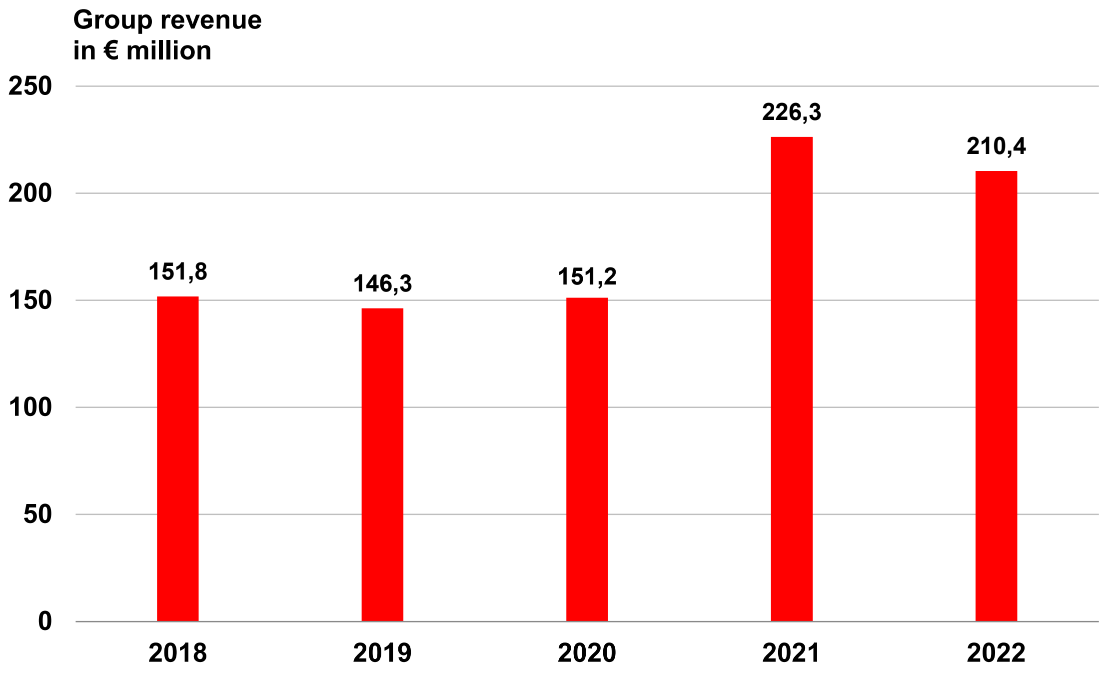
In contrast, order intake in the spare parts and service business (Plant Services) remained at a high level at € 52.3 million, following a figure of € 53.1 million in the previous year. In the Americas, along with the Asia-Pacific and Russia/CIS regions, the expectations for order intake were significantly exceeded due to special effects. The Plant Services segment was responsible for 24.0% of the total order intake (previous year: 22.9%) in the 2022 financial year.

Revenue (€ 210.4 million) and order intake (€ 218.6 million) were nearly at the same level in the reporting year. For this reason, order backlog as of December 31, 2022 reached a figure of € 254.6 million, which is slightly above the previous year's figure of € 252.1 million. There were no adjustments due to the reduction of order values or cancellation of orders, which are reported as an adjustment to order backlog (previous year: € 6.4 million). However, exchange rate fluctuations affected order backlog in the amount of € -5.1 million (previous year: € 12.8 million).



Group Revenue

In the 2022 financial year, the Group achieved revenue in the amount of € 210.4 million (previous year: € 226.3 million). Revenue was slightly less than that of the previous year due to delays in revenue recognition for specific projects. Projects in India and neighboring countries, in the USA and in East and Southeast Asia were the biggest contributors to revenue.



Group Earnings Position

The costs of sales totaled € 182.8 million in the 2022 financial year (previous year: € 207.0 million). Adjusted gross profit for the 2022 financial year in the amount of € 27.6 million has considerably improved in comparison with the previous year (€ 19.3 million).

The other operating income of € 2.6 million was lower than the previous year's figure (€ 3.6 million). As in the previous year as well, it also primarily includes income from exchange rate fluctuations in the amount of € 1.8 million (previous year: € 2.1 million).

Sales expenses in the amount of € 10.6 million exceeded the previous year's figure (€ 9.6 million), which resulted from higher personnel expenses as well as increased tendering costs due to intensive sales activities.

General and administrative expenses increased from € 13.2 million in the previous year to € 14.9 million in the 2022 financial year. Personnel expenses in particular increased from € 8.2 million in the previous year to € 9.9 million in the reporting year. General and administrative costs include, in particular, legal and consulting costs, accounting costs, IT costs, Management Board remuneration, Supervisory Board remuneration, and costs related to the Group's stock exchange listing.

Other expenses (€ 7.1 million, previous year: € 5.3 million) include, in particular, currency exchange rate fluctuations and changes in market value of foreign exchange forward contracts for hedging exposure on foreign currency receivables of € 2.4 million (previous year: € 2.1 million) and expenses for research and development of € 2.9 million (previous year: € 2.8 million). As a result, research and development activities remain at a high level in the 2022 financial year as well, illustrating the efforts of KHD to continue to expand its technological expertise. The increase in other operating expenses resulted primarily from impairment of goodwill in the amount of € 1.6 million (previous year: € 0.0 million).

Despite a considerable improvement with respect to the previous year, an unsatisfactory, negative EBIT of € -2.5 million (previous year: € -5.2 million) remains in the 2022 financial year. The EBIT margin improved from -2.3% to -1.2%.

The Group's net finance income decreased from € 5.9 million in the previous year to € 4.7 million in the reporting year. In particular, it includes interest income of € 4.7 million (previous year: € 4.9 million) from the loans granted to AVIC Kairong. As of the balance sheet date, these loans totaled € 85.0 million (previous year: € 95.0 million) and incur interest of 5.0% p.a. The largest items under finance expenses, which totaled € 1.6 million (previous year: € 0.8 million), are the interest expenses for a bank loan, expenses related to exchange losses on securities and interest expenses resulting from lease liabilities. As in previous years, the net finance income made an important contribution toward compensating for the Group's operating losses.

The 2022 reporting year concluded with positive earnings before taxes (EBT) in the amount of € 2.2 million, a considerable improvement in comparison with the 2021 financial year (previous year: € 0.7 million).

The Group incurred income tax expenses in the amount of € 2.0 million in the 2022 financial year (previous year: € 1.8 million). The income tax expense is due to the varying profitability of the KHD subsidiaries. Some subsidiaries achieved positive EBT that resulted in income tax expenses, whereas other subsidiaries sustained losses. KHD capitalizes deferred tax assets on temporary differences and tax loss carry-forwards only to a limited extent, so that only a low compensation effect on current income tax expenses could be recognized. The Group net profit for the year amounted to € 0.3 million (previous year: Group net loss of € -1.1 million). Basic and diluted earnings per share improved to € 0.01 (previous year: € -0.02).

Segment Earnings Situation

Revenue for the Capex segment of € 163.6 million was, as expected, below the of previous year's figure (€ 194.1 million). The gross profit in the Capex business unit amounted to € 15.3 million (previous year: € 10.1 million), which was significantly higher than the previous year's figure. The improved gross profit is reflected in a higher gross profit margin (9.4%, previous year: 5.2%).

Other operating income of € 2.6 million (previous year: € 3.6 million) was attributed to the Capex business unit in the 2022 financial year. The segment's sales expenses were € 7.8 million (previous year: € 6.8 million) and the general and administrative expenses were € 12.0 million (previous year: € 10.6 million). KHD Group's other expenses in the amount of € 7.1 million (previous year: € 5.3 million) were almost exclusively allocated to the Capex segment with a figure of € 6.6 million (previous year: € 5.3 million). Other operating expenses for the Capex segment include impairment of goodwill in the amount of € 1.1 million. EBIT in the Capex segment totaled € -8.5 million following a figure of € -9.0 million in the previous year. After adjusting for impairment of goodwill, EBIT totaled € -7.3 million. The EBIT margin amounted to -5.2% following a figure of -4.6% in the 2021 financial year; the adjusted EBIT margin was -4.5%.

KHD Group revenue in the Plant Services segment totaled € 46.8 million, considerably above the level of the 2021 financial year (€ 32.1 million). The gross profit in this business unit was € 12.3 million (previous year: € 9.2 million), another positive development. The total of sales expenses and general and administrative expenses in the Plant Services segment amounted to € 5.8 million (previous year: € 5.4 million). Other expenses incurred in the amount of € 0.5 million in the reporting year were due to impairment of goodwill. As a result, the Plant Services business unit achieved EBIT of € 6.0 million following a figure of € 3.8 million in the previous year. The EBIT margin amounted to 12.8% in the 2022 financial year (previous year: 11.9%). After adjusting for impairment of goodwill, EBIT amounts to € 6.5 million with an EBIT margin of 13.9%.

Financial Position and Net Assets

Fundamentals of the Financing Strategy

The KHD Group's finance strategy continues to be characterized by a robust liquidity position and a strong equity base. A solid financial position is an important basis for the targeted growth, which includes investments in new technologies and an expansion of the business model.

KHD AG controls the Group's financial management and makes sufficient cash available to Group companies where required so that payment obligations can be met in full at all times. The excess liquidity which is not necessary for daily operations has been granted to AVIC Kairong in the form of two loans totaling € 85.0 million.

The bank loan granted by Bank of China Limited, Frankfurt Branch, amounts to € 25.0 million and has a variable interest rate. On October 28, 2022 the term was extended by two years to October 10, 2024. The applicable interest rate for the loan for the 2022 financial year is lower than the interest rate obtained by KHD AG for the two loans granted to AVIC Kairong.

In accordance with the KHD financial strategy, Group companies are in the first instance responsible for accumulating liquidity surpluses to cover their financing requirements (principle of internal financing). However, if needed KHD provides its subsidiaries with additionally required liquidity.

The project business means that the KHD Group has to cope with a very cyclical market environment that is characterized by individual high-volume orders and varying financing structures. A high liquidity position is necessary in order to have sufficient cash and cash equivalents to meet Group companies' operational financing requirements at all times. Financial security is controlled via the operating cash flow and is largely measured by determining freely available liquidity and by using the equity ratio.

All operating companies in the KHD Group have access to bank guarantee credit facilities for various hedging instruments such as guarantees via bank guarantee credit facilities with Deutsche Bank AG (€ 55.0 million). Furthermore, the KHD Group has a bank guarantee credit facility with Bank of China Limited, Frankfurt Branch, with a volume of € 6.0 million. Moreover, the subsidiary HW India has concluded a local bank guarantee credit facility for € 11.3 million (currency translated into euros). As of December 31, 2022 the bank guarantee credit facilities have been utilized in a total amount of € 63.1 million (previous year: € 55.8 million).

Contracts with both customers and suppliers are generally concluded in the local currency of the respective KHD company. In principle, foreign exchange rate risks are hedged using foreign exchange forward contracts.

Financial Position

Total cash and cash equivalents of € 40.7 million as of the balance sheet date were below the previous year's level (€ 65.3 million). Here it must be taken into consideration that as of the balance sheet date, KHD is reporting bank deposits in the amount of € 11.3 million (December 31, 2021: € 0.0 million) under other current financial assets that are not shown as cash and cash equivalents. Besides the short-term liquidity in the form of cash and cash equivalents, KHD can, in case of additional need for liquidity, call in a loan of € 35.0 million for repayment that was granted to AVIC Kairong by giving 30 days' notice.

A bank loan for € 25.0 million and long-term pension benefit obligations of € 12.1 million (previous year: € 16.9 million) offset cash and cash equivalents.

Cash Flow

The cash flow from operating activities totaled € -22.0 million (previous year: € -12.6 million) in the 2022 reporting year. Partially, the negative cash flow from operating activities reflects the Group's operating losses. Mainly the cash outflow results from the advanced phase of project execution, i.e. project payments, including payments to suppliers, regularly exceed further progress payments from the customers.

Further details of the operating cash flow (in accordance with internal reporting) are presented in the following table:

Cash flow effect from operating activities for the 2022 financial year	in € thousand
Cash flow from customer contacts with revenue recognition over time	34,786
Cash flow from current liabilities/ invoices from subcontractors	-54,382
Cash flow from changes in trade receivables	2,450
Cash flow from utilization of provisions and long term liabilities	-496
Cash inflow from result (EBITDA)	1,095
Cash flow from tax payments made/ received	-1,728
Other cash inflows and outflows	-3,773
Cash flow from operating activities	**-22,048**

Cash flow from investing activities of € -0.4 million (previous year: € 9.1 million) mainly results from interest payments received (€ 4.7 million, previous year: € 4.9 million) on the loans granted to AVIC Kairong and cash inflow from the partial repayment of these loans in the amount of € 10.0 million. Short-term bank deposits were made in the amount of € 11.3 million. Outgoing payments for investments in property, plant and equipment and intangible assets resulted in a cash outflow amounting to € 3.7 million (previous year: € 2.2 million).

Cash flow from financing activities of € -2.2 million (previous year: € -2.0 million) includes principal payments on the recognized lease liabilities of € -1.7 million (previous year: € -1.6 million). Interest payments for a bank loan are reported in the amount of € -0.6 million (previous year: € -0.4 million).

Total Assets

The balance sheet total of the Group decreased considerably from the figure at the end of 2021 (€ 303.7 million) by € 49.7 million to € 254.0 million. This reduction resulted primarily from lower contract assets than in the previous year. The contract assets decreased from € 42.6 million in the previous year to € 17.5 million as of December 31, 2022. Lower cash and cash equivalents in the amount of € 40.7 million (previous year: € 65.3 million) also contributed to the reduction. As of the balance sheet date, current assets in the amount of € 227.6 million exceeded non-current assets of € 26.4 million and accounted for 89.6% of the total assets (previous year: 62.2%). This development is primarily due to reporting the loan to AVIC Kairong (€ 85.0 million), which is due for repayment in 2023, under current assets. In the previous year, this loan was included in the non-current assets in the amount of € 95.0 million.

Due to the reclassification of the loan granted to AVIC Kairong into the current assets as described above, the non-current assets amounted to just € 26.4 million, which was considerably less than the previous year's figure (€ 114.9 million). At € 13.0 million, property, plant, and equipment is slightly higher than the previous year's level (€ 10.8 million). The figure for rights of use in accordance with IFRS 16 "Leases" was € 9.1 million as of the balance sheet date for the reporting year (previous year: € 2.6 million). The increase is primarily due to a recently concluded, long-term rental contract. Goodwill decreased from € 3.8 million in the previous year to € 2.2 million in the reporting year due to impairment of € 1.6 million.

In addition to cash and cash equivalents, current assets include, among others, non-current trade receivables and other receivables of € 45.3 million (previous year: € 48.6 million). The contract assets from customer contracts with revenue recognition over time decreased to € 17.5 million (previous year: € 42.6 million) and result from projects for which the costs incurred for these contracts as of the end of 2022 plus proportionate profits recognized exceeded progress billings. The considerable decrease in contract assets is due to the execution status as of the reporting date as well as the contractually agreed upon conditions for issuing progress billings for these projects. The payments made in advance also decreased in comparison with the previous year's figure and amounted to € 12.8 million as of the balance sheet date, following a figure of € 23.7 million as of December 31, 2021.

Financing

Group equity increased slightly in comparison with the figure at the end of the previous year (€ 90.7 million) by € 1.7 million to € 92.4 million. Due to the lower total assets as of December 31, 2022, the equity ratio amounted to 36.4% (previous year: 29.9%), so it remains at a fully satisfactory level as of the balance sheet date.

Non-current liabilities of € 54.4 million on the balance sheet date were significantly above the figure as of December 31, 2021 (€ 27.0 million). In addition to pension benefit obligations of € 12.1 million (previous year: € 16.9 million), non-current liabilities include the bank loan granted to KHD by Bank of China Limited, Frankfurt Branch for € 25.0 million, which was reported under current liabilities in the previous year. Initially, the term of the loan expired on October 10, 2022, but in the 2022 financial year it was extended by two years to October 10, 2024.

The current liabilities as of December 31, 2022 (€ 107.2 million) decreased considerably in comparison with the previous year (€ 186.0 million). This is primarily due to significantly lower trade and other payables (€ 56.5 million in comparison with € 108.5 million in the previous year) as well as the reporting change for the bank loan as described above.

Net working capital – the difference between current assets (less cash and cash equivalents, bank deposits and current loan receivables) and current liabilities (less short-term bank loans) – increased to € -16.6 million (December 31, 2021: € -37.5 million).

Non-financial Performance Indicators

Non-financial performance indicators include employee development, customer satisfaction, the impact of our products on the environment, product quality and individual employee-related performance indicators.

KHD has a standard procedure for employee evaluation and development with which important competencies, such as performance and results orientation, assertiveness and communication are assessed. The results form the basis for a discussion of individual development activities as well as long-term personnel and succession planning. Target achievement in relation to non-financial performance indicators is measured with the help of various instruments, such as annual employee appraisal, the recording of customer satisfaction or the systematic measuring of emissions values and energy consumption of individual products. Value-oriented management in the KHD Group means that, for example, customer satisfaction and the minimization of our products' impact on the environment are more important than short-term profit maximization.

Employees

Personnel Development

As of the 2022 balance sheet date, KHD employed 791 people across the entire Group, 54 more than the previous year's total of 737. While the number of employees at the companies in the USA, China and Russia hardly changed, the subsidiary in India in particular added 45 more employees. The number of employees increased by 15 at German locations as well. As of the end of 2022, approximately 29% of all employees in the Group worked in Germany and 62% in India.

KHD's personnel expenses in the 2022 financial year totaled € 40.8 million, following a figure of € 35.7 million in the previous year.

Development of Team and Leadership Skills

Our employees undergo a variety of internal and external training programs. This is intended to ensure that the knowledge, skills, and working practices are adapted to continuously changing conditions and to customers' growing expectations. Internal training also includes seminars for our managers. Internal feedback sessions for the evaluation and development of employees were also carried out in 2022.

ANNUAL FINANCIAL STATEMENTS OF KHD HUMBOLDT WEDAG INTERNATIONAL AG

KHD Humboldt Wedag International AG (KHD AG) is the controlling company of the KHD Group and functions as a holding company with no operating business activities. The Management Board of KHD AG is responsible for managing the company and the Group. This primarily includes determining and implementing the Group strategy and financial management. The annual financial statements of KHD AG were prepared pursuant to provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG); the management report is combined with the Group management report. The individual financial statements are used to determine the net retained profit and the potential for dividend distribution.

Business Performance in 2022 and Expected Development in 2023 with Significant Risks and Opportunities

The business development and position of KHD AG is primarily determined by the development of business and the success of subsidiaries and, therefore, the development of the entire KHD Group. In this respect, reference is made to the corresponding sections of the combined management report.

Liquidity and earnings before taxes (excluding the effect of income from investments) are the performance indicators with key relevance. As a management holding company, KHD AG – unlike the operating Group companies – is not additionally controlled based on non-financial performance indicators. KHD AG did not achieve the targets as submitted in the outlook for the 2022 financial year with respect to a slightly positive earnings before taxes (excluding the effect of income from investments). Revenue for the 2022 financial year, which includes income from services provided to subsidiaries, increased considerably in comparison with the previous year. Moreover, other operating income increased. Because costs of purchased services as well as personnel expenses and expenses for income taxes were also higher, a positive net result for the year was not achieved. For this reason, the 2022 financial year concluded with another net loss for the year – though it was significantly lower than in the previous year.

The expected development of KHD AG in the 2023 financial year is also determined by the operating success and dividend policy of the direct and indirect subsidiaries and, therefore, the development of the KHD Group. To this extent, the statements in the outlook for the Group also apply indirectly to the future development of KHG AG. With respect to the significant performance indicators, KHD AG expects slightly negative earnings before taxes (excluding the effect of income from investments) in the 2023 financial year. This guidance is based on the assumption that the operating subsidiaries will continue to receive services from the bond arrangement agreement via KHD AG in the planned volume and that the Group charges for management tasks performed for KHD subsidiaries and services received do not change significantly. KHD AG intends to extend the terms of the loans granted to AVIC Kairong in the amount of € 85.0 million in the 2023 financial year. The liquidity and financing of KHD AG continue to be ensured to their full extent.

The risks and opportunities for KHD AG essentially correspond to those of the Group. They are presented in the risk and opportunity report of the combined management report. In addition to the risks presented there, KHD AG is exposed to specific risks in its function as a management holding company. These include equity holding risks, particularly in the form of an impairment of the carrying amount of the investment, but also exposure from legal and contractual contingent liabilities as a result of relationships to the subsidiaries. KHD AG continuously monitors the Group companies' economic development through active investment controlling. The remaining risk will continue to be classified as "medium."

Results of Operations

The revenue generated by KHD AG in the 2022 financial year totaled € 3,245 thousand (previous year: € 2,151 thousand) and resulted exclusively from internal Group services.

Other operating income in the amount of € 711 thousand was significantly above the previous year's level (€ 239 thousand). The main reason here was income from charges to affiliated companies in the amount of € 333 thousand, which was not present in the previous year. In addition, income from exchange rate forward contracts and exchange rate gains contributed € 340 thousand to other operation income in the reporting year (previous year: € 239 thousand).

The expenses for purchased services of € 623 thousand in the reporting year (previous year: € 441 thousand) mainly included, as in the previous year, external consulting services in connection with intra-group revenue.

Personnel expenses in the amount of € 2,416 thousand (previous year: € 2,045 thousand) included the compensation of the members of the Management Board as well as the Company's employees. The Company employed six salaried staff members on average during the year (previous year: six employees).

Other operating expenses increased slightly in the 2022 financial year from € 3,312 thousand to € 3,404 thousand. Other operating expenses primarily include Group charges, expenses for legal consultation and for other consulting services which, together with higher costs for the preparation and audit of annual financial statements, are the reason for the increase in this item. In addition, other operating expenses include exchange rate losses, Supervisory Board compensation, costs related to the Group's stock exchange listing and other administrative costs.

Income from long-term loans in financial assets of € 4,708 thousand in the 2022 financial year (previous year: € 4,869 thousand) was equivalent to the interest income from the loans granted to AVIC Kairong. This slight decrease compared with the previous year is caused by the reduction of the loans during the year from € 95.0 million to € 85.0 million. Interest and similar expenses totaling € 2,676 thousand (previous year: € 2,855 thousand) primarily resulted from interest for loans taken out by four subsidiaries (€ 1,786 thousand, previous year: € 2,172 thousand) as well as bank guarantee fees and interest expenses from a bank loan.

Income taxes for the 2022 financial year amounted to € 139 thousand. Income from income tax refunds in the amount of € 85 thousand was reported in the previous year.

After taxes, a net loss for the year of € -553 thousand (previous year: net loss of € -1,263 thousand) was recorded for the financial year under review.

Financial Position and Net Assets

The assets of the Company, which still functions only as a management holding company, decreased slightly in the financial year from € 173,731 thousand to € 161,646 thousand; the financial assets (€ 155,410 thousand; previous year € 165,410 thousand) remain dominant.

The most significant assets of KHD AG were – as in the previous years as well – the shares in KHD GmbH in the unchanged amount of € 70.4 million and the two loans granted to AVIC Kairong totaling € 85.0 million as of the balance sheet date on December 31, 2022 (previous year: € 95.0 million).

The total value of these financial investments was equal to 96.1% of the total assets (previous year: 95.2%).

Current assets amounted to € 6,124 thousand on the balance sheet date on December 31, 2022 (previous year: € 8,106 thousand). This development is primarily due to the lower figure for the Company's cash and cash equivalents, which decreased from € 3,809 thousand to € 1,709 thousand. Receivables and other assets of € 4,415 thousand were at about the same level as in the previous year (€ 4,297 thousand).

The 2022 financial year concluded with a net loss for the year in the amount of € -553 thousand (previous year: € -1,263 thousand) and, as a result, the equity of KHD AG decreased from € 106,138 thousand to € 105,585 thousand. Nevertheless, due to the lower total assets in comparison with the previous year, the equity ratio increased slightly from 61.1% to 65.3% and remains at a very high level.

Other provisions and accruals, which as of December 31, 2022 were established primarily for outstanding invoices, bonuses, unused vacation days and for auditing costs, increased from € 1,576 thousand on the balance sheet date for the previous year to € 1,766 thousand as of December 31, 2022. The increase is primarily due to increased provisions for bonuses as well as costs for the preparation and audit of annual financial statements and for unused vacation days. Liabilities amounted to € 53,655 thousand on the balance sheet date (previous year: € 65,586 thousand). Liabilities almost exclusively comprise liabilities due to affiliated companies in the amount of € 28.4 million (previous year: € 40.5 million) and bank loans in the amount of € 25.0 million (previous year: € 25.0 million).

As in the previous year as well, tax expenses from differences between the carrying amounts of assets, debts, prepayments and deferred expenses recognized by commercial law and their respective tax valuations, which will likely decrease in later financial years, did not result in deferred tax liabilities in the reporting year.

The financing of KHD AG continues to be ensured to its full extent due to the available liquidity at the end of 2022, the option to require repayment of the loan granted to AVIC Kairong in the amount of € 35.0 million within 30 days, and the ongoing distribution potential of companies in the KHD Group. As a management holding that provides a central financing function, the Company can use cash and cash equivalents from other Group companies as needed.

Relations with Affiliated Companies

The Management Board of KHD AG has prepared a report on relations with affiliated companies – a dependent company report – in accordance with Section 312 of the German Stock Corporation Act (AktG) for the 2022 financial year. The Management Board of KHD AG issued the following concluding declaration in the Company's dependent company report:

"With respect to the legal transactions listed and in view of the facts known to us at the time at which the legal transactions were made, our Company received appropriate consideration for each legal transaction. Furthermore, with respect to the measures listed and in view of the facts known to us at the time at which the measures were taken, our Company was not disadvantaged. No other legal transactions or other measures at the request of or in the interest of the controlling companies or one of their affiliated companies occurred."

Accumulated Loss

The annual financial statements of KHD Humboldt Wedag International AG for the 2022 financial year indicate a net loss for the year of € 553 thousand and an accumulated loss of € 8,918 thousand. The accumulated loss, determined in accordance with the German Commercial Code (HGB) shall be carried forward to new account.

Balance Sheet and Income Statement of KHD Humboldt Wedag International AG

The balance sheet and income statement of KHD AG are given in a condensed form.

Assets	**Dec. 31, 2022 € thousand**	**Dec. 31, 2021 € thousand**
Fixed Assets	155,438	165,445
	155,438	**165,445**
Current Assets		
Receivables and Other Assets	4,415	4,297
Bank Balances	1,709	3,809
	6,124	**8,106**
Prepayments and Deferred Expenses	**84**	**180**
Total Assets	**161,646**	**173,731**

Equity and Liabilities	**Dec. 31, 2022 € thousand**	**Dec. 31, 2021 € thousand**
Equity		
Subscribed Capital	49,704	49,704
Reserves	64,799	64,799
Accumulated Loss	(8,918)	(8,365)
	105,585	**106,138**
Provisions and Accruals		
Accruals for Taxes	640	431
Other Provisions and Accruals	1,766	1,576
	2,406	**2,007**
Liabilities		
Liabilities due to Banks	25,024	25,020
Liabilities due to Affiliated Companies	28,447	40,529
Other Liabilities	184	37
	53,655	**65,586**
Total Equity and Liabilities	**161,646**	**173,731**

Income Statement

	2022 € thousand	2021 € thousand
Revenue	3,245	2,151
Other Operating Income	711	239
Cost of Purchase Services	(623)	(441)
Depreciation and Amortization	(2,416)	(2,045)
Personnel Expenses	(19)	(9)
Other Operating Expenses	(3,404)	(3,312)
Interest Income/ Expenses	2,092	2,069
Income Taxes	(139)	85
Net Loss for the Year	**(553)**	**(1.263)**
Loss carried forward from Previous Year	(8,365)	(7,102)
Net Accumulated Loss	**(8.918)**	**(8.365)**

DISCLOSURES PURSUANT TO SECTION 315a OF THE GERMAN COMMERCIAL CODE (HGB)

Composition of Subscribed Capital

The Company's subscribed capital (share capital) amounted to € 49,703,573 as of December 31, 2022, and is divided into 49,703,573 no-par-value ordinary shares. All shares are ordinary bearer shares and grant the same rights. The rights and obligations arising from the shares are derived from statutory regulations.

Restrictions affecting Voting Rights or the Transfer of Shares

There are no restrictions affecting voting rights or the transfer of shares.

Direct or indirect Interests in the Share Capital exceeding 10% of Voting Rights

Direct and indirect interests in the share capital exceeding 10% of voting rights are held by (allocation of voting rights pursuant to the regulations of Section 22 of the German Securities Trading Act (WpHG)):

- AVIC International Engineering Holdings Pte. Ltd., Singapore, Singapore;
- Max Glory Industries Limited, Hong Kong, Hong Kong;
- AVIC International Beijing Co. Limited, Peking, China;
- AVIC International Holdings Limited, Shenzhen, China;
- AVIC International Shenzhen Company Limited, Shenzhen, China;
- AVIC International Holding Corporation, Beijing, China;
- Aviation Industry Corporation of China, Beijing, China;
- People's Republic of China, Beijing, China.

AVIC International Engineering Holdings Pte. Ltd. and Max Glory Industries Limited directly hold a 69.02% and a 20.00% stake in the share capital, respectively.

The Management Board was not informed of any other shareholders whose voting rights directly or indirectly exceeded 10% of the total voting rights as of the reporting date December 31, 2022, or at the time of the preparation of the financial statements.

Shares with Special Rights granting Control Authorizations

There are no shares with special rights that grant control authorizations.

Method of Voting Right Control if Employees hold Shares and do not directly exercise their Controlling Rights

There are no shares owned by employees as defined by Section 315a, Paragraph 1, Number 5 of the German Commercial Code (HGB).

Regulations governing the Appointment and Recall from Office of Management Board Members, as well as Regulations governing Changes to the Articles of Association

The Management Board consists of one or more persons whom the Supervisory Board appoints for a maximum of five years pursuant to Section 84 of the German Stock Corporation Act (AktG). Reappointment or an extension of the term of office is permitted. The Supervisory Board may appoint one of the Management Board members to be the Chief Executive Officer. A court may appoint a Management Board member in exceptional cases pursuant to Section 85 AktG. The Supervisory Board may revoke a Management Board appointment or the appointment as Chief Executive Officer pursuant to Section 84, Paragraph 3 AktG for good cause.

The articles of association may be changed only by a resolution passed by the Annual General Meeting pursuant to Section 119, Paragraph 1, Number 5 and Section 179 AktG. Unless determined otherwise by mandatory statutory provisions, resolutions by the Annual General Meeting are passed with a simple majority of votes submitted and, if required, by a simple majority of the issued share capital represented, pursuant to Section 133 AktG and Section 18, Paragraph 2 of the articles of association. The Supervisory Board may pass resolutions to amend the articles of association which relate solely to their wording pursuant to Section 20 of the Articles of Association. Amendments to the articles of association take effect once they have been entered into the Commercial Register in accordance with Section 181, Paragraph 3 AktG.

Management Board Authorizations, notably with regard to the Possibility of issuing or repurchasing Shares

The Management Board members are neither authorized nor empowered to issue or repurchase their own shares.

Significant Agreements subject to a Change of Control following a Takeover Bid

Agreements with regard to a change of control have been made in the bilateral bank guarantee credit facilities with Deutsche Bank AG and Austrian Raiffeisen Bank International AG. In the event of a change of control under the agreement, the Company will immediately inform the banks of the change in control and enter into negotiations with the banks concerning the continuation of the bank guarantee credit facilities. The loan contract with the Bank of China Limited stipulates comparable rules. Following notification of a change of control, the bank decides how to continue its involvement.

Compensation Agreements that the Company has entered into with Management Board Members or Employees in the Event of a Takeover Offer

The Company has not entered into any compensation agreements with Management Board members or employees in the event of a takeover offer.

COMPENSATION REPORT

The Compensation Report applicable for German stock corporations in accordance with Section 162 AktG, including the Auditor’s Report in accordance with Section 162, Paragraph 3 AktG is available in the Company’s website at www.khd.com/ir/news-reports/#compensation-reports.

REPORT ON EVENTS AFTER THE REPORTING PERIOD

The bank guarantee credit facility concluded with the Deutsche Bank AG in the 2022 financial year was increased by € 15.0 million from € 55.0 to € 70.0 million, effective February 2023. No other events of special significance occurred after the conclusion of the financial year that could affect the result of operations, financial position, and net assets.

RISK AND OPPORTUNITIES REPORT

Risk Management

As a globally operating cement plant equipment supplier and service company, the KHD Group is subject to a number of different risks in the course of its business activities. By being prepared to take calculated commercial risks, the KHD Group is able to utilize opportunities to increase the Group's value over the long term.

KHD's Management Board has implemented a comprehensive, systematic, and effective risk management system, which is based on a formal risk policy. Risk management in the KHD Group is based on the COSO-ERM concept. In addition to the systematic approach towards the early identification, recording, and assessment of risks, the essential components of our risk management system include steps to mitigate risk, which means defining and implementing measures in response to risks that have been identified. Risk management is a task performed on an ongoing basis across the Group and forms an integral part of decision-making and business processes throughout the KHD Group.

Identification and evaluation of opportunities is not carried out as a separate category of the risk management system. Nevertheless, risk management in the KHD Group also takes into account the best possible use of opportunities as positive deviation from targets due to successful implementation of the respective measures in addition to reducing impact and probability of negative events. With effective and efficient risk management, we are able to identify and capitalize on business opportunities to the benefit of our shareholders, customers, and employees.

The systematic recording and assessment of risks and opportunities is an essential component in controlling the Group. The corporate strategy and risk management are closely linked with respect to the systematic identification of risks at an early stage. Since the corporate objectives and the corresponding success factors are set as part of the planning process, direct relationships exist between risk management, on the one hand, and strategic planning and medium-term planning on the other. Transactions and measures that could potentially damage business viability are avoided in principle. For the KHD Group, this means in particular that for projects, liability for consequential damages is contractually excluded.

The risk management system in the KHD Group is incorporated into the internal control system. Risk management is not limited to the early risk recognition system set out in Section 91, Paragraph 2 of the German Stock Corporation Act (AktG), as it not only covers business viability risks, but encompasses all substantial risks for the Company or the KHD Group (operational, strategic, financial, and compliance risks). Improving risk management includes regularly evaluating and enhancing the relevant internal controls in order to ensure that the process functions properly and efficiently. Process improvements and amendments are identified and implemented on a continual basis.

Risk Management Organization, Responsibilities, Instruments, and Reporting

The KHD Group makes a distinction between risks that affect the entire Group or that can only be managed at the Group level (Group risks), and risks that are managed by the operating business units (entity risks). Group risks are identified by the managers of central functions and members of the Management Board and are then managed by risk owners, who are appointed accordingly. The respective risk owners in the operating business units are responsible for handling entity risks in a systematic way.

The KHD Group has appointed employees responsible for risk management at the level of the operating business units in order to help ensure that risks are identified and assessed in the same way across the Group and to coordinate these activities. These risk managers are also in charge of monitoring and tracking how specific measures to mitigate risks are being implemented. Central risk management is directly taken care of by the Chief Executive Officer, who is supported by a risk management coordinator.

All material risks are recorded in risk registers. They also document assessments of the probability of a risk occurring and the extent of potential damage that would be caused by each significant risk, as well as record the risk response measures planned or in place, in a clear and compact format. The risk registers are updated regularly so that decision-makers are provided with an overview of the entire risk situation.

The particular requirements of the project business are accounted for via risk management measures integrated into the operational processes. As part of this, key points are reviewed by the experts in our specialist departments during the tendering phase before signing the respective contracts in order to avoid taking on unexpected or unmanageable risk. Project-related risk management continues in the project execution phase, where project management considers risks relating to exceeding budgeted cost or time, technical difficulties, and financial aspects.

Reporting plays a particularly important role in ensuring effective risk management. It ensures that all significant risks are depicted according to a uniform set of criteria and explained to managers during the decision-making process.

The Chief Executive Officer provides a detailed report on the risk situation every six months to the Supervisory Board, using the risk registers as a basis. In addition, the CEO also reports on the effectiveness of the risk management system to the entire Management Board and the Supervisory Board of KHD. The independent auditors also assess the effectiveness of the risk early warning and internal monitoring system in accordance with Section 317, Paragraph 4 of the German Commercial Code (HGB) and report on the result of their audit to the Management Board and Supervisory Board.

Risk Assessment

The potential impact is classified for each operating business unit on the basis of the local materiality calculated. In order to highlight the risk potential and to raise risk awareness, an assessment of the probability of a risk occurring and its potential impact must be given in the risk register, both with (net risks) and without (gross risks) considering the measures and controls for risk mitigation. Moreover, business viability risks must be identified and recorded accordingly in the risk register for both the Group and the operating business units.

The scale for measurement of the probability of occurrence is presented in the following table:

Class	Probability of Occurrence	Description
1	1 – 10%	Very low/very unlikely
2	11 – 25%	Low/unlikely
3	26 – 50%	Moderate
4	51 – 75%	High/likely
5	76 – 99%	Very high/very likely

The scaling of the probability of occurrence is consistent with the accounting methods applied, i.e. the probability of occurrence of Class 4 corresponds to the accounting terminology “more likely than not.”

The scale for measurement of potential amount of damage is presented in the following table:

Class	Impact	Description
1	Low	Insignificant negative impact
2	Moderate	Limited negative impact below the materiality threshold (€ 1.5 million)
3	Material	Significant negative impact that exceeds the materiality threshold (€ 1.5 million)
4	Very material	Negative impact that exceeds the level of the materiality threshold by two times (€ 3.0 million)
5	Catastrophic	Negative impact potentially threatening to business viability

The summarized risk assessment arises on the basis of the following risk assessment:

Probability of Occurrence Impact	**1**	**2**	**3**	**4**	**5**
1	Low	Low	Low	Low	Low
2	Low	Low	Low	Medium	Medium
3	Low	Low	Medium	Medium	High
4	Low	Medium	Medium	High	High
5	Medium	Medium	High	High	High

Risk Management for Financial Instruments

In its position as a globally operating Group, KHD is exposed to various financial risks (currency, interest rate, default, credit, and liquidity risks) which may have a significant impact on the Group's net assets, financial position, and result of operations. The aim of financial risk management in the KHD Group is to cover or reduce financial risks by making appropriate use of hedging instruments, including derivative financial instruments.

In the case of exchange rate risks, a differentiation should be made on the one hand between currency risks related to the execution of projects in different currency areas and from the extension of loans in a currency different from the functional currency, and risks arising from the translation of individual Group companies' financial statements denominated in a foreign currency at various reporting dates on the other. As part of the execution of projects and extension of loans, exchange rate risks are generally determined on the basis of planned cash flows and minimized by using derivative financial instruments. The derivative financial instruments currently in use include only foreign exchange forward contracts. Since the derivative financial instruments used by the KHD Group do not meet the strict requirements of hedge accounting, the economic hedge relationship is not reflected by using hedge accounting in the annual financial statements or consolidated financial statements.

Interest rate risks arise through market-related fluctuations in interest rates. As of the balance sheet date, the KHD Group reports a continuous high level of cash and cash equivalents and large loans granted to the AVIC Group, but also significant interest-bearing liabilities. In the fourth quarter of 2021, KHD took out a bank loan with a term of three years and a variable interest rate. Transactions for hedging the variable interest rate were not concluded because the KHD Group does not expect a significant increase in the interest rate until the maturity date of the bank loan. The interest rates for the loans to the AVIC Group have been firmly agreed for the applicable term. This means that there is no interest rate risk for the loans.

The risk of credit concentration with regard to receivables is generally diminished as receivables are spread out worldwide, reflecting the Group's customer structure. Long-term business relationships are maintained with important customers. In the past, these customers have not been involved in bad debt losses based on credit rating. In addition, there are no current indications of increase credit rating risks. Credit risk is also mitigated through the payment terms the Group agrees with its customers, notably progress billings and advance payments, to avoid excessively high levels of outstanding receivables. Internal guidelines ensure that products are generally only sold to customers with appropriate credit ratings. The risk of counterparty default is managed through regular analyses of the trade receivables and the structure of receivables. At the KHD Group, receivables from export contracts are to a large extent secured against default risks by confirmed and unconfirmed letters of credit, as well as through letters of comfort, guarantees, and cover notes, which also include export credit agencies (e.g. Hermes).

The KHD Group has been pursuing a conservative, forward-looking policy of liquidity hedging for many years and has a solid level of cash and cash equivalents. By means of financial and liquidity planning, cash and cash equivalents are available in such a way that the Company or the KHD Group is at all times able to fully meet its payment obligations. Guarantee credit facilities arranged with banks allow individual KHD Group companies to provide bank guarantees for its customers worldwide.

Accounting-related Internal Control System

Along with the risk management system, the KHD Group's internal control system (ICS) also includes, in particular, extensive control activities to secure proper and reliable accounting and financial reporting. The ICS is oriented toward ensuring compliance with relevant laws and standards, as well as the commercial efficiency of operating processes. Both KHD Group's internal control system and risk management is based on the COSO-ERM concept.

The Management Board is responsible for the establishment, monitoring, and further development of the ICS, as well as for ensuring its effectiveness. All consolidated subsidiaries are included in KHD's ICS.

The control activities for ensuring proper and reliable accounting primarily comprise both automated control processes, such as system access controls based on a user authorization concept or programmed plausibility checks for financial figures, and manual control processes such as deviation and trend analyses on the basis of defined key performance indicators and comparisons with budget figures.

The entire accounting-related ICS is documented both at KHD and in the significant subsidiaries by means of process descriptions (narratives). In this context, key controls are identified for each process and summarized in a risk control matrix (RCM). The responsible process owners monitor the operating effectiveness of all key control activities on an ongoing basis and ensure that appropriate documentation is prepared.

KHD and its subsidiaries are responsible for recording accounting transactions. The ICS measures that focus on proper and reliable Group accounting practices ensure that business transactions are recorded completely and in a timely manner in compliance with legal and other regulatory requirements. Furthermore, care is taken to ensure that assets and liabilities are recognized, measured, and presented appropriately. Other core principles of the ICS in the KHD Group are the dual control principle and the segregation of duties; in this way, the possibility of fraudulent behavior is also reduced.

The locally prepared monthly financial reporting is combined with supplementary information in order to produce a Group reporting package, which is then submitted to the central consolidation department using a Group-wide standardized reporting system. The process for preparing the Group financial statements is performed and monitored centrally. Uniform Group guidelines for accounting, measurement, and reporting ensure compliance with legal regulations.

Summary of the Company’s and KHD Group’s Risk Position

In summary, it may be concluded that the risks identified do not pose a threat to the Company and to the KHD Group as a going concern, either individually or in combination. From an organizational standpoint, the foundations have been laid to ensure that changes in the risk position are recognized in good time. Overall the risk position has not changed significantly compared with the previous year. With regard to measurable specific risks, valuation allowances and balance sheet provisions have been set up to the extent required in the 2022 financial year.

Risk Areas

The following section describes the key risk areas, the strategy for risk mitigation and the summarized risk assessment (“high”, “medium”, and “low”) taking into account the measures and controls for risk mitigation (net risks). The risk areas combine a large number of individual risks. The risk mitigation strategy presented below comprises a large number of specific individual measures and activities. The risk areas principally cover the Capex and Plant Services segments, although the procurement, innovation, and project risks are of much higher significance for the Capex business unit. As long as there is no explicit reference within the relevant risk areas, the net risks remain unchanged in comparison to prior year.

Risks in connection with the COVID-19 Pandemic

The COVID-19 pandemic was included in the individual risk areas for the first time in the previous financial year. The extent and duration of individual effects on KHD business are difficult to predict, despite a considerable reduction in the overall risk assessment. Risks exist in the context of subsequent economic effects with regard to limitations on sales activities, cancellation of projects or postponed investments. Results can also include increased default risks with regard to receivables and difficulties in our supply chain in certain areas.

A central task force that includes the Management Board is active at the Group level to work out overall decisions and coordinate the flow of information. At the same time, the responsible management areas in the individual KHD companies are authorized to take measures in accordance with local circumstances. Various effects of COVID-19 are carefully monitored and moderated. Here the emphasis is on the health and safety of our employees and business continuity. For reason of caution, the remaining risk is still classified as "medium” (previous year: “medium”).

Risks from Underlying Economic Conditions

In its position as a globally active group, the KHD Group is affected by changes in the economic cycle. As a supplier of technical equipment for cement plants, the Group is particularly dependent on cyclical trends in the demand for cement. Moreover, there is also a risk of losing market share and of decreasing margins as a result of tough competition.

The KHD Group operates as a plant engineering company in many countries and regions, meaning that risks are lessened to a certain extent due to geographic diversification. Risks are to be mitigated by concentrating on expanding our service business (including spare parts) as well as systematically developing our position in growth markets and in markets where we have had a low presence up until now. We counter the risk posed by the competition by analyzing our market environment and the situation of our competitors on an ongoing basis. Maintaining constant customer contact, together with enhancing our sales area and the resulting proximity to the market, provides us with important information about the needs of our customers. The information gathered here enables us to develop and offer suitable products as well as to strengthen our competitive position. The remaining risk is classified as "medium” (previous year: “medium”).

Country Risks

As a globally operating group, the KHD Group is exposed to country risks. These include legal risks, capital transaction prohibitions, other regulatory restrictions, defaults on trade receivables, war, and other social unrest. Country risks affect the KHD Group due to the continuing high degree of political risks.

From as early as the tendering phase, individual projects are assessed, taking such country risks into consideration. Risks of defaults on export business are assessed and if necessary limited by covenants provided by cover notes provided from export credit agencies (e.g. Hermes guarantees). Remaining country risks are principally classified as “low”. The Russian war of aggression against Ukraine is resulting in severe limitations of the supply and service relationships with customers and suppliers in Russia. KHD business activities in Russia are currently at a low level in the context of a multi-year comparison. KHD does not see discontinuing the business relationships with Russian customers as responsible behavior. However, all of the KHD companies are strictly adhering to existing restrictions and sanctions. In view of the KHD Group’s minimal ability to influence future developments and given the potential significance of the Russian market for the KHD Group’s order intake, the remaining risk for Russia is classified as “high” (previous year: “high”), as it has been since the 2014 financial year, despite its rather low significance for the business activities of the KHD Group

Procurement Risks

The reliable availability of products and services in an appropriate quality, quantity, and at competitive prices is a decisive factor for success. Disruptions in the procurement process therefore represent a significant risk to the KHD Group.

In order to minimize this risk, purchasing follows a global strategy based on the systematic analysis of the quality, delivery performance, and pricing structure of existing and potential new suppliers. The purchasing organizations of the operating business units are integrated into a Global Supply Chain Management in order to utilize available knowledge about local markets when developing the purchasing strategy. This is supported by strategic procurement elements that are applied across the Group. The remaining risk is classified as "medium” (previous year: “medium”).

Innovation Risks
Excellence in innovation is a crucial factor of success for a technology-focused group such as the KHD Group. Besides customer requirements, it is important in this context to also take into account growing environmental protection requirements in the development of our products. Furthermore, our research and development activities focus particularly on improving and reducing the cost of existing products that can be used for customer-specific solutions.

Research and development activities are linked to the market as closely as possible by maintaining constant communication with the sales department and by setting up cross-departmental teams. A development process with defined milestones and a given budget for individual research and development projects identifies potential deviations from targets as early as possible and triggers corresponding corrective measures. The remaining risk is classified as "medium” (previous year: “medium”).

Project Risks
Complex, large-scale cement plant construction projects present particular challenges for our risk management. Our projects regularly entail contractual periods significantly longer than twelve months. The contract value of individual orders can be significant for the subsidiaries concerned, but may also be significant from the perspective of the KHD Group. Such large-scale projects typically comprise all activities relating to the planning, engineering, and delivery of the important components of cement plant equipment. Potential project risks arise here with regard to the uncertainties entailed in project cost estimates, unexpected technical problems, supply bottlenecks or quality problems at suppliers of important components, delays in project execution, delays of budgeted cash flows, and unforeseeable developments during the erection and commissioning phase on site. There are also warranty risks after the commissioning of the plant. Essentially, in recent years we have faced a growing complexity of contractual obligations combined with an expansion of service requirements and growing customer demands.

It is especially important for risk management to identify possible cost variances in an early stage in order to estimate the effect on the costs to complete and to take countermeasures in a timely manner. From as early as the tendering phase, we employ proven methods to manage such project risks, in order to prevent entering into risks that cannot be calculated or managed. In the project execution phase, the risk factors identified and assessed before the contract is signed are systematically processed and minimized. Together with organizational and procedural provisions, the methods used in project management and project controlling to identify, assess and minimize risks are subject to a continuous improvement process. Provisions are set up on the face of the balance sheet to cover any defects that might arise during the warranty phase. The risk remaining after risk mitigation is classified as "medium” (previous year: “medium”).

Personnel Risks

The KHD Group is distinguished by a corporate culture based on trust. At the forefront of this culture is the responsible and entrepreneurial way of thinking and acting demonstrated by our employees. The success of the KHD Group is directly dependent on the dedication, motivation, and capabilities of its employees, as well as on efficient and effective leadership. Risks also exist if management positions cannot be filled promptly and with qualified candidates.

We mitigate personnel risks through identification and promotion, especially of high-performing individuals. The KHD Group aims to ensure that its managers and employees remain committed and loyal to the Group over the long term. We develop individual personal development measures on the basis of systematic competency assessment. The risk remaining after risk mitigation is classified as "medium" (previous year: "medium").

Legal Risks

As an internationally active company, the KHD Group is exposed to a large number of legal risks. These may include risks concerning warranties, breach of contractual terms, competition and patent law, and tax law. The outcome of currently pending or future legal proceedings in most cases cannot be predicted with a reasonable degree of security.

Existing and pending litigation is identified and analyzed continuously, and potential juridical and financial consequences are qualitatively and/or quantitatively assessed. Based on this assessment, management implements appropriate measures in good time and establishes balance sheet provisions for such risks if necessary. The remaining risk is classified as "medium" (previous year: "medium").

Tax Risks

The companies in the KHD Group are required to take a large number of international and country-specific laws and tax regulations into consideration. Fiscal risks may arise if tax authorities are of the opinion that tax laws and other regulations have not been complied with, or have not been fully complied with. In particular, tax audits may result in charges due to retrospective tax payments, interest payments, and penalties.

The KHD Group mitigates tax risks by permanently monitoring the current and evolving tax legislation as well as by consulting with external tax advisors. Balance sheet provisions are established for such tax risks to the extent that these can be measured reliably. The remaining risk is classified as "medium" (previous year: "medium").

IT Risks

All key business processes (accounting and controlling, project management, purchasing, engineering, sales, etc.) within the KHD Group depend on the functionality and availability of the IT systems used. Thus, disruptions of system operations entail disruptions to the workflow as well as to business and operational processes. In addition, the number of attacks on the IT infrastructure ("cyber threats") continues to increase.

In order to safeguard uninterrupted and trouble-free operations, particular attention is paid to the availability of IT resources and IT systems. To defend against attacks on our IT infrastructure, the security technologies we use have undergone rigorous development. Furthermore, we are continually mindful of ensuring the integrity and confidentiality of significant information (data protection). In addition, we continuously monitor the effectiveness and efficiency of the software solutions deployed within the KHD Group with respect to our business processes. Measures to update and replace software solutions and hardware are determined as part of our IT strategy. The remaining risk is classified as “low” (previous year: “low”).

Default Risks on Loans Extended

In the 2020 financial year, the KHD Group extended the terms of two loan agreements, each for € 50.0 million, concluded in the 2017 financial year with AVIC Kairong as the borrower, by three years. These two loans totaled € 85.0 million as of December 31, 2022.

Possible default risks are effectively minimized by continuous monitoring of the credit worthiness of the borrower and by a Group guarantee issued to the KHD Group by AVIC. The remaining risk after effective risk mitigation is classified as “low” (previous year: “low”).

Opportunities

Generally speaking, the risks indicated here represent opportunities for the future growth of the KHD Group if the appropriate measures are implemented successfully. These opportunities arise from an improvement in the market and competitive position owing to the development of more cost-effective products, the optimization of procurement activities or our project execution, for instance. By the same token, the expansion of our service business (including the spare parts business) as well as systematically developing our position in growth markets and in markets where we have had a low presence up to now represent key opportunities. In the section below, we will examine the significant opportunities and potential for future development.

From the expansion of our market activities in China and the rigorous implementation of our “Go China” strategy – based in no small part on our innovative products – we expect, to a certain extent, positive effects on future development.

The KHD Group entered into a strategic partnership with AVIC back in December 2010. Following the successful conclusion of the takeover by AVIC there is a stable shareholder structure with a very significant majority. The partnership with AVIC has resulted in great advantages in the implementation of our “Go China” strategy and significant opportunities for the expansion of our market activities in China.

The development of convincing concepts for drastically reducing the CO_2 emissions of cement plants remains tremendously important. KHD, as a technology leader in cement plant engineering, sees a particular opportunity here. To minimize the CO_2 footprint, KHD continues to invest in the development of new technologies.

In addition to the traditional concepts of energy efficiency, alternative fuels and clinker substitution, these essentially include the following new technologies, which KHD believes have significant future market potential:

- Techniques for the calcination of alternatives to limestone, such as clay, which are more advantageous with respect to CO_2,
- Oxyfuel plants,
- Recarbonization of used concrete,
- CCUS (carbon capture, utilization and storage of CO_2).

Through KHD Group’s activities in Global Supply Chain Management, we aim to make improvements with regard to easier and more extensive access to the Chinese supply market. In this context, working with AVIC makes it easier to gain access to more cost-effective, high-quality production capacities in China. In addition, better opportunities for cooperation with manufacturing facilities in China are in progress. Over and above the cost advantages of manufacturing of existing products, further opportunities result from adapting KHD Group products to local manufacturing materials and standards.

Furthermore, we regard rising regulatory requirements for reducing the environmental impact of cement plants, such as the focus on environmental aspects in China’s current five-year plan, as opportunities. The KHD Group offers its customers environmentally friendly solutions by considering the environmental impact of the cement production process as early as in the tendering phase. We are also constantly developing our products with regard to environmental aspects. In this context, we concentrate on achieving lower emission levels as well as the efficient use of resources, materials, and energy.

The KHD Group continually invests in the development of new technologies and the improvement of existing technologies, products, and services which, in our view, meet the current and future needs of our customers to the fullest extent possible. By taking the efficiency, reliability and availability of equipment, environment and climate protection, standardization, and user-friendliness into account, the KHD Group generates significant opportunities as early as in the development phase.

With the typical time delay, the global economic recovery is having an impact on the markets for long-term capital goods. There is a growing demand for cement, especially in emerging economies, due to advancing urbanization and efforts to promote infrastructure development. Production capacities are being augmented and cement plants modernized and/or expanded. Thanks to a strong market position, the KHD Group sees opportunities for growth, particularly in India as well as in neighboring countries.

The KHD Group constantly endeavors to strengthen its position as a leading technology company, develop additional market potential, and expand its portfolio of products and services. We monitor our current and future markets in order to identify opportunities for strategic acquisitions or cooperations which may complement our organic growth.

OUTLOOK

Projected Market Environment

In its World Economic Outlook for 2023, the IMF expects a decline in the growth of global economic output from an estimated 3.4% in 2022 to 2.9% in 2023. According to the IMF, this is primarily due to insecurity in connection with the Russian war of aggression against Ukraine as well as increases in interest rates to combat higher inflation.

According to CW Research, global growth in cement consumption of 2.7% is expected for 2023. However, if China is not taken into account, global growth of 3.6% is forecast. In the regions and countries we take into consideration, various developments in cement consumption are expected in 2023. While increases are expected in Western Europe (1.4%) and Asian countries such as India (8.0%) and the Philippines (7.0%), a decline in cement demand is expected in North America (-0.7%), Russia and Turkey (-3.0% each).

Expected Business Development

KHD plans to achieve slightly positive earnings before taxes for the 2023 financial year. Improvements in internal processes have been implemented since the 2019 financial year, and moreover, cost structures have been adapted for the long term. At the same time, the risks of project execution have been considerably reduced. Overall, the foundation for achieving positive results on a sustainable basis has been successively laid.

In 2023 KHD will continue to target its sales activities at business opportunities in which the position of KHD as a technology leader can be applied appropriately. We are expecting a moderate slowdown in order intake for the 2023 financial year as compared to the 2022 financial year (€ 219 million). Due to the planned increase of stage of completion of projects, order backlog at the end of 2023 will be below the previous year’s value.

Based on our planning, revenue for the 2023 financial year will be slightly higher than the previous year’s level. Because a highly competitive environment and margin pressure remain, we again expect a gross profit margin that is not entirely satisfactory, at about the same level as the previous year.

Overall, KHD expects a stable result of operations in comparison with the 2022 financial year. However, because the gross profit margins of projects in the current order backlog are still not entirely satisfactory, the operating result for the 2023 financial year is not expected to be sufficient to cover all of the costs of the KHD Group, according to our rather conservative planning. For this reason, KHD again expects negative figures for EBIT as well as for adjusted EBIT for the current year 2023. Accordingly, both the EBIT margin and the adjusted EBIT margin will be slightly negative. The figures will be at about the same level as in the 2022 financial year. Taking the considerably positive net finance income into account, our planning indicates a positive result for earnings before taxes (EBT), which will not differ significantly from the figure in the previous financial year.

For operating cash flow in 2023 we expect a positive figure in the low, single-digit millions. The planned operating cash inflows are due to the improvements planned in net working capital.

Overall, because market conditions remain challenging, KHD expects that the result of operations for the 2023 financial year will not be entirely satisfactory. In order to achieve positive results over the long term again, including for EBIT, further improvements in margin quality with regard to order intake and good processes in project execution are crucial along with the implementation of our “Go China” strategy. We forecast that KHD’s financial and net assets position will remain stable and will probably not change significantly in the 2023 financial year (compared to the previous year). This, combined with our high equity ratio, allows us to develop our portfolio of products and services continuously and to make the most of opportunities for internal and external growth.

Expected Economic Development of the Capex Segment

We are expecting order intake in the Capex segment that is about the same as that of the previous year. In 2022, KHD will again use the business opportunities it is offered in a targeted manner with regard to the projects in which our position as a technology leader can be applied appropriately. However, customers' investment decisions remain subject to uncertainty due to economic, financial and political unpredictability. Due to revenue recognition according to the stage of completion and the conservative order intake planning, the order backlog at the end of 2023 is expected to be below the previous year’s value.

Due to current order backlog and the expected order intake, the KHD Group expects revenue in the Capex segment for the 2023 financial year that is slightly higher than the level of the 2022 financial year.

Despite the measures implemented in previous years toward cost optimization, our planning shows that due to low gross profit margins the Capex segment is once again expected to report negative EBIT / adjusted EBIT and a negative EBIT margin / adjusted EBIT margin. These figures are not expected to differ significantly from the figures recorded for the previous financial year.

Expected Economic Development of the Plant Services Segment

Due to the good potential with regard to spare parts and services, KHD intends to defend its market position in this area successfully in the 2023 financial year. However, the special effects that influenced the Americas, the Asia-Pacific and the Russia/CIS regions in the 2022 financial year will not, unfortunately, continue to this degree in subsequent years. In accordance with our planning, for the Plant Services segment we are expecting a considerable reduction in order intake in comparison with the good figure (€ 52.3 million) reported in the 2022 financial year.

Despite an order intake that is expected to be lower in the 2023 financial year, we are expecting a slight increase in revenue in the Plant Services segment due to the high order backlog at the beginning of 2023. In turn, significantly positive EBIT is expected in the Plant Services business unit, which is expected to be higher than the figure for the 2022 financial year.

Opportunities and Risks Relating to the Outlook for the 2023 Financial Year

While the risk management system is, in principle, oriented toward the medium and long term, special consideration is given in the budget preparation process to the opportunities and risks that can have an effect within the outlook period. Due to the special characteristics of long-term plant engineering, risks and opportunities can also lead to significant deviations from planned figures in the short-term outlook.

Significant risks and opportunities regarding the budget values exist for order intake, particularly in the Capex segment. The awarding of individual large contracts to the KHD Group can significantly affect the order intake in the 2023 financial year. Despite close collaboration with customers during the tendering process, customer investment decisions and the awarding of individual projects to KHD can only be forecast with substantial uncertainty, which can lead to either a significantly higher or significantly lower order intake.

The revenue outlook is mainly based on the order backlog as of December 31, 2022, on expected order intake for the initial months of the 2023 financial year in the Capex segment, and on the planning of business in the Plant Services segment. Particularly with regard to expected order intake in the first six months of the 2023 financial year there are significant risks and opportunities in terms of the planned revenue figures. Delays or accelerations in project execution can directly affect the planned revenue figure for the financial year in addition to the risk that projects reflected in planned order intake do not materialize or are postponed and the possibility that additional projects not included in the budget are awarded to KHD.

In addition to sales volume effects, the planned result (adjusted EBIT) is materially affected by project-related risks. These arise from unexpected technical problems, supply bottlenecks or quality problems at suppliers of important components, delays in project execution, legal disputes and unforeseeable developments during the erection and commissioning phase on site. There are also warranty risks after the commissioning of the plant. On the other hand, improved project execution and negotiations with customers and suppliers with regard to increasing order values or backcharging cost overruns result in opportunities for significantly improving the planned EBIT.

Cologne, March 6, 2023

The Management Board

Jianlong Shen (Chair)	Jürgen Luckas	Dr. Matthias Jochem
Tao Xing	Matthias Mersmann	

Group Income Statement for KHD Humboldt Wedag International AG, Cologne, Germany, for the 2022 Financial Year

in € thousand	Note	2022	2021
Revenue	20	210,373	226,259
Cost of sales	21	(182,795)	(206,960)
Gross profit		**27,578**	**19,299**
Other operating income	22	2,572	3,610
Sales expenses	23	(10,568)	(9,576)
General and administrative expenses	24	(14,943)	(13,198)
Other expenses	25	(7,122)	(5,310)
Profit before interest and taxes (EBIT)		**(2,483)**	**(5,175)**
Finance income	26	6,341	6,617
Finance expenses	26	(1,616)	(757)
Net finance income		**4,725**	**5,860**
Profit before tax (EBT)		**2,242**	**685**
Income tax expense	27	(1,956)	(1,802)
Group net profit/ loss for the year		**286**	**(1,117)**
Of which are attributable to:			
Parent company shareholders		283	(1,139)
Non-controlling interests		3	22
		286	**(1,117)**

		2022	2021
Net profit/loss attributable to shareholders (in € thousand)		283	(1,139)
Weighted average number of shares outstanding Basic		49,703,573	49,703,573
(undiluted) and diluted earnings per share (in €)	28	0.01	(0.02)

Group Statement of Comprehensive Income for KHD Humboldt Wedag International AG, Cologne, Germany, for the 2022 Financial Year

in € thousand	2022	2021
Group net profit/loss for the year	**286**	**(1,117)**
Items that will be reclassified subsequently to profit or loss when specific conditions are met		
Currency translation differences	(2,162)	2,395
Items that will not be reclassified subsequently to profit or loss		
Actuarial gains and losses related to defined benefit obligations less - deferred taxes related thereto	3,578	305
Other comprehensive income	**1,416**	**2,700**
Group comprehensive income	**1,702**	**1,583**
Of which attributable to:		
Parent company shareholders	1,697	1,561
Non-controlling interests	5	22
	1,702	**1,583**

As in the previous year, no income taxes on currency translation differences were applicable.

The actuarial gains and losses recognized in other comprehensive income are reduced in principle to the related deferred tax assets and deferred tax liabilities, which are also recognized in other comprehensive income in their entirety, without affecting profit and loss. The actuarial gains and losses do not include any deferred taxes in either the financial year or the previous year.

Group Balance Sheet of KHD Humboldt Wedag International AG, Cologne, Germany, as of December 31, 2022

ASSETS	Note	Dec. 31, 2022	Dec. 31, 2021
in € thousand			
Non-current assets			
Property, plant and equipment	5	12,957	10,806
Goodwill	6	2,229	3,851
Other intangible assets	6	962	1,162
Right of use	8	9,118	2,615
Trade and other receivables	7	4	297
Other financial assets	11	-	95,000
Future Income Tax Assets	8	1,107	1,150
Total non-current assets		**26,377**	**114,881**
Current assets			
Inventories	9	11,704	5,766
Contract assets	10	17,454	42,555
Trade and other receivables	7	45,282	48,616
Payments made in advance	10	12,824	23,718
Other financial assets	7	97,884	1,495
Income tax assets		1,819	1,386
Cash and cash equivalents	12	40,670	65,282
Total current assets		**227,637**	**188,818**
Total assets		**254,014**	**303,699**

EQUITY AND LIABILITIES	Note	Dec. 31, 2022	Dec. 31, 2021
in € thousand			
Equity			
Subscribed capital		49,704	49,704
Capital reserves		61,097	61,097
Currency translation differences recognized in equity		(12,899)	(10,737)
Retained earnings		(6,003)	(9,862)
Shares of equity attributable to shareholders of the parent company		91,899	90,202
Non-controlling interests		497	504
Total equity	13	**92,396**	**90,706**
Non-current liabilities			
Other liabilities	16	4,140	4,101
Lease liabilities	16	7,986	1,703
Bank loan	16	25,000	-
Pension benefit obligation	14	12,147	16,867
Provisions	15	5,139	4,308
Total non-current liabilities		**54,412**	**26,979**
Current liabilities			
Trade and other payables	16	56,523	108,495
Bank loan	16	-	25,000
Contract liabilities and advance payments received	17	34,956	35,608
Income tax liabilities	16	793	574
Provisions	15	14,934	16,337
Total current liabilities		**107,206**	**186,014**
Total equity and liabilities		**254,014**	**303,699**

Group Statement of Cash Flows for KHD Humboldt Wedag International AG, Cologne, Germany, for the 2022 Financial Year

in € thousand	2022	2021
Cash flow from operating activities		
Group net gain/ loss for the year	286	(1,117)
Income tax expense recognized in the income statement	1,956	1,802
Net finance income recognized in the income statement	(4,725)	(5,860)
Earnings before interest and taxes (EBIT)	**(2,483)**	**(5,175)**
Amortization and depreciation of non-current assets	4,674	2,732
Book gain (-) / loss on disposal of fixed assets	(19)	(7)
Increase(-) / decrease in trade receivables and financial assets	3,527	(19,302)
Increase (-) / decrease in inventories and gross amount due from customers for contract work	19,163	(27,277)
Increase (-) / decrease in payments made in advance and other financial assets	10,827	(6,278)
Increase (+) / decrease in trade and other payables and contract liabilities and advance payments received	(52,623)	50,669
Increase (+) / decrease in pension benefit obligations	(1,144)	(1,156)
Increase (+) / decrease in provisions and non-current liabilities	(496)	(5,863)
Other non-cash-transactions	(983)	327
Other translation differences	(2,183)	(392)
Interest received	1,733	1,243
Interest paid	(313)	(251)
Income tax paid	(1,728)	(1,869)
Cash flow from operating activities	**(22,048)**	**(12,599)**
Cash flow from investing activities		
Cash outflow for intangible assets	(121)	(256)
Cash outflow for property, plant and equipment	(3,638)	(1,968)
Cash inflow from the disposal of property, plant and equipment	5	30
Interest received from Intercompany loans	4,707	6,279
Repayment of loans from affiliated companies	10,000	17,000
Extention of loans to affiliated companies	-	(12,000)
Cash outflow for payment in short term bank deposits	(11,322)	-
Cash flow from investing activities	**(369)**	**9,085**

in € thousand	2022	2021
Cash flow from financing activities		
Cash out for repayment of loans	-	(25,000)
Cash in for extension of loans	-	25,000
Redemption of lease liabilities	(1,654)	(1,593)
Dividends paid to parent company shareholders	(13)	(13)
Interest paid for loans	(549)	(420)
Cash flow from financing activities	**(2,216)**	**(2,026)**
Change in unrestricted cash and cash equivalents	**(24,633)**	**(5,540)**
Opening balance of unrestricted cash and cash equivalents	65,282	68,035
Exchange rate effects	21	2,787
Closing balance of unrestricted cash and cash equivalents	**40,670**	**65,282**

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Composition of unrestricted cash and cash equivalents		
Current bank accounts and cash	22,009	44,305
Short-term bank deposits	18,661	20,977
Total cash and cash equivalents	**40,670**	**65,282**
Closing balance of unrestricted cash and cash equivalents	**40,670**	**65,282**

Cash and cash equivalents decreased in the financial year by € 24,612 thousand to € 40,670 thousand (previous year: € 65,282 thousand). The reason for this is, in particular, is the cash outflow from operating activities of € 22,048 thousand (previous year: € 12,599 thousand). In addition to the cash outflows from investing activities in the amount of € 369 thousand (previous year: € 9,085 thousand) there were cash outflows from financing activities of € 2,216 thousand (previous year: € 2,026 thousand). Cash flow from investing activities resulted primarily from payments related to financial investments in the context of short-term financial planning in the amount of € 11,322 thousand as well as cash outflow for property, plant and equipment (€ 3,638 thousand), which exceeded the interest payments received for the loans granted to AVIC Kairong in the amount of € 4,707 thousand (previous year: € 6,279 thousand) and from the partial repayment of the granted load in the amount of € 10,000 thousand. Cash and cash equivalents were affected by positive exchange rate effects in the amount of € 21 thousand (previous year: € 2,787 thousand) in the 2022 financial year. Unrestricted cash and cash equivalents, including exchange rate effects, decreased by € 24,612 thousand (previous year: € 2,753 thousand) to € 40,670 thousand (previous year: € 65,282 thousand) in the 2022 financial year.

Group Statement of Changes in Equity for KHD Humboldt Wedag International AG, Cologne, Germany, for the 2022 Financial Year

in € thousand	Subscribed capital	Capital reserves	Treasury shares	Currency translation differences recognized in equity	Retained earnings	Euqity attributable to shareholders of the parent company	Non-controlling interests	Total
Dec. 31, 2020/ Jan. 1, 2021	**49,704**	**61,097**	**-**	**(13,132)**	**(9,028)**	**88,641**	**495**	**89,136**
Group net loss for the year	-	-	-	-	(1,139)	(1,139)	22	(1,117)
Actuarial gains and losses and other effects on the group comprehensive income	-	-	-	-	305	305	-	305
Currency translation differences	-	-	-	2,395	-	2,395	-	2,395
Group comprehensive income	**-**	**-**	**-**	**2,395**	**(834)**	**1,561**	**22**	**1,583**
Dividend payments	-	-	-	-	-	-	(13)	(13)
Dec. 31, 2021/ Jan. 1, 2022	**49,704**	**61,097**	**-**	**(10,737)**	**(9,862)**	**90,202**	**504**	**90,706**
Group net profit for the year	-	-	-	-	283	283	3	286
Actuarial gains and losses and other effects on the group comprehensive income	-	-	-	-	3,576	3,576	2	3,578
Currency translation differences	-	-	-	(2,162)	-	(2,162)	-	(2,162)
Group comprehensive income	**-**	**-**	**-**	**(2,162)**	**3,859**	**1,697**	**5**	**1,702**
Other changes							1	1
Dividend payments	-	-	-	-	-	-	(13)	(13)
Dec. 31, 2022	**49,704**	**61,097**	**-**	**(12,899)**	**(6,003)**	**91,899**	**497**	**92,396**

Group Notes to the Consolidated Financial Statements of KHD Humboldt Wedag International AG, Cologne, Germany, for the 2022 Financial Year

1. Summary of Major Accounting and Measurement Principles

Basis of Preparation and Other Notes

KHD Humboldt Wedag International AG with registered offices in Von-der-Wettern-Straße 4a, 51149 Cologne, Germany (previously: Colonia-Allee 3, 51067 Cologne), entered in the Cologne Commercial Register, Department B, with the number 36688. The company's shares are traded on the regulated market (general standard) at Frankfurt Stock Exchange.

KHD and its subsidiaries are hereinafter referred to as the "Group" or the "KHD Group". The directly controlling parent company of KHD is AVIC International Engineering Holdings Pte. Ltd. (AVIC Engineering), Singapore, Singapore, which holds 69.02% of the shares of KHD. To the knowledge of the Management Board, AVIC Engineering itself does not publish consolidated financial statements. The ultimate parent company of the KHD Group is Aviation Industry Corporation of China, Beijing, which itself is owned by the People's Republic of China.

KHD's group financial statements have been prepared according to uniform accounting and measurement principles. The group financial statements have been prepared in accordance with prevailing International Financial Reporting Standards (IFRS) and their related interpretations as applicable in the EU, and are in line with the statutory obligations that are applicable to companies which are required to submit mandatory reports to the capital markets pursuant to Section 315e, Paragraph 1 of the German Commercial Code (HGB) together with Article 4 of the Regulation (EC) No. 1606/2002 of the European Parliament and Council of July 19, 2002, relating to the application of current international accounting standards in their current version (IAS Regulation). These group financial statements have been prepared in euros. All amounts, including figures used for comparison from the previous year, are generally stated in thousands of euros (€ thousand). All amounts have been rounded according to normal commercial practice. The Group income statement has been prepared using the nature of expense method. The financial year of KHD and of its subsidiaries and joint ventures included in the group financial statements corresponds to the calendar year. One exception to this is Humboldt Wedag India Private Limited ("HW India"), for which the financial year runs from April 1 to March 31. However, for the purpose of composing the KHD Group financial statements, HW India issues interim statements on December 31.

Consolidation

Subsidiaries are investees over which KHD has the power to control, is exposed to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. This is regularly the case if KHD holds, directly or indirectly, more than 50% of the voting rights, or controls the business activities in another manner. These companies are, as a general rule, consolidated. Subsidiaries are consolidated from the date when actual control is transferred to KHD and are deconsolidated from the date when control no longer exists.

All intercompany transactions, balances, and unrealized profits or losses on intra-group transactions are eliminated. The accounting and measurement principles applicable to subsidiaries pursuant to statutory law are adjusted in order to ensure consistency with the accounting and valuation principles of KHD.

Non-controlling interests are presented and commented on separately. The Group's subsidiaries are listed under Note 2 in the notes to the group financial statements.

Currency Translation
Monetary items denominated in foreign currencies are translated in the individual financial statements at the rate effective as of the transaction date and adjusted to the relevant rate prevailing on each reporting date. Resultant currency translation differences are recognized in the income statement.

The individual financial statements prepared by the foreign subsidiaries are translated into euros in line with the functional currency principle. Equity is translated at historical rates, assets and liabilities at the rate in effect on the balance sheet date, and income and expenses at the average rates. The Group's functional currency is the euro.

The applicable exchange rates are set out in the table below:

		Closing rate	Average rate
	Currency	As of Dec. 31, 2022	Jan. 1 to Dec. 31, 2022
	1 Euro =		
India	**INR**	88.3259	82.7969
USA	**USD**	1.0674	1.0516
Malaysia	**MYR**	4.7022	4.6270
Brazilia	**BRL**	5.6425	5.4012
China	**CNY**	7.4224	7.0909
Russia	**RUB**	77.9165	73.4547

Exchange rates used in the preceding financial year:

		Closing rate	Average rate
	Currency	As of Dec. 31, 2021	Jan. 1 to Dec. 31, 2021
	1 Euro =		
India	**INR**	84.4200	87.2010
USA	**USD**	1.1372	1.1800
Malaysia	**MYR**	4.7410	4.8663
Brazilia	**BRL**	6.3375	6.3843
China	**CNY**	7.2499	7.6020
Russia	**RUB**	85.3582	87.3321

Intangible Assets

Goodwill
In line with IFRS 1 exemptions, goodwill was included in the first IFRS group financial statements at the carrying amounts which were determined according to the previously applicable accounting principles (Section 301 of the German Commercial Code [HGB]).

For all acquisitions subsequent to this date, goodwill corresponds to the positive difference between the acquisition costs for a business combination and the acquired remeasured assets, liabilities, and contingent liabilities which remains after performing a purchase price allocation, in particular, the identification of intangible assets. Goodwill is presented as a separate item under non-current assets. It is subject to impairment tests, which are performed annually and/or following triggering events, and is measured at the lower of cost and recoverable amount (cost less impairment losses).

Rights of Use

As the new lease reporting according to IFRS 16 takes effect as of January 1, 2019, rights of use from leases were reported for the first time in the balance sheet if a contract provides authorization to control the use of an identified asset for a specified period in return for the payment of a fee. Rights of use are measured based on the amortized costs less all accumulated amortization and impairment expenses and corrected by each revaluation of the lease liability. The costs of the rights of use include the reported lease liabilities and the initial direct costs generated as well as the lease payments made during or before the provision of the rights of use less any lease incentives received. Rights of use are regularly amortized straight-line over the shorter of the two terms and the expected useful life of the lease.

KHD is using the transitional provisions of IFRS 16 on short-term lease contracts and leases for assets with low value. Rights of use are not capitalized for these leases; instead, lease expenses are recognized straight-line over the term of the lease.

Corresponding with the approach of a right of use, KHD reports lease liabilities at the present value of the lease payments that must be made over the term of the lease. KHD uses the marginal capital interest rate to calculate the present value of the lease liability because the underlying interest rate cannot be readily determined. In the context of the subsequent measurement, the lease liability is increased in order to take greater interest expense into account and decreased to take the lease payments made into account. Furthermore, the carrying amount of the lease liability is remeasured if the lease is changed, if the term of the lease is changed, or if the lease payments change.

Other Intangible Assets

Other intangible assets are recognized at cost less scheduled amortization. Software licenses are amortized using the straight line method over a useful life of three years.

Development costs are capitalized in the KHD Group to the extent that they meet the requirements for capitalization. As in the previous year, development costs that require capitalization were not incurred. Research costs are recognized as an expense through the income statement in the period in which they are incurred.

Property, Plant, and Equipment

Property, plant, and equipment is measured at cost less scheduled, straight-line depreciation. In addition to the purchase price, acquisition costs also include costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The useful life of operating and office equipment and of other plants is generally between three and ten years. The properties are not depreciated straight-line. Leasehold improvements are depreciated over the term of the lease. Gains and losses on the disposal of property, plant, and equipment are measured by reference to their carrying amount and are recognized in the income statement.

Costs for the repair of property, plant, and equipment are generally expensed in the period when incurred. Major expenses for renewals and improvements are capitalized if it is likely that the Group will derive future economic benefit in addition to the originally recorded performance standard of the existing item of property, plant, or equipment.

Borrowing Costs

Borrowing costs are capitalized in the KHD Group to the extent that they are attributable to the purchase or production of qualifying assets. Borrowing costs are otherwise expensed through the income statement under net finance income. As in the previous year, no borrowing costs were capitalized in the 2022 financial year.

Impairment Test on Non-current Assets

Non-current assets, including intangible assets with a limited useful life, are tested for impairment as soon as events or changes in circumstances indicate that the carrying amount of such assets is no longer recoverable. If the carrying amount is higher than the calculated recoverable amount, the asset is written down to its recoverable amount.

Financial Instruments

In accordance with IFRS 9, financial assets are classified and measured based on the characteristics of the cash flow accompanying the financial assets (cash flow conditions) as well as the underlying business model (business model condition). This results in three possible measurement categories:

- Measurement based on amortized costs for debt instruments,
- Measurement at fair value without affecting profit and loss for debt instruments (with recycling) and for equity instruments (without recycling),
- Measurement at fair value through profit or loss for debt instruments, derivatives, and equity instruments.

Financial assets are allocated to a measurement category at the time of initial recognition. Financial assets are measured at fair value on initial recognition. The subsequent measurement is performed according to the rules of the respective measurement category. At KHD, the majority of the financial assets are measured at amortized cost. Only those financial assets held for trading and the derivatives acquired for hedging purposes are allocated to the category "measured at fair value through profit or loss". To date, the Group has not utilized the fair value option.

In the KHD Group, financial assets are primarily cash and cash equivalents, loans and receivables, equity instruments, and derivative financial instruments for hedging purposes.

- Cash and cash equivalents
  Cash and cash equivalents are primary financial assets. Cash and cash equivalents include cash on hand as well as bank balances immediately available, call deposits at banks, and money market investments, excluding overdraft facilities with an original term to maturity of up to three months that are accounted for at nominal value. To the extent that they are due for repayment in the short term, draft facilities are included in the cash equivalents. Restricted cash is reported under “Other financial assets”. Cash on hand and bank balances are measured at amortized cost.

- Loans and receivables
  Loans and receivables are non-derivative financial assets with fixed or determinable payments and which are not quoted in an active market. They include receivables from loans, trade and other receivables as well as other assets. They are generated if KHD provides money, goods, or services directly to a debtor. They are classified as current assets, except for those that come due more than twelve months after the balance sheet date, or which are classified as non-current on the basis of their economic structure. These are reported as non-current assets. After initial recognition, loans and receivables are measured at amortized cost by applying the effective interest rate method less any impairment. Gains and losses are recognized in the net profit for the year when loans and receivables are derecognized or impaired as well as in the context of the amortization process.

- Equity instruments
  The Group holds a limited amount of financial assets for trading that are measured at fair value through profit or loss.

- Derivative financial instruments and hedges
  The Group regularly utilizes derivative financial instruments to mitigate the foreign currency risk of recognized assets and liabilities or of planned transactions denominated in foreign currencies. All derivative contracts are exclusively foreign exchange forward contracts. These are initially recognized at fair value on the date the contract is concluded and measured at fair value in subsequent periods. The fair value of derivatives is calculated on the basis of discounted cash flow analyses, using corresponding yield curves for the term to maturity of the instruments concerned. Economic hedges are not depicted as balance sheet hedges in the context of hedge accounting. The option to use IFRS 9 for reporting hedges in the balance sheet is not utilized. As a result, the changes in value of the derivative financial instruments concluded by KHD are recognized directly in the income statement.

Financial liabilities as defined by IFRS 9 relate to financial liabilities that are measured at amortized cost. Financial liabilities are measured at fair value, including transaction costs, at the time of initial recognition. In the following periods, they are measured at amortized cost using the effective interest rate method. A valuation of financial liabilities with regard to their effect on net income is only performed for derivative financial instruments. The fair value option is not utilized.

Impairment of Financial Assets
In the impairment model of IFRS 9, not only losses that have occurred, but also losses that have already been expected are reported (expected loss model). KHD determines the expected credit default based on information that is externally available regarding the credit worthiness of the respective debtor and the credit rating of external credit agencies.

Except for financial assets measured at fair value through profit or loss, financial assets are examined at each balance sheet date for indications of impairment (such as considerable financial difficulties of a debtor, a high probability of insolvency proceedings against a debtor, the disappearance of an active market for a financial asset, a major change in the technological, economic, or legal environment as well as in the market environment of an issuer, or a persisting decline in the fair value of a financial asset below the amortized cost).

If there is evidence that a financial asset accounted for at amortized cost has been impaired, the amount of the impairment loss is calculated as the difference between the carrying amount of the asset concerned and the present value of the estimated future cash flows (excluding future credit losses that have not yet been incurred), discounted at the financial asset's original effective interest rate, i.e. the effective interest rate computed at initial recognition. The impairment loss is recognized through profit and loss.

If, in subsequent reporting periods, the amount of impairment loss decreases and this decrease can be related to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed. However, the new carrying amount of the asset concerned must not exceed the amortized cost at the time of the reversal. The amount of the reversal is recognized through profit and loss.

If there is objective evidence with respect to trade receivables and other receivables that not all amounts due will be received in accordance with the originally agreed terms stated in the invoice (such as doubtful solvency of a debtor), a valuation allowance is made by using an allowance account. Receivables are derecognized if they are considered to be irrecoverable. Impairments of other financial assets are taken into account by directly writing down the respective carrying amount.

Inventories
Inventories are recognized on the reporting date at either cost and net realizable value or cost of sales and net realizable value, whichever is lower. Inventories are recognized on the reporting date at either cost and net realizable value or cost of sales and net realizable value, whichever is lower. In general, raw materials, consumables and supplies are measured at moving average cost. The net realizable value is composed of the estimated selling price in the ordinary course of business less the estimated cost of completion and costs necessary to make the sale. In case of an increase in net realizable value of inventories that have been written-down the compulsory reversal of write-down is recognized as a reduction in the amount of inventories recognized as an expense.

Contract Assets and Contract Liabilities from Customer Contracts with Revenue Recognition over Time

Claims or obligations from customer contracts with revenue recognition over time are determined according to the rules of IFRS 15. In these cases, KHD specifies the result and revenue based on the stage of completion of the respective customer contract based on the proportion of project costs already incurred to the estimated overall project costs. In this way, revenue recognition over time is equivalent to profit recognition according to performance progress. Expected losses from customer contracts are immediately recorded in their entirety as an expense. Customer contracts with revenue recognition over time are reported under contract assets or under contract liabilities and advance payments received, depending on the amount of progress billings. They are measured at cost incurred plus a proportionate profit depending on the stage of completion. To the extent that contract revenue (contract costs incurred plus recognized contract profits) exceeds the progress billings, customer contracts are reported under contract assets. If there is a negative balance after deducting progress billings, this balance is reported as a liability under contract liabilities and advance payments received. Expected contract losses are covered by valuation allowances or loss order provisions and all identifiable risks are taken into consideration in determining them. Losses from onerous customer contracts are reported exclusively according to the rules of IAS 37 and not as part of contract assets or contract liabilities.

Pension Benefit Obligations and Retirement Benefit Plans

The pension benefit obligations recognized in the balance sheet are based on the present value of the obligations from defined benefit plans as of the balance sheet date. The present value of the defined benefit obligations is determined annually by independent actuaries using the projected unit credit method. When calculating the present value, the expected, future retirement trend is considered in addition to the expected mortality of the persons entitled to the pension. Revaluations, consisting of actuarial gains and losses, are directly recognized in other comprehensive income and thus directly included in the balance sheet. The revaluations recognized in other comprehensive income are part of retained earnings and will not be reclassified to the income statement in subsequent periods.

Personnel expenses of some subsidiaries include contributions for defined contribution plans. The payments are made to pension insurances on a contractual basis. The Group companies do not enter into any obligations beyond the rendering of contribution payments. No (specific) net assets are established for defined contribution plans.

In addition, there is a defined contribution plan for all employees of the Group companies in Germany within the scope of the German statutory pension scheme, with an employer contribution rate of 9.30% that remains unchanged for 2022 (previous year: 9.30%).

Provisions and Accruals

Provisions are recognized if the Group has a present legal or constructive obligation towards third parties as a result of past events and the amount of the obligation can be reliably estimated.

Provisions for contingent losses from onerous contracts are established if the expected economic benefit resulting from the contract is less than the costs that are unavoidable for contract fulfillment.

Provisions are measured at the expected settlement value, taking into consideration all recognizable risks. The settlement value is determined based on a best possible estimate. The expected outflow of resources embodying economic benefits for all products covered by warranty terms is estimated by the Group as of the balance sheet date. In the calculation of provisions, individual warranty obligations for which the probability of occurrence is greater than 50% are considered. In addition, provisions are measured on the basis of expenses incurred in the past combined with current estimates of the warranty risk.

Provisions are discounted if this effect is significant. Reimbursement claims are not balanced with provisions; instead, if their realization is virtually ensured, they are capitalized separately.

Income Tax Expenses

Income taxes include both actual income taxes as well as deferred taxes. Current tax liabilities and tax assets primarily include obligations and refund claims related to domestic and international income taxes. Current taxes comprise obligations and refund claims from the current year as well as from previous years. Tax liabilities and assets are calculated on the basis of respective local tax law and regulations.

Deferred taxes are recognized and measured in accordance with IAS 12. Deferred tax assets and deferred tax liabilities are shown as separate balance sheet items in order to account for the future tax effect of deductible temporary differences between the carrying amount of the assets and liabilities recognized in the balance sheet and the tax base of the respective assets and liabilities.

Deferred tax assets for tax loss carry-forwards are only recognized if they are likely to be realized in the future or with regard to deferred tax liabilities that can be offset. Deferred tax assets and liabilities are measured at the amount of the expected tax expense or benefit of subsequent financial years, taking into account the tax rates applicable at the time of realization.

Recognition of Income and Expenses

Revenue and other operating income are generally recognized based on a specific point in time and only if the service has been provided or the goods or products have been delivered and the risk has therefore passed to the customer. Revenue from rendering of services is recognized according to performance progress and revenue from licenses is recognized straight-line over the period of the relevant agreement. Operating expenses are recognized as an expense upon receipt of the service or at the time they are incurred.

Interest is recognized as expense or income on an accrual basis.

Project income and expenses arising in connection with customer contracts that meet the requirements for revenue recognition over time in accordance with IFRS 15.35 are recognized according to performance progress as of the balance sheet date as revenue and expenses, respectively. An expected loss on a construction contract is recognized as an expense immediately. Due to the high degree of customer individuality, the contracts generally meet the requirements of IFRS 15.35b. Some of the contract also meet the requirements of IFRS 15.35c.

Cost of sales primarily includes costs of purchased materials and services, transportation costs, wages and salaries, production-related overheads, commission, and customs duties as well as expected warranty expenses.

Estimates and Assumptions

To a certain extent, the preparation of the group financial statements in accordance with IFRS requires estimates and assumptions, which affect the recognition, measurement and presentation of assets and liabilities, the disclosure of contingent liabilities as of the balance sheet date, and the presentation of income and expenses. The estimates made include complex and subjective assessments as well as the utilization of assumptions, some of which concern circumstances that are uncertain by nature and that can be subject to change. Such estimates can change over time and significantly affect the net assets, financial position and result of operations of KHD. In the evaluation of these estimates and assumptions, KHD made all discretionary decisions based to the best of its knowledge and belief in order to disclose a true and fair view of the actual net assets, financial position and result of operations. The estimates and assumptions that comprise a significant risk in the form of possible adjustments of the carrying amounts of assets and liabilities within the next financial year are explained in the following:

Completion Date of Performance Obligations for Customer Contracts with Revenue Recognition over Time

KHD operates in the area of long-term plant engineering and determines the completion date of performance obligations for customer contracts with revenue recognition over time according to performance progress. The point in time that revenue and profit are recognized is based on the stage of completion. At KHD, the determination of the stage of completion is made based on the cost-to-cost method, which calculates the stage of completion from the proportion of contract costs incurred to the estimated total contract costs. According to management's estimation, the determination of performance progress based on the input oriented cost-to-cost method provides a realistic and faithful illustration of the transfer of goods and services to customer because the costs applied correspond to the output provided to the customer.

With the cost-to-cost method, the estimate of the stage of completion is particularly important; moreover, it can include estimates with regard to the scope of deliveries and services required to meet the contractual obligations. These significant estimates also include the overall contract revenues, the overall project costs, the contract risks, and other relevant figures.

At KHD, the overall contract revenues are a result of the fixed price contracts agreed upon. In general, there are no variable revenue arrangements which are influenced by estimation. An allocation of the total revenue to several service components might not be carried out due to the specific features of KHD's plant engineering business because the individual components of a plant cannot be identified separately as goods and services as defined by IFRS 15.

The estimation of the total contract costs and the project risks is given special significance. The estimation of total contract costs is influenced to a high degree by the technical and expert estimates of the employees responsible for the project. Changes in estimates can lead to an increase or decrease in revenue. KHD regularly checks and, if necessary, adjusts all of the estimates in connection with such customer contracts. The respective estimates by the employees responsible for the projects are checked by persons not connected with the project for plausibility and reliability in a standardized process and are constantly adjusted.

For customer contracts for which there is a specific completion date of performance obligations, revenue is recognized when control of the assets is transferred based on delivery documentation. In principle, there is no significant discretionary decision-making associated with these projects.

Impairment of Goodwill

Once a year or when appropriate, KHD reviews goodwill for possible impairment in compliance with the rules of IAS 36. The measurement of the recoverable amount of the respective cash generating units to which goodwill was allocated is subject to estimates. The forecast result based on these estimates is affected by the volatility on the capital markets and expected economic developments, among other factors. The determination of this recoverable amount as defined by IAS 36.30 et. seq. is carried out based on discounted cash flow valuation. These discounted cash flows are based on five year budgets built upon financial forecasts. The forecasts of future cash flows take past experiences into account and are based on the best possible estimate of future developments. Cash flows beyond the planning period are extrapolated by using individual growth rates. The most important assumptions upon which the determination of the recoverable amount is based include estimated growth rates, weighted average capital cost rates and tax rates. These estimates and the methodology they are based on can significantly influence the respective values and, ultimately, the amount of a possible impairment of goodwill.

Income Tax Expenses

The respective, local tax regulations and the relevant administrative opinions are taken into consideration when determining the tax asset and liability items recorded in this financial statement and, due to their complexity, these items are possibly subject to differing interpretations, by the taxpayer, on one hand, and the local tax authority, on the other. Subsequent tax payments for previous years can be required due to differing interpretations of tax regulations resulting from audits. Deferred tax assets are recognized to the extent to which it is probable that a future, taxable result will be available. In this case, the planned results from ordinary activities are included, along with the effects of the reversal of temporary differences that are to be taxed and tax planning possibilities, among others. Based on the planned, future, taxable results, KHD assesses the impairment of deferred tax assets as of the respective balance sheet date. Because future business developments are uncertain, assumptions are required to estimate the future, taxable income as well as the realization of deferred tax assets after that date. Estimates are adjusted for periods for which sufficient information exists in order to adjust them.

Accounting for Employee Benefits

Benefits after the term of employment ends in the form of obligations for pensions and other benefits are determined in accordance with actuarial assessments. These assessments are based on significant assumptions, including discount rates, salary and retirement trends and mortality rates, among others. The discount rates applied are determined based on the returns obtained at the end of the reporting period for blue-chip, fixed-interest corporate bonds with a corresponding term. Due to changing market, economic and social conditions, the assumptions upon which the assessments are based can differ from actual developments. This can significantly affect the obligations for pensions and other benefits after the term of employment ends. The resulting differences are recorded in their entirety, without affecting profit and loss, in the period in which they are generated.

Provisions and Accruals

To a considerable degree, the assessment of provisions for contingent losses from orders, of guarantee provisions, and of provisions for litigation is connected with estimates. KHD establishes provisions for contingent losses from orders if the currently estimated overall costs exceed the expected revenue from the respective contract. As a result of new information available as the project progresses, these estimates can change. KHD identifies orders that will lose money by continuously controlling project progress and updating the calculated overall costs. With respect to the assessment of guarantee provisions, estimates are required to a considerable degree regarding future expenses for repairs, renovations or other services.

KHD is facing litigation and regulatory proceedings in various jurisdictions. As a result of these proceedings, KHD could be subject to possible criminal or civil sanctions, fines, claims for damages or other claims or disgorgement of profits. KHD establishes provisions for litigation if an obligation is likely to arise in connection with these proceedings and if the obligation is likely to result in cash outflows, the amounts of which can be reliably estimated. Litigation is frequently based on complex, legal issues associated with considerable uncertainty.

Accordingly, the assessment as to whether or not a current obligation has resulted from an event in the past as of the reporting date, and as to whether or not a future cash outflow is likely and the obligation can be reliably estimated, is based on considerable discretion. KHD regularly assesses the respective status of a legal procedure with the involvement of experts as well as internal and external lawyers. An assessment can change due to new information. It can become necessary to adjust the amount of a provision for ongoing proceedings in the future based on new developments. Changes in estimates and assumptions can significantly affect the future results of operations over the course of time.

Initial Application of Accounting Standards

In the reporting period, the Group applied all International Accounting Standards Board (IASB) standards and International Financial Reporting Interpretations Committee (IFRIC) interpretations required to be applied, providing that the standards and interpretations have already been endorsed by the European Union (EU).

Initial Application of Recently Published Standards

The following rules and amendments in EU law were adopted in the 2022 financial year:

- IFRS 3: Amendments for updating a reference to the conceptual framework, published in May 2020.
- IFRS 9: Amendments resulting from the annual improvements cycle 2018-2020 (Fees in the 10% test for derecognition of financial liabilities), published in May 2020
- Amendment to IFRS 16; to extend the application period of the exemption from assessing whether a COVID-19-related rent concession is a lease modification, published in March 2021, initial application in the 2022 financial year.
- IAS 16: Amendments that prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management, published in May 2020.
- IAS 37: Amendments related to which costs to include in estimating the cost of assessing whether a contract is onerous, published in May 2020.

The application of these rules and amendments does not result in any significant effects on the Group's net assets, financial position and result of operations.

Published Standards for which Application is not yet required

In the current reporting period, the IASB has published a variety of standards, interpretations and changes to standards and interpretations, the application of which is not yet mandatory and, in part, still require endorsement into EU law.

- Amendments to IAS 1: “Classification of Liabilities as current or non-current”, published in January 2020, initial application in the 2024 financial year.
- Amendment to IAS 1: Amendment regarding the classification of debt with covenants, published in October 2022, initial application in the 2024 financial year.
- Amendments to IAS 1: Disclosure of accounting and measurement methods, published in February 2021, initial application in the 2023 financial year.
- Amendments to IAS 8: Amendments regarding accounting-related estimates, published in February 2021, initial application in the 2023 financial year.
- Amendments to IAS 12: Amendments related to the recognition of deferred tax when an entity accounts for transactions, such as leases or decommissioning obligations, published in May 2021, initial application in the 2023 financial year.

- Amendments to IFRS 16: Amendments to clarify how a seller-lessee subsequently measures sale and leaseback transactions, published in September 2022, initial application in the 2024 financial year.

KHD will apply these standards when they take effect. KHD does not expect these amendments to result in any significant effects on the Group's net assets, financial position and result of operations.

2. Subsidiaries of KHD Humboldt Wedag International AG as of December 31, 2022

Name of company	Registered office	Main Buisness	Capital and voting rights in % Dec. 31, 2022	Capital and voting rights in % Dec. 31, 2021		Currency	Subscribed capital Dec. 31, 2022	Subscribed capital Dec. 31, 2021
KHD Humboldt Wedag GmbH	Cologne, Germany	Holding function	100.00	100.00	D	€	15,339,300	15,339,300
Humboldt Wedag GmbH	Cologne, Germany	Plant engineering	100.00	100.00	I	€	7,000,000	7,000,000
ZAB Zementanlagenbau GmbH Dessau	Dessau, Germany	Plant engineering	100.00	100.00	I	€	2,000,000	2,000,000
Blake International Ltd.	Road Town, British Virgin Islands	Holding function	100.00	100.00	I	USD	1,000	1,000
KHD Humboldt Wedag Vermögensverwaltungs-AG	Cologne, Germany	Asset management	91.26	91.26	I	€	3,600,000	3,600,000
Humboldt Wedag Inc.	Norcross, USA	Plant engineering	100.00	100.00	I	USD	1,000	1,000
Humboldt Wedag India Private Ltd. *	New Delhi, India	Plant engineering	100.00	100.00	I	INR	19,200,000	19,200,000
KHD Humboldt Wedag Machinery Equipment (Beijing) Co. Ltd	Beijing, China	Plant engineering	100.00	100.00	D	USD	2,100,000	2,100,000
KHD Humboldt Engineering OOO	Moscow, Russia	Plant engineering	100.00	100.00	I	RUB	3,722,222	3,722,222
Humboldt Wedag Malaysia Sdn. Bhd.	Kuala Lumpur, Malaysia	Sales	100.00	100.00	I	MYR	500,000	500,000
Humboldt Wedag Do Brasil Servicos Technicos Ltda	Belo Horizonte, Brazil	Sales	100.00	100.00	I	BRL	801,847	801,847

D = directly owned
I = indirectly owned

* Subscribed capital of HW India as of March 31, 2022 and March 31, 2021, respectively

On August 14, 2020, KHD and AVIC International Engineering Holdings Pte. Ltd., ("'AVIC Engineering"), Singapore, concluded a share purchase agreement ("SPA") and a trust agreement involving 51% of the shares in KHD Humboldt Wedag Machinery Equipment (Beijing) Co. Ltd. ("KHD Beijing"). These agreements took effect on June 17, 2021. Based on the SPA, AVIC Engineering is the legal owner of 51% of the shares in KHD Beijing. The trust agreement establishes a fiduciary with regard to this 51% shareholding of KHD Beijing between KHD (Trustor) and AVIC Engineering (Trustee). Accordingly, KHD retains 100% of the economic ownership.

The scope of consolidation remains unchanged from the previous year and included four domestic and seven foreign subsidiaries in addition to KHD as of December 31, 2022. In this reporting year, a decision was taken to liquidate Humboldt Wedag Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia. Due to the insignificance of this company in the context of IFRS 5.32 a, further information regarding the discontinued business areas in the context of IFRS 5 is not reported.

The only Group company in which there are non-controlling interests is KHD Humboldt Wedag Vermögensverwaltungs-AG („KHD VV"):

		Interest and voting rights share of non-controlling interests		Gain or loss attributable to non-controlling interests		Accumulated attributable to non-controlling interests	
Name of the company	**Registered office**	**Dec. 31, 2022 in %**	**Dec. 31, 2021 in %**	**Dec. 31, 2022 in € thousand**	**Dec. 31, 2021 in € thousand**	**Dec. 31, 2022 in € thousand**	**Dec. 31, 2021 in € thousand**
KHD Humboldt Wedag Vermögensverwaltungs-AG	Cologne, Germany	8.74	8.74	3	22	497	504

The Group did not acquire any further shares in KHD VV during the 2022 financial year. The Group's share as of December 31, 2022 amounted to 91.26%, as in the previous year. Changes in KHD VV equity attributable to KHD are as follows in the 2022 financial year:

	€ thousand
Equity of shareholders of the parent company as of January 1, 2022	**5,261**
Change in comprehensive income attributable to shareholders of the parent company in 2022	52
Dividend payment	(131)
Equity of shareholders of the parent company as of December 31, 2022	**5,182**

Following is the summarized financial information for KHD VV in accordance with IFRS. It may differ in comparison with the financial statements under German commercial law. The summary of financial information corresponds to the amounts before intra-group eliminations:

KHD Humboldt Wedag Vermögensverwaltungs-AG	**Dec. 31, 2022** in € thousand	**Dec. 31, 2021** in € thousand
Current assets	5,520	5,635
Non-current assets	234	234
Current liabilities	(21)	(27)
Non-current Liabilities	(54)	(77)
Share of equity attributable to shareholders of the parent company	5,182	5,261
Share of equity attributable to non-controlling interests	497	504

	Dec. 31, 2022 in € thousand	**Dec. 31, 2021** in € thousand
Revenue	-	-
Expenses	38	248
Net profit for the year	38	248
	-	-
Net profit for the year attributable to shareholders of the parent company	35	226
Net profit for the year attributable to the non-controlling shareholders	3	22
Total net profit for the year	**38**	**248**
Other comprehensive income attributable to shareholders of the parent company	-	-
Total other comprehensive income	**-**	**-**
Comprehensive income attributable to shareholders of the parent company	52	226
Comprehensive income attributable to non-controlling shareholders	5	22
Comprehensive income	**57**	**248**
Dividends paid to non-controlling interests	(13)	(13)
Net cash flow from operating activities	(217)	(122)
Net cash flow from investment activities	315	34
Net cash flow from financing activities	(145)	(144)
Total net cash flow	**(47)**	**(232)**

3. Changes to the Scope of Consolidation

Regarding the change to the scope of consolidation of KHD, reference is made to point 2 of the Notes.

4. Segment Reporting

For KHD, reporting is done in two separate segments. The Capex segment (project business) is differentiated from the Plant Services segment. Segment reporting is oriented towards internal Group management control and internal financial reporting, i. e. it is based on the management approach.

The business activities of the two reportable segments as of December 31, 2022 include the following activities and services:

- **Capex (Project Business)**
  In the Capex segment, the KHD Group reports all revenues and expenses resulting from supplying equipment for cement plants and providing services directly linked to the equipment supply. This encompasses process technology, design, engineering, project management and the supply of technology and equipment. In addition, supervision of erection and commissioning of cement plants are allocated to this segment. General and administrative expenses, sales expenses and other expenses (in particular research and development costs) are allocated to this segment, accordingly.
- **Plant Services**
  The Plant Services segment comprises all revenues and expenses resulting from supplying spare parts and providing services to existing cement plants. Services include optimizing cement plants, maintenance services, carrying out plant audits, creating optimization concepts and training plant personnel. General and administrative expenses, sales expenses and other expenses are allocated to the segment accordingly.

Management and controlling of the KHD Group is based in particular on key figures for the balance sheet and income statement. However, for the operating segments, key figures are determined only for the income statement and for order intake, but not for the balance sheet. In its function as the chief operating decision maker, the Management Board assesses the profitability of the segments based on the operating result (earnings before interest and taxes – EBIT).

The following table provides an overview of the business for the 2022 and 2021 financial years:

in € thousand	Capex Jan. 1 - Dec. 31, 2022	Plant Services Jan. 1 - Dec. 31, 2022	Total Group Jan. 1 - Dec. 31, 2022	Capex Jan. 1 - Dec. 31, 2021	Plant Services Jan. 1 - Dec. 31, 2021	Total Group Jan. 1 - Dec. 31, 2021
Order intake	166,224	52,349	218,573	178,525	53,138	231,663
Revenue	163,577	46,796	210,373	194,144	32,115	226,259
Cost of sales	(148,264)	(34,531)	(182,795)	(184,044)	(22,916)	(206,960)
Gross profit	15,313	12,265	27,578	10,100	9,199	19,299
Other operating income	2,572	-	2,572	3,610	-	3,610
Sales expenses	(7,788)	(2,780)	(10,568)	(6,770)	(2,806)	(9,576)
General administrative expenses	(11,966)	(2,977)	(14,943)	(10,611)	(2,587)	(13,198)
Reorganization costs	-	-	-	-	-	-
Other expenses	(6,620)	(502)	(7,122)	(5,310)	-	(5,310)
Earnings before interest and taxes (EBIT)	(8,489)	6,006	(2,483)	(8,981)	3,806	(5,175)
Net finance income			4,725			5,860
Profit before tax			2,242			685
Income tax expense			(1,956)			(1,802)
Group net profit/ loss for the year			286			(1,117)
for information:						
depreciation and amortization	-		*(4,674)*	-		*(2,732)*

The recognition and measurement principles used for the reportable segments are in line with the IFRS principles described above that are used for the Group financial statements. Revenue and segment-related expenses are directly allocated to the respective segment. Expenses and income which cannot be allocated directly to the segments (e.g. general and administrative expenses) are allocated to the segments using appropriate allocation keys.

KHD only reports revenue from external customers in its segment reports, i.e. revenue generated from transactions between two segments is already eliminated. Due to the segment structure, as in the previous year, the Plant Services segment did not recognize any revenue from transactions with the Capex segment in this financial year. And as in the previous year, the Capex segment did not recognize any revenue with the Plant Services segment. Transactions between the two segments are in line with market conditions.

The following project data was allocated to the different geographical areas according to the place of performance or delivery of the products and services.

	Revenue		Non-current assets	
in € thousand	**2022**	**2021**	**2022**	**2021**
India	102,805	78,785	12,342	9,748
North America	41,517	98,609	866	780
Rest Asia	32,941	18,520	-	-
Rest of Europe	8,981	4,255	-	-
Russia	8,542	4,284	102	1,728
Middle East	5,926	5,045	-	-
China	4,001	13,141	207	104
Germany	1,994	(2,733)	11,749	6,074
South America	1,581	1,929	-	-
Africa	1,198	1,580	-	-
Other	887	2,844	-	-
	210,373	**226,259**	**25,266**	**18,434**

When non-current assets allocated to the segments (€ 25,266 thousand) are added to other non-current trade receivables in the amount of € 4 thousand and deferred tax assets in the amount of € 1,107 thousand, the resulting sum is the total amount of the Group's non-current assets (€ 26,377 thousand).

	Order Intake		Order Backlog	
in € thousand	**2022**	**2021**	**2022**	**2021**
India	137,653	121,216	122,181	96,605
Rest of Asia	28,017	49,288	39,293	45,017
Middle East	19,881	4,919	17,944	3,989
North America	10,502	26,912	45,972	72,494
Rest of Europe	7,214	10,296	5,247	7,014
Russia	6,922	8,734	11,621	13,242
South America	2,735	1,912	1,540	400
Germany	2,124	1,595	1,257	1,137
China	1,519	5,786	3,270	5,832
Africa	1,485	429	5,146	4,866
Other	521	576	1,113	1,477
	218,573	**231,663**	**254,584**	**252,073**

Order backlog, or the amount of the revenue from the respective contract that is not yet reported, totaled € 254,584 thousand (previous year: € 252,073 thousand) as of December 31, 2022. Of this, an order backlog of € 210,107 (previous year: € 212,846 thousand) is attributable to the Capex segment and an order backlog of € 44,476 thousand (previous year: € 39,227 thousand) to the Plant Services segment. KHD will realize the existing order backlog as revenue to the extent that the project-specific deliveries and services are provided. In the Capex segment, according to planning, approx. 70-80% of the order backlog in the next twelve months will be realized as revenue. Revenue recognition for the remaining 20-30% is expected within the following 24 months. For the Plant Services segment, revenue recognition for more than 90% of the current order backlog is expected within the next twelve months. KHD did not utilize the helpful tool for IFRS 15.121.

Contract assets and liabilities are attributed to the segments as follows:

in € thousand	Capex Dec. 31, 2022	Plant Services Dec. 31, 2022	Total Group Dec. 31, 2022	Capex Dec. 31, 2021	Plant Services Dec. 31, 2021	Total Group Dec. 31, 2021
Contract assets	15,849	1,605	17,454	42,201	354	42,555
Contract liabilities	(19,061)	(6,098)	(25,159)	(22,976)	(3,525)	(26,501)

Information about Key Customers

In the financial year, revenue of € 124.5 million was attributable to four customers with which at least 10% of the Group revenue was achieved (previous year: revenue with three customers in the amount of € 149.3 million). Revenue with the key customers was generated in both segments and is distributed as follows:

Customer 1: € 41,473 thousand
Customer 2: € 32,752 thousand
Customer 3: € 26,417 thousand
Customer 4: € 23,819 thousand

5. Property, Plant and Equipment

in € thousand	Land and building	Leasehold improvements	Property, plant and equipment	Total
COST				
Dec. 31, 2020 / Jan. 1, 2021	**3,142**	**2,850**	**10,529**	**16,521**
Additions	-	24	1,944	1,968
Disposals	**-**	**-**	**(283)**	**(283)**
Foreign currency translation and reclassification	182	210	134	526
Dec. 31, 2021	**3,324**	**3,084**	**12,324**	**18,732**
Additions	1,812	725	1,101	3,638
Disposals	-	(122)	(1,202)	(1,324)
Foreign currency translation and reclassification	(147)	35	1,533	1,421
Dec. 31, 2022	**4,989**	**3,722**	**13,756**	**22,467**
ACCUMULATED DEPRECIATION				
Dec. 31, 2020 / Jan. 1, 2021	**-**	**702**	**6,489**	**7,191**
Additions	-	134	771	905
Disposals	-	-	(260)	(260)
Currency differences	-	-	90	90
Dec. 31, 2021	**-**	**836**	**7,090**	**7,926**
	-	**-**	**-**	**-**
Additions	-	191	895	1,086
Disposals	-	(110)	(1,191)	(1,301)
Foreign currency translation and reclassification	-	97	1,702	1,799
Dec. 31, 2022	**-**	**1,014**	**8,496**	**9,510**
CARRYING AMOUNT	**0**	**0**	**0**	**0**
Dec. 31, 2021	**3,324**	**2,248**	**5,234**	**10,806**
Dec. 31, 2022	**4,989**	**2,708**	**5,260**	**12,957**

As in the previous financial year, the additions to property, plant, and equipment in the financial year in the amount of € 3,638 thousand primarily result from investments in technical equipment and machinery in the production facility in India as well as replacement investments in IT hardware. Furthermore, an additional property was purchased during the financial year to expand production in Faridabad, India. Total depreciation in the financial year amounted to € 1,086 thousand (previous year: € 905 thousand).

6. Goodwill and Other Intangible Assets

in € thousand	Goodwill	Other intangible assets	Rights of use	Total
COST				
Dec. 31, 2020 / Jan. 1, 2021	**5,162**	**10,848**	**5,993**	**22,003**
Additions	-	256	1,180	1,436
Disposals	-	-	(285)	(285)
Currency differences and reclassification	-	3	(15)	(12)
Dec. 31, 2021	**5,162**	**11,107**	**6,873**	**23,142**
Additions	-	121	8,444	8,565
Disposals	-	(1,058)	(360)	(1,418)
Currency differences and reclassification	-	(732)	(316)	(1,048)
Dec. 31, 2022	**5,162**	**9,438**	**14,641**	**29,241**
ACCUMULATED AMORTIZATION				
Dec. 31, 2020 / Jan. 1, 2021	**1,311**	**9,570**	**2,779**	**13,660**
	-	**-**	**-**	**-**
Additions	-	348	1,479	1,827
Disposals	-	-	-	-
Currency differences	-	27	-	27
Dec. 31, 2021	**1,311**	**9,945**	**4,258**	**15,514**
Additions	1,622	324	1,642	3,588
Disposals	-	(1,058)	-	(1,058)
Foreign currency translation and reclassificatic	-	(735)	(377)	(1,112)
Dec. 31, 2022	**2,933**	**8,476**	**5,523**	**16,932**
CARRYING AMOUNT	**-**	**-**	**-**	**-**
Dec. 31, 2021	**3,851**	**1,162**	**2,615**	**7,628**
Dec. 31, 2022	**2,229**	**962**	**9,118**	**12,309**

As was the case in the previous year, the additions to other intangible assets include primarily investments in software. Rights of use are reported with the application of IFRS 16.

The reported rights of use are primarily attributable to the rights of use with regard to rented real estate. Rights of use for factory and office equipment are also reported. The carrying amounts of the rights of use reported in the balance sheet developed as follows in the financial year:

in € thousand	Other property, plant and equipment	Real estate	Total
COST			
Dec. 31, 2021	363	6,510	**6,873**
Addition	247	8,197	**8,444**
Disposals	(4)	(356)	**(360)**
Foreign currency translation and reclassification	263	(579)	**(316)**
Dec. 31, 2022	**869**	**13,772**	**14,641**
ACCUMULATED DEPRECIATION			
Dec. 31, 2021	308	3,950	**4,258**
Addition	70	1,572	**1,642**
Disposals	-	-	**-**
Foreign currency translation and reclassification	266	(643)	**(377)**
Dec. 31, 2022	**644**	**4,879**	**5,523**
CARRYING AMOUNT Dec. 31,2022	**225**	**8,893**	**9,118**

The lease contracts for the factory and office equipment are depreciated over a period of up to six years. The leases for real estate have contract terms of up to ten years.

Additions with regards to leases for real estate mainly include a rental contract for an office building.

Depreciation of rights of use totaling € 1,642 (previous year: € 1,479 thousand) were recognized in the 2022 financial year. In addition, the interest expenses for lease liabilities were € 256 thousand (previous year: € 184 thousand). Expenses for short-term leases and leases for assets of low value are of minor importance in the financial year. The total expenses in connection with leases recognized in profit or loss totaled € 1,898 thousand (previous year: € 1,663 thousand).

The Group's cash outflows for leases amounted to € 1,910 thousand in the 2022 financial year (previous year: € 1,777 thousand).

The extension options available during the financial year for individual leases for real estate that favor KHD were not taken into consideration in the determination of rights of use as of December 31, 2022 because exercising the extension options was considered unlikely. The undiscounted potential future lease payments for periods after the point in time that the extension option is exercised amounted to approx. € 4.5 million (previous year: € 3.6 million).

Goodwill

Goodwill as reported as of December 31, 2022 resulted from acquisitions and was allocated to the respective cash generating units. The original amount of goodwill amounted to € 5,162 thousand, € 2,127 thousand of which resulted in the context of the capital consolidation of KHD GmbH, i.e. in the context of the initial consolidation, the active difference remaining between the carrying amount of the investment and the equity that required consolidation was recognized as goodwill. Goodwill in the original amount of € 3,035 thousand resulted initially in the 2011 financial year in the context of the capital consolidation of KHD OOO.

The annual impairment analysis yielded an impairment in the amount of € 1,622 thousand. The impairment was attributed in part (€ 1,120 thousand) to the cash generating unit "Capex KHD OOO" and in part (€ 502 thousand) to the cash generating unit "Plant Services KHD OOO". The impairments are an indirect consequence of the Russian invasion of Ukraine because it resulted in a considerable reduction in business opportunities on one hand and a very sharp increase in added country risk in the discount interest rate on the other. Overall, goodwill decreased to € 2,229 thousand (previous year: € 3,851 thousand). As of December 31, 2022, goodwill is attributable to the following cash generating units:

CGU	Carrying amount of goodwill allocated to CGU in € thousand	Proportion of total goodwill	Discounting interest rate (before tax) in %	Growth rate in %	Description of key assumptions of company valuation	Procedure used to determine key assumptions
Plant Services HWG	2,127	95.4%	11.2%	1.0%	- Growth rates of the respective markets - Industry-specific cycles - Selling prices - Procurement prices	- Intercompany estimate of the responsible sales and purchasing departments - Economic conditions expected by KHD AG and external market research
Plant Services KHD OOO	102	4.6%	31.2%	1.0%	- Growth rates of the respective markets - Industry-specific cycles - Selling prices - Procurement prices	- Intercompany estimate of the responsible sales and purchasing departments - Economic conditions expected by KHD AG and external market research
Capex KHD OOO	0	0.0%	21.0%	1.0%	- Growth rates of the respective markets - Industry-specific cycles - Selling prices - Procurement prices	- Intercompany estimate of the responsible sales and purchasing departments - Economic conditions expected by KHD AG and external market research

The respective goodwill is subjected to an annual impairment test as part of the preparation of the financial statements. This is done by comparing the carrying amount of the respective cash generating unit (including goodwill) with its recoverable amount. The recoverable amount is calculated as the value in use based on the discounted cash flow method in the form of the flow-to-equity-approach.

The (pre-tax) cash flows accounted for are based on the management-approved medium-term planning, which includes a five year period. The capitalization rates were derived from market data, taking into account the risk situation of the respective cash generating unit, while taking various risk premiums for country risks into consideration.

A change to the key measurement parameters, such as a reduction in the expected cash flows by 10%, would make it necessary for the cash generating unit "Plant Services KHD OOO" to recognize an impairment loss in the amount of € 13 thousand (previous year: € 78 thousand). If the capitalization rate increased by 20% this year, the cash generating unit "Plant Services KHD OOO" would have to recognize an impairment loss in the amount of € 36 thousand (previous year: € 183 thousand). A change to the key measurement parameters would not require the cash generating unit “Plant Services HWG” to recognize an impairment.

7. Receivables and Financial Assets

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Current financial assets		
Trade receivables	39,786	41,717
Less valuation allowances for impairment of receivables	(2,728)	(3,243)
Trade receivables - net	37,058	38,474
Intercompany receivables	3,015	3,527
Other financial assets	97,884	1,495
Financial receivables	2,598	2,234
Current financial assets	**140,555**	**45,730**
Other receivables	2,611	4,381
Current financial assets and other receivables	**143,166**	**50,111**
Non-current financial assets		
Trade receivables	4	297
Other non-current financial assets	-	95,000
Non-current financial assets	**4**	**95,297**

Trade receivables (gross amount – before deducting valuation allowances) decreased in the financial year by € 1,931 thousand from € 41,717 thousand to € 39,786 thousand. Intercompany receivables increased by € 512 thousand, from € 3,527 thousand to € 3,015 thousand as of December 31, 2022.

The largest share of the valuation allowances relates to customers from North Africa, India and Nepal (previous year: from North Africa, Turkey and India). For trade receivables that are not overdue and for which no valuation allowance has been provided, the Group does not foresee any impairment due to the credit rating of the debtors.

As in the previous year, intercompany receivables result from delivery of goods and services to AVIC Group companies.

Two loans to AVIC Kairong for € 50,000 thousand and € 35,000 thousand (previous year: € 50,000 thousand and € 45,000 thousand) are reported under other current financial assets. The two loans are due and payable in 2023, so they are reported under current assets. In the previous financial year, the two loans were reported under other non-current financial assets. Each of the loans incurs interest at 5% p.a. KHD has the right to demand full or partial repayment of the loan for € 35.0 million at any time before the due date with a notification period of 30 days. Both loans are secured by a corporate guarantee from AVIC.

Likewise, bank deposits in the amount of € 11,322 thousand (December 31, 2021: € 0 thousand) that are not shown as cash and cash equivalents are reported under other current financial assets.

Financial receivables increased by € 512 thousand, from € 2,234 thousand to € 2,598 thousand. Financial receivables as of December 31, 2022 mainly comprise costs backcharged to subcontractors, interest receivables, securities, insurance claims, and other financing receivables totaling € 2,004 thousand (previous year: € 1,265 thousand).

Other receivables in the amount of € 2,611 thousand (previous year: € 4,381 thousand) arise from reimbursement claims for value-added tax.

Other non-current financial assets include trade receivables against customers in an amount of € 4 thousand (previous year: € 297 thousand).

Age Structure of overdue Receivables for which no Valuation Allowance was recognized

in € thousand	**Dec. 31, 2022**	**Dec. 31, 2021**
61 to 90 days	367	506
91 to 180 days	1,447	827
181 to 365 days	2,098	757
Over 365 days	227	156
Total	**4,139**	**2,246**

Overdue receivables are reviewed at monthly intervals. If there is objective evidence of impairment, specific bad debt reserves (valuation allowances) are recognized.

For trade receivables in the amount of € 4,139 thousand (previous year: € 2,246 thousand) which were overdue by more than 61 days, no valuation allowances were made because no material change in the credit standing of these debtors was identified and the outstanding amounts are expected to be recoverable.

in € thousand	2022	2021
Valuation allowances as of Jan. 1	3,243	2,704
Addition	629	815
Utilization	(688)	(98)
Currency translation differences	(55)	64
Reversal	(401)	(242)
Valuation allowances as of Dec. 31	**2,728**	**3,243**

Valuation allowances correspond to the net value (excluding VAT) of the impaired receivables. In the financial year under review, KHD recorded valuation allowances on receivables due to expected credit losses according to IFRS 9 in the amount of € 481 thousand (previous year: € 316 thousand).

Current receivables include foreign currency receivables (CNY) due from an indirect parent company in the amount of € 737 thousand (previous year: € 1,184 thousand).

8. Deferred Tax Assets and Liabilities

The Group accounts for deferred taxes arising from temporary differences between the IFRS amount and the tax base as well as tax assets on tax loss carry-forwards. Deferred tax assets and liabilities are calculated on the basis of local tax rates. Deferred tax assets are recognized to the extent to which it is probable that a future, taxable result will be available. In compliance with the accounting standard IAS 12, the extent to which convincing, substantial indications of future, taxable profits exists is taken into account.

As of December 31, 2022, KHD has a total amount of tax loss carry-forwards of € 171.3 million (previous year: € 164.2 million) for corporate income tax and comparable foreign income taxes. For trade tax, the total amount of tax loss carry-forwards is € 104.5 million (previous year: € 101.4 million). In the reporting of deferred tax assets as of December 31, 2022, tax loss carry-forwards of € 6.5 million (previous year: € 1.6 million) for corporate income tax and comparable foreign income taxes as well as € 6.2 million (previous year: € 0.9 million) for trade tax were recognized. To the degree that it is probable that future, taxable results will be available, deferred tax assets are capitalized to the extent that based on the 5-year business planning a future taxable result will be available. The basis for the expected future taxable profit is KHD's estimation in relation to the future development of its subsidiaries. Deferred tax assets, however, are capitalized at least to the extent that corresponding deferred tax liabilities are recognized.

The probable taxable profit in the future is determined for the respective subsidiary based on business planning done for Group purposes. The temporary differences, for which no deferred tax assets were recognized, totaled € 0.0 million (previous year: € 3.8 million). No deferred tax assets were recognized with regard to the tax loss carry-forwards listed above, for which future utilization is not sufficiently probable. In principle, the tax loss carry-forwards of the German companies can be carried forward with no time limit. The utilization of tax loss carry-forwards for foreign companies is subject to some time limits. Unused loss carry-forwards for foreign companies in the amount of € 58,442 thousand (previous year: € 53,302 thousand) will expire during the time period from 2031 through 2042. Unused loss carry-forwards for foreign companies of € 410 thousand (previous year: € 337 thousand) will expire earlier, following the 2027 financial year.

The deferred tax assets not recognized in profit and loss amount to € 307 thousand (previous year: € 307 thousand) as of December 31, 2022.

For temporary differences amounting to € 0.6 million (previous year: € 2.3 million) which are linked to shares in subsidiaries and which will not reverse in the foreseeable future, no deferred tax assets or liabilities were recognized.

Deferred tax assets and liabilities arise from the following items:

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Deferred tax assets		
Provisions	1,956	2,035
Resulting from tax loss carry-forwards	1,254	407
Offset with deferred tax liabilities	(2,103)	(1,292)
	1,107	**1,150**
Deferred tax liabilities		
Construction contracts / PoC method	(2,103)	(1,292)
Offset with deferred tax assets	2,103	1,292
	-	**-**

Of the reported deferred tax assets on provisions in the amount of € 1,956 thousand, € 307 thousand relate to deferred tax assets for pension benefit obligations.

In general, KHD recognizes deferred tax assets and deferred tax liabilities if KHD has a right to offset them and if the deferred tax assets and deferred tax liabilities relate to the same tax authority.

9. Inventories

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Raw materials, consumables, and supplies	4,970	4,882
Work in progress	8,173	2,230
Finished goods and merchandise	11	258
Write-down to net realizable value	(1,450)	(1,604)
	11,704	**5,766**

In the financial year, inventories in the amount of € 6,347 thousand (previous year: € 5,583 thousand) were recorded as part of cost of sales. The manufactured products and services are mainly spare parts stocked by customers, but for which transfer of ownership to the customer occurs only when the customer retrieves a part. Write-downs to net realizable value of the inventories amount to € 1,450 thousand as of December 31, 2022 (previous year: € 1,604 thousand). These write-downs relate to raw materials, consumables, and supplies, the gross carrying amount of which is € 1,515 thousand (previous year: € 1,775 thousand).

10. Contract Assets and Contract Liabilities, Advance Payments made and Advance Payments Received

Claims or obligations from customer contracts with revenue recognition over time are presented under the item contract assets or contract liabilities and advance payments received.

Contract assets represent conditional claims to a payment from the customer for satisfying contractual performance obligations. Receivables are recorded only after the claim to receipt of the payment becomes unconditional. This is usually the case if contractually agreed upon milestones for settlement are reached. When these milestones are reached, the contract assets are reclassified under receivables in the amount of the respective progress billings.

Contract liabilities arise when customer payments based on the agreed upon milestones exceed the contractual obligations that have already been satisfied. The contract liabilities are recorded as revenue when KHD provides the contractual service. Revenue in the amount € 23,370 thousand (previous year: € 13,652 thousand), which was included in the balance of the contract liabilities at the beginning of the period, was recorded in the 2022 financial year.

Costs incurred plus a proportionate profit depending on the stage of completion less progress billings are taken into consideration in the measurement of the contracts with revenue recognition over time.

The development of the contract balances from customer contracts is shown as follows:

in € thousand	**Dec. 31, 2022**	**Dec. 31, 2021**
Costs incurred to date for construction contracts with realization of revenues over time	333,651	260,655
Proportionate results under these contracts recognized to date	10,588	12,269
Total costs incurred and profits recognized	344,239	272,924
Less progress billings	(351,944)	(256,870)
Balance of contract assets and contract liabilities	**(7,705)**	**16,054**
This amount is comprised as follows:		
Contract assets	17,454	42,555
Contract liabilities	(25,159)	(26,501)
	(7,705)	**16,054**
Disclosure on the credit side of the balance sheet		
Contract liabilities	(25,159)	(26,501)
Advance payments received	(9,797)	(4,747)
Contract liabilities and advance payments received	**(34,956)**	**(31,248)**
Advance payments made	**12,824**	**23,718**

In general, the customer contracts are designed such that the completion date of performance obligations corresponds with the contractually agreed upon progress billings and customer payments. As of the reporting date, projects demonstrate a contract asset or contract liability due from the respective customer in the balance depending on the respective project status in addition to the individually agreed upon settlement schedule.

As of the reporting date, December 31, 2022, the balance of the contract assets and contract liabilities decreased by € 23,759 thousand from € 16,054 thousand to € -7,705 thousand due to progress in project execution and recognized progress billings.

Of the revenue recognized in the reporting period in the amount of € 210,373 thousand (previous year: € 226,259 thousand), € 171,858 thousand (previous year: € 193,525 thousand) is attributable to customer contracts for which revenue was recognized based on stage of completion.

Impairment losses on contract assets for expected credit-related losses according to IFRS 9 are of minor significance.

Advance payments made decreased by € 10,894 thousand, from € 23,718 thousand to € 12,824 thousand. The advance payments made are primarily payments to suppliers in project business.

11. Other non-current Financial Assets

In the previous year, two loans to AVIC Kairong for € 50,000 thousand and € 45,000 thousand were reported here. The two loans are due and payable in 2023, so as of December 31, 2022 they are reported under current financial assets.

12. Cash and Cash Equivalents

The Group reports cash and cash equivalents in the amount of € 40,670 thousand (previous year: € 65,282 thousand).

in € thousand	**Dec. 31, 2022**	**Dec. 31, 2021**
Bank balances and cash on hand	22,009	44,305
Short-term bank deposits	18,661	20,977
	40,670	**65,282**

13. Equity

As in the previous year, the Company's share capital amounts to € 49,703,573 and is divided into 49,703,573 no-par-value bearer shares.

Capital reserves comprise the additional paid-in capital resulting from the issuing of shares by KHD Humboldt Wedag International AG.

There are no authorizations to purchase the company's own shares.

Retained earnings amounting to € -6,003 thousand (previous year: € -9,862 thousand) comprise revenue reserves and accumulated Group losses as well as items of other comprehensive income from remeasuring defined benefit plans that will not be reclassified subsequently to profit or loss. Other items of other comprehensive income relate to currency translation differences from the translation of foreign currency financial statements. This is presented as a separate item within equity.

The non-controlling interests of 8.74% (previous year: 8.74%) relate solely to the minority shareholders at the subsidiary KHD Humboldt Wedag Vermögensverwaltungs-AG.

14. Pension Benefit Obligations

The pension benefit obligations from the pension scheme granted to employees in the Group relate as of December 31, 2022 exclusively to two Group companies in Germany. The pension scheme is granted under defined benefit plans, which are covered by setting up pension benefit obligations. After the pension plans were frozen in 1996, it is no longer possible for employees to acquire additional vested rights to future pensions. The claims to payment of committed, non-forfeitable pension benefit obligations under the pension plans arise upon application by the beneficiaries, and through the provision of supporting evidence that the statutory pension may be drawn. The pension plans of the two Group companies are identical. They are designed as benefits for old-age pension, early retirement pension, and pension benefits to widows and orphans. Benefits to respective employees are dependent on date of entry, length of service, and income.

As of December 31, 2022, the Group’s pension benefit obligations amounted to € 13,469 thousand (previous year: € 18,225 thousand).

The pension plans typically expose the Group to the following actuarial risks:

Inflation risk:	An increase in inflation in the medium term leads to an increase in the plan obligation
Interest rate change risk:	A decrease in the loan rate leads to an increase in the plan obligation.
Longevity risk:	The present value of the defined benefit obligations arising from the plan is determined on the basis of the best possible estimate of the expected mortality of the employees participating in the plan, both during the term of the employment contract as well as after the end of the employment. An increase in the life expectancy of the employees participating in the plan leads to an increase in the plan obligation.

The pension benefit obligations are not funded by a separate fund or in the form of plan assets, but are financed exclusively internally.

The most important actuarial assumptions made are as follows:

in %	Dec.31, 2022	Dec.31, 2021
Discount rate	4.06	0.84
Pension trend	2.20	1.70
Employee turnover rate	0.00	0.00

For the financial year, the unchanged mortality tables 2018 G by Dr. Klaus Heubeck form the biometric basis for calculating these obligations. As a result of using the mortality tables, there were no actuarial losses due to demographic changes in the financial year (previous year: € 0 thousand).

The assumptions shown above reflect realistic expectations at the respective reporting date. A change in the parameters named above can lead to changes in the measurement. The effects of changes to the material actuarial assumptions on the amount of the obligation at the reporting date can be clarified using the following sensitivity analyses:

- If the discount rate increases by 0.5%, the pension benefit obligations decrease by € 493 thousand (previous year: € 821 thousand). If, however, the discount rate instead falls by 0.5%, the pension benefit obligations increase by € 529 thousand (previous year: € 892 thousand).
- If the pension trend increases by 0.25%, the pension benefit obligations rise by € 262 thousand (previous year: € 428 thousand). If the pension trend decreases by 0.25%, the pension benefit obligations are reduced by € 255 thousand (previous year: € 413 thousand).
- If life expectancy increases by one year for both men and women, the benefit obligation increases by € 764 thousand (previous year: € 1,210 thousand).

The sensitivity analyses above cannot be taken as representative of the actual change in the defined benefit obligation. It is unlikely that deviations from the assumptions made will arise independently of one another because the assumptions are partly related to each other.

In addition, the present value of the defined benefit obligations in the sensitivity analyses above was determined as of the reporting date using the projected unit credit method, the same method used to calculate the benefit-related obligation presented on the face of the Group balance sheet.

The change in the present value of the defined benefit obligation is as follows:

in € thousand	2022	2021
Defined benefit obligation on Jan. 1	18,225	19,729
Interest cost	147	114
Benefits actually paid (total)	(1,325)	(1,313)
Losses / (gains) due to experience adjustments	(3,424)	(75)
Actuarial (gains) / losses due to change in actuarial assumptions	(154)	(230)
Losses / (gains) due to demographic adjustments	-	-
Defined benefit obligation on Dec. 31	**13,469**	**18,225**

Since there are no plan assets, the present value of the defined benefit obligations corresponds to the net debt as of the reporting date.

As of December 31, 2022, of the total obligations of € 13,469 thousand (previous year: € 18,225 thousand), an amount of € 58 thousand is attributable to active employees (previous year: € 189 thousand), € 987 thousand to former employees (previous year: € 1,822 thousand), and € 12,424 thousand to pensioners and surviving dependents (previous year: € 16,214 thousand).

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Opening balance - cumulative remeasurement gains (-) / losses	8,392	8,697
Actuarial gains (-) / losses	(3,578)	(305)
Closing balance - cumulative remeasurement gains (-) / losses	**4,814**	**8,392**

As of December 31, 2022, the average term of the defined benefit obligation was 7.70 years (previous year: 9.31 years).

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Defined benefit costs		
Current service cost	-	-
Net interest expense	**147**	**114**
Actuarial (gains) / losses due to experience adjustments	(3,424)	(75)
Actuarial (gains) / losses due to change in actuarial assumptions	(154)	(230)
Losses / (gains) due to demographic adjustments	-	-
Actuarial (gains) / losses recognized in other comprehensive income	**(3,578)**	**(305)**
Defined benefit costs	**(3,431)**	**(191)**

Interest expenses on pensions of € 147 thousand (previous year: € 114 thousand) were recognized under finance expenses for the financial year.

Expected benefit payments

in € thousand	2022	2021
in 2022	-	1,362
in 2023	1,322	1,328
in 2024	1,294	1,294
in 2025	1,253	1,247
in 2026	1,207	1,196
in 2027	1,157	-
2028 onwards (prior year: 2027 onwards)	7,236	11,798

The defined benefit plans are financed out of current cash flow.

The portion of pension benefit obligations expected to be paid out in the following financial year in the amount of € 1,322 thousand (previous year: € 1,358 thousand) is reported in the current provisions.

15. Provisions and Accruals

in € thousand	Warranty	Tax and litigation risks	Impending losses	Pension benefit obligations	Provision for Reorganization	Total
Provisions as of Jan.1, 2022	17,415	1,072	611	1,358	189	20,645
Additions	6,136	93	136	-	-	6,365
Release	(3,065)	(7)	(135)	-	(8)	(3,215)
Currency translation effects	(77)	(20)	(15)	-	-	(112)
Utilization	(2,993)	(5)	(395)	-	(181)	(3,574)
Reclassification	-	-	-	(36)	-	(36)
Provisions as of Dec. 31, 2022	**17,416**	**1,133**	**202**	**1,322**	**-**	**20,073**

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Non-current (warranty)	5,139	4,308
Current	14,934	16,337
	20,073	**20,645**

The provisions for warranties cover all identifiable risks which relate to guarantee or warranty commitments. The provisions are measured on a contract-by-contract basis according to the best estimate. The amounts reported as non-current incorporate warranty commitments for a term of more than one year. The remaining expected maturities are between one and four years. The interest effect related to the discounting of accruals is reported in the net finance income.

The provisions for tax and litigation risks primarily involve the risks for legal disputes.

The effects from currency translation of € -112 thousand (previous year: € 521 thousand) are, as in the previous year, mainly attributable to the translation of the local currencies of HW India and HW Inc.

16. Liabilities

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Current financial liabilities		
Trade payables	46,808	100,597
Liabilities due to affiliated companies	24	24
Current financial liabilities	24	20
Other current liabilities	7,560	5,918
Lease Liabilities	1,616	1,400
Bank loan	-	25,000
Current financial liabilities	**56,032**	**132,959**
Other liabilities		
Tax and social security	491	536
Income tax liabilities	793	574
Other liabilities	**1,284**	**1,110**
Current liabilities	**57,316**	**134,069**
Non Current financial liabilities		
Lease Liabilities	7,986	1,703
Bank loan	25,000	-
Non Current financial liabilities	**32,986**	**1,703**
Other non current liabilities		
Other non current liabilities	4,140	4,101
Other non current liabilities	**4,140**	**4,101**
Non current liabilities	**37,126**	**5,804**

Trade payables recognized as of the balance sheet date are subject to the usual retentions of title.

The initial term for the loan for € 25.0 million granted by the Bank of China Limited, Frankfurt Branch expired on October 10, 2022, but it was extended on October 28, 2022 for two years until October 10, 2024.

Other non-current liabilities as of December 31, 2022 include lease liabilities in accordance with IFRS 16 in the amount of € 7,986 thousand (previous year: € 1,703 thousand).

The carrying amounts reported as of the reporting date generally correspond to the fair values.

17. Contract Liabilities and Advance Payments received

This item contains the contract liabilities from customer contracts which are determined with the application of IFRS 15 and presented in Note 10. Furthermore, this item includes advance payments recognized in accordance with IFRS 15, i.e. advance payments made by customers after acceptance of the contract as long as KHD is not expected to already have provided services with respect to the respective project.

18. Personnel Expenses

in € thousand	**2022**	**2021**
Wages and salaries	35,663	30,702
Social security contributions and costs, including pension costs	5,131	4,982
	40,794	**35,684**

	As of Mar. 31, 2022	**As of Jun. 30, 2022**	**As of Sept. 30, 2022**	**As of Dec. 31, 2022**
Salaried employees	631	634	649	650
Industrial employees	135	138	145	141
Total	**766**	**772**	**794**	**791**

As of December 31, 2022, the number of employees was 791 (previous year: 737). In the financial year under review, the average number of employees was 781, of whom 140 were industrial employees (previous year: 714 employees, of whom 123 were industrial).

Personnel expenses include employer contributions to statutory pension insurance in the amount of € 1,588 thousand (previous year: € 1,543 thousand) and expenses for contractually defined contribution plans of € 839 thousand (previous year: € 756 thousand).

19. Compensation of Current and Former Members of the Management Board and the Supervisory Board (Key Management Personnel in Accordance with IAS 24)

Compensation for key management personnel amounted to € 1,741 thousand in the 2022 financial year (previous year: € 1,588 thousand).

Compensation for members of the KHD Management Board in the 2022 financial year amounted to € 1,561 thousand (previous year: € 1,408 thousand). It can be attributed to the following categories in accordance with IAS 24.17:

- € 1,413 thousand (previous year: € 1,203) – short-term benefits,
- € 0 thousand (previous year: € 0 thousand) – post-employment benefits,
- € 148 thousand (previous year: € 205 thousand) – other long-term benefits,

- € 0 thousand (previous year: € 0 thousand) – termination benefits,
- € 0 thousand (previous year: € 0 thousand) – share-based compensation.

Total compensation according to Section 314, Paragraph 1, Number 6a of the German Commercial Code (HGB) for members of the Management Board of KHD amounted to € 1,561 thousand in the 2022 financial year (previous year: € 1,408 thousand). There was no compensation paid out in the financial year under review that has not been reported previously in any Group financial statements (previous year: € 0).

No compensation of the Management Board is outstanding for payment as of December 31, 2022 as was the case on the balance sheet date of the previous year as well. The compensation of the members of the Management Board includes expenses for establishing provisions of € 462 thousand (previous year: € 383 thousand) for variable compensation as well as voluntary profit-based bonuses.

Dr. Matthias Jochem shall not receive any Management Board compensation. KHD concluded a consulting contract in the 2019 financial year with 4-stream consulting GmbH, Roetgen, a company related to Management Board member Dr. Matthias Jochem as an affiliated company. In accordance with the contractual agreement, KHD reported € 323 thousand in the 2022 financial year (previous year: € 313 thousand) as expenses for consulting services.

The remuneration granted to members of the Supervisory Board for performing their duties in the 2022 financial year amounted to € 180 thousand (previous year: € 180 thousand). The compensation of Supervisory Board members in the 2022 financial year amounting to € 180 thousand (previous year: € 180 thousand) is completely attributable to short-term benefits. As of December 31, 2022, a total balance of € 200 thousand (previous year: € 334 thousand) of the remuneration of members of the Supervisory Board is outstanding for payment.

No benefits were granted to former Management Board or Supervisory Board members or their remaining dependents after their resignation from the respective board. There are no pension commitments with respect to this group of individuals.

The Compensation Report contains further details about Management Board and Supervisory Board remuneration. The Compensation Report also describes the main aspects of the compensation system. The Compensation Report for KHD for the 2022 financial year is publicly available on the Group's website (www.khd.com/ir/news-reports/#compensation-reports).

20. Revenue and Recording Revenues

The revenue in the 2022 financial year amounts to € 210,373 thousand (previous year: € 226,259 thousand) which can be divided into the Capex segment (project business) € 163,577 thousand (previous year: € 194,144 thousand) and the Plant Services segment € 46,796 thousand (previous year: € 32,115 thousand). The revenue in the Capex segment includes license revenue in the amount of € 1,323 thousand (previous year: € 1,021 thousand). For further classification of the revenue, reference is made to the segment report in section 4.

- Capex (project business):
  Due to the contract conditions, the revenue realized in the Capex segment is primarily related to revenue that is recognized over time based on the stage of completion using the cost-to-cost method. For this reason, revenue is realized depending on the progress in services rendered by KHD, which is determined methodically based on the proportion of he internal and external costs incurred to the overall costs. The payment conditions in project business are linked to contractually agreed upon milestones. When the agreed upon milestones are reached, KHD issues partial billings that are due for payment within 14 to 90 days, depending on the individual contract.

- Plant Services:
  The revenue in the Plant Services segment is attributable to both the spare parts business and services. Revenue in the spare parts area is realized either over time or based on a specific point in time. Business with spare parts individualized per customer generally meets the requirements for revenue recognition over time. For spare parts business with standardized products, revenue is recognized at a specific point in time when control is transferred to the customer. Services in the Plant Services segment are also realized at a specific point in time to the extent that the service has been provided. The payment conditions for spare parts supply and services are agreed upon individually with customers and vary from advance payment agreements to terms of payment of 90 days.

In both project business and the spare parts business, KHD grants mechanical guarantees based on performance as well as wear-related guarantees. With respect to duration and scope, the guarantees granted do not go beyond the legal and/or general industry standards and generally do not include any performance obligations that must be reported separately as defined by IFRS 15.

To determine and classify revenue, KHD uses a practical tool. In this way, KHD foregoes the capitalization of the costs of contract initiation if the respective project period is not greater than one year. These contract initiation costs are recorded directly as expenses at the point of time they are incurred.

21. Cost of Sales

The cost of sales amounted to € 182,795 thousand in the 2022 financial year (previous year: € 206,960 thousand).

22. Other Operating Income

in € thousand	2022	2021
Exchange gains	1,751	2,092
Other income	821	1,518
	2,572	**3,610**

Other operating income includes exchange gains and exchange rate forward contracts in the amount of € 1,751 thousand (previous year: € 2,092 thousand). The exchange gains are mainly the result of exchange rate fluctuations for the US dollar and the Indian rupee related to the euro. Exchange gains include both realized and unrealized exchange rate effects. Regarding exchange gains it should be considered that from an economic perspective, due to the foreign currency hedging performed, the expenses from foreign exchange forward contracts that are reported under other expenses and a portion of exchange rate losses should be offset against the income from exchange rate fluctuations.

23. Sales Expenses

Sales expenses increased in comparison with the previous year by € 992 thousand, from € 9,576 thousand to € 10,568 thousand. Sales expenses include costs for tendering of € 5,630 thousand (previous year: € 5,405 thousand). Furthermore, sales expenses include costs for trade show appearances and customer events as well as sales-related expenses.

24. General and Administrative Expenses

Administrative expenses increased by € 1,746 thousand from € 13,198 thousand in the previous year to € 14,943 thousand in the current financial year. Aside from the costs of general administration, general and administrative expenses include in particular costs for Management Board compensation, legal and consulting costs, costs of preparing and auditing financial statements, Supervisory Board remuneration and investor relations costs.

25. Other Expenses

in € thousand	2022	2021
Research and development	2,927	2,806
Exchange rate losses and expenses from derivatives	2,449	2,140
Impairment loss goodwill	1,622	-
Miscellaneous expenses	124	364
	7,122	**5,310**

Other expenses increased in comparison with the previous year by € 1,812 thousand from € 5,310 thousand to € 7,122 thousand. Included here are expenses for foreign exchange forward contracts and exchange rate losses, which increased by € 309 thousand from € 2,140 thousand in the previous year to € 2,449 thousand. The foreign exchange forward contracts were used exclusively to hedge foreign currency receivables. Expenses arising from foreign exchange forward contracts offset revenue from currency effects. Since the derivative financial instruments used by the KHD Group do not meet the strict requirements of hedge accounting, the economic hedge relationship is not reflected by using hedge accounting in the consolidated financial statements.

Expenses for research and development increased by € 121 thousand from € 2,806 thousand in the previous year to € 2,927 thousand. A clear focus on promising development projects continued in the 2022 financial year as well.

Goodwill was amortized in the amount of € 1,622 thousand in the 2022 financial year (previous year: € 0 thousand).

Other miscellaneous expenses decreased by € 240 thousand from € 364 thousand to € 124 thousand. Miscellaneous expenses include expenses for non-recoverable taxes, fees and insurance premiums.

26. Net Finance Income

Net finance income is composed as follows:

in € thousand	**2022**	**2021**
Interest income	6,341	6,151
Total interest income	**6,341**	**6,151**
Dividend income	-	56
Gains on securities	-	410
Finance income	**6,341**	**6,617**
Interest related to pension benefit obligations, provisions and other non-current liabilities	(147)	(114)
Losses on securities	(470)	-
Interest expense of leasing liabilities	(256)	(184)
Interest expense	(589)	(459)
Other finance expenses	(154)	-
Finance expenses	**(1,616)**	**(757)**
Net finance income	**4,725**	**5,860**
thereof from discontinued operations	-	-
Financial result from continued operations	**4,725**	**5,860**

Interest income includes interest income from bank deposits and cash equivalents as well as interest income from deferral agreements totaling € 1,634 thousand (previous year: € 1,282 thousand). Interest income from loans to an affiliated company amounted to € 4,707 thousand (previous year: € 4,869 thousand). Total interest income increased by € 190 thousand from € 6,151 thousand to € 6,341 thousand. Interest income is attributed to financial assets that are measured at amortized cost. Due to price development, the fair value measurement of listed shares held as financial assets gains on securities resulted in a loss of € 470 thousand (previous year: profit of € 410 thousand) in the financial year.

Finance expenses include interest related to pension benefit obligations in the amount of € 147 thousand (previous year: € 114 thousand). In the financial year, no interest expenses were incurred due to interest on provisions and other non-current liabilities (previous year: € 0 thousand). Interest expenses in the amount of € 554 thousand (previous year: € 394 thousand) were recorded for a bank loan.

27. Income Taxes

The income tax expense of € 1,956 thousand incurred in the 2022 financial year (previous year: € 1,802 thousand) is composed as follows:

in € thousand	2022	2021
Current tax expense	(1,947)	(1,526)
Deferred tax expense / income	(9)	(276)
Tax expense for the year	**(1,956)**	**(1,802)**

The expected tax expense is reconciled to actual tax expense as follows:

in € thousand	2022	2021
Earnings before income tax	2,286	685
Expected tax result while applying an average tax rate of 32.45% (previous year: 32.45%)	(742)	(222)
Effects of tax-free income	881	2,645
Effects of non-tax-deductible expenses	(1,721)	(2,603)
Effects of unutilized deferred tax losses not recognized as deferred assets recognized tax losses and offset possibilities	(181)	(512)
Effects of originally unrecognized unutilized tax losses and offset possibilities, which are now reported as deferred tax assets and effects arising from changes to tax loss carryforwards	68	(832)
Effects of subsidiaries' divergent tax rates	199	312
Adjustments for previous years' taxes recognized in the current period	-	(290)
Other non-tax-effective additions and deductions	(460)	(300)
Tax expense for the year	**(1,956)**	**(1,802)**

Tax rates that differ from the average Group tax rate primarily relate to the subsidiaries in the USA and India as in the previous year.

The effective Group taxation rate is 85.56% (previous year: 263.07%).

The income tax expense is due to the varying profitability of the subsidiaries. While some subsidiaries achieved taxable profits, other subsidiaries recorded high tax losses. However, deferred tax assets are not recognized on temporary differences and tax loss carryforwards if the future utilization is not reasonably assured. As a result, the Group tax rate is unfavorable. Moreover, non-tax-deductible expenses (primarily from impairment of the shares in KHD OOO) affect the tax rate.

28. Earnings and Dividends per Share

Earnings per Share

As in the previous year, the number of ordinary shares issued amounts to 49,703,573.

	2022	2021
Group net gain for the year attributable to shareholders (in € thousand)	283	(1,139)
Weighted average number of shares outstanding	49,703,573	49,703,573
Basic (undiluted) and diluted earnings per share (in €)	0.01	(0.02)

Dividend per Share

According to the articles of association, KHD's Annual General Meeting of shareholders passed a resolution concerning the appropriation of net retained profit. With regard to the suggestion for appropriation of the net retained profit, reference is made to the annual financial statements of KHD AG.

29. Total Fees Charged by the Auditors for the Financial Year

As in the previous year, the auditor for the 2022 financial year is Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft.

The total fees charged by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft for the 2022 financial year are comprised as follows:

in € thousand	**2022**	**2021**
Financial statement audit services	454	382
	454	**382**

The total remuneration for the auditor for the 2022 financial year is € 390 thousand (previous year: € 292 thousand). The financial statement audit services mainly include the fees for the audits of the annual financial statements and consolidated financial statements of KHD AG as well as the audits of the annual financial statements for two other German subsidiaries. Expenses in the 2022 financial year include auditing services in the context of the audit of the annual financial statements for the 2021 financial year in the amount of € 64 thousand (previous year: € 89 thousand related to the audit of the annual financial statements for the 2020 financial year).

30. Commitments and Contingent Liabilities and Assets

Commitments for Operating Leases

Future minimum payments for non-cancellable operating leases and rent contracts primarily result from lease contracts for buildings:

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Within one year	2,632	2,725
Between two and five years	6,455	5,450
After five years	3,976	4,369
Total lease and rental commitments	**13,063**	**12,544**

Commitments for the purchase of property, plant and equipment in the amount of € 674 thousand were incurred as of December 31, 2022. Other contingent liabilities from current contracts amount to € 264 thousand (previous year: € 294 thousand).

Expenses for leased and rented office space and office equipment recognized in the Group income statement amount to € 2,621 thousand in the 2022 financial year (previous year: also € 2,621 thousand).

Contingent Liabilities

Contingent liabilities of KHD are obligations that do not meet the criteria for recognition as a provision, but the possibility of an outflow of resources is more than remote.

As of the reporting date, contingent liabilities result from a possible calling of guarantees and from other claims against KHD that exceed the amounts covered by provisions. Considering the current stage of negotiations, a more precise quantification is neither practical nor possible. For further details regarding the contingent liabilities, reference is made to the items in section 31, Liquidity Risk.

Contingent Assets

Contingent assets are claims by KHD for which the realization of income is not virtually certain, but the inflow of economic benefits is probable.

Contingent assets arise from claims against customers due to subsequent scope changes of projects and cost overruns caused by customers as well as from claims for backcharges against subcontractors.

The development of both contingent assets and contingent liabilities are monitored continuously. As soon as the corresponding claims and obligations are substantiated, they are recorded in profit and loss for the period. For reasons of practicality, no amount is listed here.

31. Additional Notes on Financial Instruments

Financial Risk Factors

In its position as a globally operating Group, KHD is exposed to various financial risks (currency, interest rate, default, credit, and liquidity risks) which may have a significant impact on the Group's net assets, financial position, and result of operations.

Capital Management

The primary objective of capital management at the KHD Group is to ensure that the Group's ability to service debts is maintained in the future and that its financial standing is preserved.

Financial security is largely measured using the equity ratio. The components of this key performance indicator are equity and total assets as reported in the group financial statements. The equity ratio is used as a key performance indicator to communicate with investors, analysts, banks, and rating agencies.

KHD can generally manage its capital structure through distributing dividends, reducing capital and/or issuing new shares, and through issuing financial instruments qualified as equity in accordance with IFRS. The aim is to achieve a capital structure that is appropriate to the business risk.

KHD is subject to the minimum capital requirements applicable to German stock corporations. Compliance with these requirements is monitored continuously. KHD was in compliance with these requirements in 2022.

in € thousand	Dec. 31, 2022	Dec. 31, 2021
Equity	92,396	90,706
Total assets	254,014	303,699
Equity ratio (in %)	36.4	29.9

The equity ratio increased by 6.5 percentage points compared with the previous year from 29.9% to 36.4%.

Market Risk

Currency Risk

In the case of foreign exchange risks, a differentiation should be made between currency risks related to the execution of projects in different currency areas and risks arising from translation of individual Group companies' financial statements denominated in a foreign currency at various reporting dates. As part of the execution of projects, exchange rate risks are determined on the basis of planned cash flows and minimized by using derivative financial instruments. Foreign exchange forward contracts are the only derivative financial instruments used.

The Group recognized assets and liabilities denominated in foreign currencies translated to a carrying amount of € 5,596 thousand (previous year: € 4,727 thousand). In this context, foreign currency denotes that a company of the KHD Group holds assets and liabilities in a currency that is not the respective functional currency of the subsidiary. Without taking into account any exchange rate forward contracts that may be in place, a 10% variance in exchange rates would change Group earnings / comprehensive income by € 378 thousand (previous year: € 319 thousand).

The individual financial statements prepared by the foreign subsidiaries are translated into euros in line with the functional currency principle. The Group's functional currency is the euro. Assets and liabilities are translated at the balance sheet closing rate. Currency translation differences resulting from translating the assets and liabilities of foreign subsidiaries denominated in local currencies into the Group's functional currency may have an impact on Group equity. A 10% change in foreign currency exchange rates would change Group equity by € 4,549 thousand (previous year: € 4,624 thousand).

Price Risk

The Group reports securities in its balance sheet and is exposed to standard market price risk with respect to securities. In view of the fact that price and performance are set out in individual contracts, the Group is not exposed to commodity price risk.

Credit and Default Risk

In general, the risk of credit concentration with regard to trade receivables is geographically dispersed all over the world, due to the Group's customer structure. Long-term business relationships are maintained with important customers. In the past, these customers have not been involved in bad debt losses based on credit rating. In addition, there are no current indications of increase credit rating risks. Credit risk is also mitigated through the payment terms the Group agrees with its customers, notably progress billings and advance payments, to avoid excessively high levels of outstanding receivables. Internal guidelines ensure that products are only sold to customers with appropriate credit ratings. The risk of counterparty default is managed through regular monitoring and reviews of the trade receivables and the structure of receivables. At the KHD Group, receivables from export contracts are to a large extent secured against default risks by letters of credit, as well as through letters of comfort, guarantees, and cover notes, which also include export credit agencies (e.g. Hermes).

No securities for receivables were reported in the financial year (previous year: € 0 thousand).

In the 2017 financial year, the KHD Group concluded two loan agreements, each with a term of three years, for a total of € 100.0 million with AVIC International Kairong Limited the borrower. In accordance with the contractual agreement from 2020, the term of the two loans was extended by three years. The first loan amounts to € 35.0 million as of December 31, 2022. The second loan is recognized in the amount of € 50.0 million as in the previous financial year. Possible default risks are effectively minimized by continuous monitoring of the credit worthiness of the borrower and by a Group guarantee issued to the KHD Group. The KHD Group is also entitled to call the first loan of € 35.0 million for repayment at any time prior to its maturity by giving 30 days' notice.

The default risk arising from financial assets relates to the risk of counterparty default and is therefore limited to the positive carrying amounts of the respective financial assets. Credit and default risks are addressed through valuation allowances made for outstanding receivables that have become doubtful.

Liquidity Risk

The KHD Group has been pursuing a conservative, forward-looking policy of liquidity hedging for many years and has a high level of cash and cash equivalents.

In order to avoid financial risks from the plant engineering business, construction contracts are executed through progress billings and customer payments made in advance, which largely financed projects in progress as of the balance sheet date. By means of financial and liquidity planning, cash and cash equivalents are available in such a way that the KHD Group is at all times able to fully meet its payment obligations. The majority of current trade and other payables reported as of the balance sheet date in the amount of € 46,832 thousand (previous year: € 100,621 thousand) are payable within 60 days.

With regard to the maturity of pension benefit obligations, reference is made to section 14, and for foreign exchange forward contracts, reference is made to the paragraphs on derivatives in this section. Other liabilities and provisions that are recorded within non-current liabilities have residual terms of up to five years. The terms of these liabilities are substantially determined by the warranty periods.

Within the scope of its normal business transactions, the Group has commitments due to advance guarantees, performance bonds, and guarantees for warranty obligations. KHD does not anticipate any material liabilities due to these commitments. The arranged bank guarantee credit facilities allow individual KHD Group companies to provide bank guarantees for its customers worldwide. As part of these guarantee facilities, the Group has provided bank guarantees within the scope of its normal business activities in the amount of € 63.1 million (previous year: € 55.8 million).

Interest Rate Risk

The Group holds assets that are affected by changes in market interest rates over the course of time. In the event that market interest rates had risen or fallen by 50 basis points, Group earnings as of December 31, 2022, would have been € 148 thousand (previous year: € 220 thousand) higher or lower, respectively. As of December 31, 2022, KHD reports interest-bearing debt in the form of a bank loan. The loan has a variable interest rate, so it is subject to interest risk due to changes in market interest rates. If market interest rates had risen by 50 basis points, Group earnings as of December 31, 2022 would have been € 125 thousand lower (previous year: € 125 thousand), and if market interest rates had fallen by 50 basis points, Group earnings as of December 31, 2022 would have been € 125 thousand higher (previous year: unchanged Group earnings). A fixed interest rate has been agreed for each of the three-year loans extended to AVIC Kairong, so there is no risk from interest rate changes with regard to these loans.

Net Earnings per Category

The net earnings per category of financial assets and liabilities are as follows:

2022 in € thousand	Financial assets			Financial liabilities		Total
	Available for sale	Held for trading	Loans and receivables	Held for trading	Amortized cost	
Expenses due to valuation allow ances on financial assets	-	-	(629)	-	-	(629)
Interest Income / expense	-	-	6,341	-	(606)	5,735
Other net earnings	-	(578)	(178)	-	-	(756)
Net earnings	**-**	**(578)**	**5,534**	**-**	**(606)**	**4,350**

2021 in € thousand	Financial assets			Financial liabilities		Total
	Available for sale	Held for trading	Loans and receivables	Held for trading	Amortized cost	
Expenses due to valuation allow ances on financial assets	-	-	(815)	-	-	(815)
Interest Income / expense	-	-	6,151	-	(459)	5,692
Other net earnings	-	76	535	-	-	611
Net earnings	**-**	**76**	**5,871**	**-**	**(459)**	**5,488**

Net earnings include in particular interest income and expense, income and expenses from translating monetary items denominated in foreign currency, market value changes of securities, and expenses for valuation allowances on financial assets.

Dec. 31, 2022	**Financial assets Measurment according to IFRS 9**				**Financial liabilities Measurment according to IFRS 9**				
in € thousand	Fair value through OCI	Fair value through P&L	Amortized cost	Not in IFRS 9 application area	Fair value through P&L	Amortized cost	Not in IFRS 9 application area	Carrying amount Dec. 31, 2022	Fair value Dec. 31, 2022
Non-current financial assets	-	-	4	-	-	-	-	4	-
Trade receivables	-	-	37,058	-	-	-	-	37,058	-
Related party receivables	-	-	3,015	-	-	-	-	3,015	-
Contract assets	-	-	17,454	-	-	-	-	17,454	-
Other financial assets	-	698	97,186	-	-	-	-	97,884	83,840
Derivatives	-	-	-	-	-	-	-	-	-
Other receivables	-	-	2,598	2,611	-	-	-	5,209	-
Cash and cash equivalents	-	-	40,670	-	-	-	-	40,670	-
Total financial assets	**-**	**698**	**197,985**	**2,611**	**-**	**-**	**-**	**201,294**	**83,840**
Financial liabilities		-	-	-	-	24	-	24	-
Loans	-	-	-	-	-	25,000	-	25,000	25,000
Contract liabilities	-	-	-	-	-	34,956	-	34,956	-
Other liabilities	-	-	-	-	-	7,560	4,140	11,700	-
Derivatives	-	-	-	-	-	170	-	170	170
Trade payables	-	-	-	-	-	46,832	-	46,832	-
Total financial liabilities	**-**	**-**	**-**	**-**	**-**	**114,542**	**4,140**	**118,682**	**25,170**

Dec. 31, 2021	**Financial assets Measurment according to IFRS 9**				**Financial liabilities Measurment according to IFRS 9**				
in € thousand	Fair value through OCI	Fair value through P&L	Amortized cost	Not in IFRS 9 application area	Fair value through P&L	Amortized cost	Not in IFRS 9 application area	Carrying amount Dec. 31, 2021	Fair value Dec. 31, 2021
Non-current financial assets	-	-	95,297	-	-	-	-	95,297	94,928
Trade receivables	-	-	38,474	-	-	-	-	38,474	-
Related party receivables	-	-	3,527	-	-	-	-	3,527	-
Contract assets	-	-	42,555	-	-	-	-	42,555	-
Other financial assets	-	1,168	327	-	-	-	-	1,495	1,168
Derivatives	-	-	-	-	-	-	-	-	-
Other receivables	-	-	2,234	4,381	-	-	-	6,615	-
Cash and cash equivalents	-	-	65,282	-	-	-	-	65,282	-
Total financial assets	**-**	**1,168**	**247,696**	**4,381**	**-**	**-**	**-**	**253,245**	**96,096**
Financial liabilities		-	-	-	-	20	-	20	-
Loan	-	-	-	-	-	25,000	-	25,000	25,000
Contract liabilities	-	-	-	-	-	35,608	-	35,608	-
Other liabilities	-	-	-	-	-	5,918	4,101	10,019	-
Derivatives	-	-	-	-	-	62	-	62	62
Trade payables	-	-	-	-	-	100,621	-	100,621	-
Total financial liabilities	**-**	**-**	**-**	**-**	**-**	**167,229**	**4,101**	**171,330**	**25,062**

The carrying amounts reported as of the reporting date generally correspond to the fair values as long as no other explicit information is given.

The fair values of financial assets and financial liabilities held for trading were determined according to the following procedure:

- The fair values of the listed securities that are held for trading are determined by reference to quoted market prices.
- The fair value of derivatives is calculated on the basis of discounted cash flow analyses, using corresponding yield curves for the term to maturity of the instruments concerned.

Financial assets and financial liabilities	Fair value		Level	Measurement method	significant unobservable input(s)
	Dec. 31, 2022	Dec. 31, 2021			
Derivatives	Financial assets: € 0 thousand Financial liabilities: € 170 thousand	Financial assets: € 0 thousand Financial liabilities: € 62 thousand	Level 2	Discounted cash flow	N/A
Securities	Financial assets: € 698 thousand	Financial assets: € 1.168 thousand	Level 1	Listed price on active market	N/A

Securities Held for Trading

Securities held for trading amounted to € 698 thousand (previous year: € 1,168 thousand). A 10% variance in the market price would change Group earnings by € 66 thousand (previous year: € 111 thousand).

Receivables

Overdue Group receivables, including receivables for which valuation allowances were made, amounted to € 6,805 thousand (previous year: € 5,004 thousand). After deducting securities (letters of credit and Hermes coverage), the Group values the resulting risk at € 6,805 thousand (previous year: € 5,004 thousand). The receivables for which valuation allowances have been made are generally more than 90 days overdue.

Derivatives

Foreign exchange forward contracts are the only derivative financial instruments used. These are measured at fair value according to IAS 39.

The net balance of the derivatives carries a fair value of € -170 thousand (previous year: € -62 thousand). A 10% change in the exchange rate hedged by the derivative would affect earnings by € 102 thousand (previous year: € 102 thousand). The total amount of underlying transactions allocated to foreign exchange forward contracts amounts to € 1.5 million (previous year: € 1.5 million).

Foreign exchange forward contracts amounting to € 1.5 million (previous year: € 0 million) are due within one year.

Offsetting
In the KHD Group there are offsetting agreements with the corresponding banks for derivative financial instruments. In accordance with these framework agreements, the amounts owed by each respective party with respect to transactions in the same currency that are still outstanding on a specific date of maturity are offset to reach a net amount. The derivative financial instruments concluded as of the reporting date and as of the previous year's reporting date have a negative value of € 170 thousand (previous year: negative value of € 62 thousand). They are reported under other current liabilities.

32. Related Party Disclosures

As defined by IAS 24, in addition to the subsidiaries of KHD, the related companies also include those companies that have a controlling or joint management interest in KHD or exercise considerable influence as well as those other related companies of AVIC Group that are affiliated with these. As business transactions between KHD and its consolidated subsidiaries were eliminated in the consolidation process, the following presents only the transactions with respect to direct and indirect parent companies of KHD and the other related companies or persons that were not eliminated. These are primarily business transactions with companies of the AVIC Group and the members of the Management Board and Supervisory Board. Transactions with indirect parent companies relate to AVIC INTL and AVIC Beijing. Transactions with other affiliated companies took place with AVIC Kairong.

Relations with Affiliated Companies
There has been a cooperation agreement with AVIC Beijing since 2010, reinforced since February 2011 by the capital interest in KHD amounting to 20% that is held by Max Glory Industries Limited (Max Glory), an AVIC Beijing group company. As a consequence of a public takeover offer, AVIC Beijing further increased its indirect share in KHD in the 2014 financial year. As of December 31, 2022, AVIC Beijing indirectly holds the majority of KHD shares with 89.02% (unchanged from the previous year). The strategic partnership between AVIC and KHD resulted in numerous joint projects in various sales regions all over the world. The emphasis of the cooperation in recent years was the increasing development of the Chinese market for KHD technology.

KHD concluded a consulting contract in the 2019 financial year with 4-stream consulting GmbH, Roetgen, a company related to Management Board member Dr. Matthias Jochem as an affiliated company. In accordance with the contractual agreement, KHD reported € 323 thousand in the 2022 financial year (previous year: € 313 thousand) as expenses for consulting services. The liabilities due to 4-stream consulting GmbH amounted to € 54 thousand as of December 31, 2022 (previous year: € 24 thousand).

Other Transactions with Affiliated Companies of the AVIC Group

KHD granted two loans to AVIC International Kairong Limited (AVIC Kairong), Hong Kong, each for € 50,000 thousand, in the 2017 financial year. In accordance with the contractual agreement from 2020, the term of the two loans was extended by three years. The first loan amounts to € 35,000 thousand as of December 31, 2022. The second loan is recognized in the amount of € 50,000 thousand as in the previous financial year. Interest on the two loans as of the beginning of the extended terms (July 22, 2020 and November 13, 2020) amounts to 5% per annum.

KHD has the right to demand full or partial repayment of the first loan (€ 35,000 thousand) at any time before the due date with a notification period of 30 days. Both loans are secured by a corporate guarantee from AVIC.

The following business transactions with affiliated companies of the AVIC Group took place during the reporting year:

Income

in € thousand	2022	2021
Indirect parent company	5,761	11,446
Other related companies	4,708	4,869
	10,469	16,315

Income with indirect parent companies amounted to € 5,761 thousand in the financial year (previous year: € 11,446 thousand). Income in the current year largely relates to income generated from project business. Interest income from the loans extended to AVIC Kairong in the amount of € 4,708 thousand (previous year: € 4,869 thousand) is reported under income with other affiliated companies.

Current Assets

In the financial year under review, there were current assets due from companies of the AVIC Group in the amount of € 3,015 thousand (previous year: € 3,526 thousand). These are exclusively the result of project receivables. In the previous year, these resulted exclusively from project receivables and interest receivables.

in € thousand	2022	2021
Indirect parent company	3,015	3,526
	3,015	3,526

In addition, loans to other affiliated companies amounting to a total of € 85,000 thousand (previous year: € 95,000 thousand) were recognized under non-current assets as of the balance sheet date.

Liabilities

As in the previous year, no liabilities due from other affiliated companies were reported under the liabilities from project contracts. Liabilities in the amount of € 1,975 thousand (previous year: € 2,789 thousand) are reported as due from indirect parent companies.

in € thousand	2022	2021
Indirect parent company	1,975	2,789
	1,975	2,789

Relationships with Associated Persons

Associated persons include the current and former members of the Management Board and Supervisory Board of KHD and their family members.

Compensation for key management personnel in accordance with IAS 24 includes the compensation of the active members of the Management Board and Supervisory Board. With regard to the current compensation of members of the Management Board and Supervisory Board and with respect to termination benefits for former Management Board members, reference is made to note 19.

33. Corporate Governance

The Management Board and Supervisory Board of KHD issued the statement required pursuant to Section 161 of the German Stock Corporation Act (AktG) on February 6, 2023, and also made it permanently publicly available to shareholders on the Company's website at (www.khd.com/declaration-of-compliance.html).

Furthermore, the Management Board and Supervisory Board of the publicly listed Group company KHD VV issued the statement required pursuant to Section 161 of the German Stock Corporation Act (AktG) on January 27, 2023, and also made it permanently publicly available to shareholders on the KHD VV website (khdvv.de/corporate-governance).

34. Events after the Reporting Period

The bank guarantee credit facility concluded with the Deutsche Bank AG in the 2022 financial year was increased by € 15.0 million from € 55.0 to € 70.0 million, effective February 2023. There have been no other significant developments or events of particular importance since the reporting date of December 31, 2022.

35. Release for Publication by the Management Board

These group financial statements were released for publication by the Management Board resolution of March 6, 2023. The Supervisory Board approval is due to be issued at the Supervisory Board meeting on March 8, 2023.

Cologne, March 6, 2023

The Management Board

Jianlong Shen (Chair)	Jürgen Luckas	Dr. Matthias Jochem
Tao Xing	Matthias Mersmann	

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the group financial statements give a true and fair view of the net assets, financial position, and profit or loss of operations 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 principal opportunities and risks associated with the expected development of the Group.

Cologne, March 6, 2023

The Management Board

Jianlong Shen (Chair)	Jürgen Luckas	Dr. Matthias Jochem
Tao Xing	Matthias Mersmann	

Independent Auditor's Report

Reproduction of the auditor's report

We issued the following auditor's report on the consolidated financial statements, the group management report, which was combined with the Company's management report, and the ESEF documents:

"Independent auditor's report

To KHD Humboldt Wedag International AG

Report on the audit of the consolidated financial statements and of the group management report

Opinions

We have audited the consolidated financial statements of KHD Humboldt Wedag International AG, Cologne, and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the fiscal year from 1 January 2022 to 31 December 2022, the consolidated statement of financial position as at 31 December 2022, consolidated statement of cash flows and consolidated statement of changes in equity for the fiscal year from 1 January 2022 to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of KHD Humboldt Wedag International AG, which was combined with the management report of the Company, for the fiscal year from 1 January 2022 to 31 December 2022. We do not express an opinion on the group corporate governance statement pursuant to Sec. 315d HGB, which is published on the website stated in the group management report, or on the remuneration report pursuant to Sec. 162 AktG ["Aktiengesetz": German Stock Corporation Act], which is published on the website stated in the group management report, both of which are part of the group management report.

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB 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 fiscal year from 1 January 2022 to 31 December 2022, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. We do not express an opinion on the content of the corporate governance statement referred to above or the content of the remuneration report referred to above.

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

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 HGB and the EU Audit Regulation (No 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Key audit matters in the audit of the consolidated financial statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the fiscal year from 1 January 2022 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.

Below, we describe what we consider to be the key audit matters:

Long-term construction contracts: Revenue recognition and measurement of provisions for obligations under onerous contracts

Reasons why the matter was determined to be a key audit matter

Revenue from long-term construction contracts is recognized over time depending on the stage of completion, which is determined as the ratio of contract costs actually incurred to the planned total costs ("cost-to-cost method"). In particular, the determination of the expected total costs requires estimates and assumptions to be made by the executive directors. If the planned total costs exceed the achievable total revenue, provisions for potential losses from obligations under onerous contracts are recognized.

Due to possible estimation uncertainties and the related risks of material misstatement arising from the determination of the stage of completion of long-term construction contracts and the measurement of contract revenue and contract costs, the recognition of revenue and the measurement of provisions for obligations under onerous contracts in connection with long-term construction contracts was a key audit matter.

Auditor's response

During our audit, we examined the processes established by the Company for the Group to determine the stage of completion of long-term construction contracts. We obtained an understanding of the amount and the substantive allocation of the actual costs, which mainly comprise material and wage costs, by taking into consideration materiality levels and inspecting a sample of vouchers gathered using statistical selection criteria and comparing these to job order costing. We assessed the amount and the recognition of the planned total costs of individual orders on a sample basis by inspecting contracts and project costings and by discussing with project managers the progress of projects and the estimated costs until completion. In addition, we analyzed the measurement of and the need to make allocations or adjustments to a provision for obligations under onerous contracts for such construction projects in which the stage of completion, expected project costs or planned margins differ significantly from the original project costings. In this context, we compared the original project costings with the current, ongoing project costings and discussed any ensuing deviations with the project managers. Furthermore, we checked the clerical accuracy of project costings on a sample basis and compared the amount of revenue to be recognized and the provisions for obligations under onerous contracts with the Company's financial accounting. By comparing the project costings with documents from the prior year, we also analyzed whether the methods used were applied consistently over time.

Our procedures did not lead to any reservations regarding the recognition of revenue or the measurement of provisions for obligations under onerous contracts for long-term construction contracts.

Reference to related disclosures

The Company's disclosures on revenue recognition and the measurement of provisions for obligations under onerous contracts are included in sections 1 "Summary of Major Accounting and Measurement Principles" under "Contract Assets and Contract Liabilities from Customer Contracts with Revenue Recognition over Time" and 20 "Revenue and Revenue Recognition" of the notes to the consolidated financial statements.

Other information

The Supervisory Board is responsible for the Report of the Supervisory Board. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG on the German Corporate Governance Code, which is part of the group corporate governance statement. In all other respects, the executive directors are responsible for the other information. The other information comprises the group corporate governance statement referred to above. In addition, the other information comprises the group non-financial report, of which we obtained a copy prior to issuing this auditor's report. The other information also comprises additional parts to be included in the annual report, of which we obtained a copy prior to issuing this auditor's report, in particular:

- the responsibility statement pursuant to Sec. 264 (2) Sentence 3 HGB in conjunction with Sec. 297 (2) Sentence 4 and Sec. 315 (1) Sentence 5 HGB,

but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon.

In addition, the other information comprises all remaining parts of the annual report, which we expect to be provided with after the auditor's report has been issued, in particular:

- "Key Figures at a Glance," "Facts & Figures" as well as the Foreword by the Management Board and

- the Report of the Supervisory Board.

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

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

- is materially inconsistent with the consolidated financial statements, with the group management report 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 the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 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, the executive directors are 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, the executive directors are 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, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

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

Auditor’s responsibilities for the audit of the consolidated financial statements and of the group management report

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

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

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than 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 control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors’ use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

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

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

Other legal and regulatory requirements

Report on the assurance on the electronic rendering of the consolidated financial statements and the group management report prepared for publication purposes in accordance with Sec. 317 (3a) HGB

Opinion

We have performed assurance work in accordance with Sec. 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the group management report (hereinafter the “ESEF documents”) contained in the attached file (2022_KHD_AG_Konzernabschluss-Lagebericht.zip) and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format (“ESEF format”). In accordance with German legal requirements, this assurance work extends only to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained within these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the file identified above and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinions on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from 1 January 2022 to 31 December 2022 contained in the “Report on the audit of the consolidated financial statements and of the group management report” above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

Basis for the opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the attached file identified above in accordance with Sec. 317 (3a) HGB and the IDW Assurance Standard: Assurance on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Sec. 317 (3a) HGB (IDW AsS 410 (06.2022)). Our responsibility in accordance therewith is further described in the “Group auditor’s responsibilities for the assurance work on the ESEF documents” section. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the executive directors and the Supervisory Board for the ESEF documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Sec. 328 (1) HGB for the electronic reporting format.

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

Group auditor’s responsibilities for the assurance work on the ESEF documents

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 Sec. 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Sec. 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 containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, on the technical specification for this file.

- Evaluate whether the ESEF documents enable an XHTML rendering with content equivalent to the audited consolidated financial statements and to the audited group management report.

- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Arts. 4 and 6 of Commission Delegated Regulation (EU) 2019/815, in the version in force at the date of the financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on 27 May 2022. We were engaged by the Supervisory Board on 6 September 2022. We have been the group auditor of KHD Humboldt Wedag International AG without interruption since fiscal year 2018.

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

In addition to the financial statement audit, we have provided to group entities the following services that are not disclosed in the consolidated financial statements or in the group management report:

- Audit of the remuneration report

Other matter – Use of the auditor’s report

Our auditor’s report must always be read together with the audited consolidated financial statements and the audited group management report as well as the assured ESEF documents. The consolidated financial statements and the group management report converted to the ESEF format – including the versions to be published in the *Unternehmensregister* [German Company Register] – are merely electronic renderings of the audited consolidated financial statements and the audited group management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the assured ESEF documents made available in electronic form.

German Public Auditor responsible for the engagement

The German Public Auditor responsible for the engagement is Titus Zwirner.”

Cologne, 13 March 2023

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Zwirner	Ormanns
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

List of Abbreviations

AVIC Beijing	AVIC International Beijing Company Limited, Beijing, China
AVIC Kairong	AVIC International Kairong Limited, Hong Kong, Hong Kong
AVIC Engineering	AVIC International Engineering Holding Pte. Ltd., Singapore, Singapore
AVIC INTL	AVIC International Holdings Limited, Shenzhen, China
HWG	Humboldt Wedag GmbH, Cologne
HW Inc.	Humboldt Wedag, Inc., Norcross (Georgia), USA
HW India	Humboldt Wedag India Private Ltd., New Delhi, India
KHD	KHD Humboldt Wedag International AG, Cologne, Germany
KHD AG	KHD Humboldt Wedag International AG, Cologne
KHD Beijing	KHD Humboldt Wedag Machinery Equipment (Beijing) Co. Ltd., Beijing, China
KHD GmbH	KHD Humboldt Wedag GmbH, Cologne
KHD OOO	KHD Humboldt Engineering OOO, Moscow, Russia
KHD VV	KHD Humboldt Wedag Vermögensverwaltungs-AG, Cologne, Germany
Max Glory	Max Glory Industries Limited, Hong Kong, Hong Kong

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