
023
Annual Report
JUNGHEINRICH

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About this report

We have optimised the PDF version of our annual report for PCs and tablets. The landscape format with individual page view is better suited for viewing on a monitor. The links in the table of contents enable the reader to navigate all chapters quickly and easily. Useful links and standardised function buttons on each page make it easier for the reader to reference content and the reporting in a more user-friendly and transparent manner.

Company profile

As a globally leading provider in intralogistics, Jungheinrich has been advancing the development of innovative and sustainable products and solutions for material flows for more than 70 years. As a pioneer in the sector, the family-owned listed business is committed to creating the warehouse of the future.

With its portfolio of material handling equipment, automation and matching services, Jungheinrich offers its customers tailor-made solutions from a single source to support them in mastering the growing challenges in intralogistics and achieving their sustainability goals. The company has energy expertise that is unique in the industry with over one million electric trucks in use and especially energy-efficient lithium-ion technology solutions. The company creates fully automated intralogistics workflows with a comprehensive range of automated warehouse systems, mobile robots and software. Uniting economic, environmental and social responsibility is the focus of all its business activities, and the corporate Strategy 2025+ pursues the aim of creating sustainable value for all stakeholders.

In 2023, Jungheinrich and its workforce of more than 21,000 employees generated revenue of €5.5 billion. The global network covers twelve production plants and 42 service and sales companies. The share is listed on the MDAX.

Key figures at a glance

Jungheinrich Group		2023	2022	Change in %
Incoming orders	units	121,800	128,800	–5.4
	€ million	5,238	4,791	9.3
Orders on hand 31/12	€ million	1,441	1,595	–9.7
Revenue	€ million	5,546	4,763	16.4
thereof Germany	€ million	1,205	1,106	9.0
thereof abroad	€ million	4,341	3,657	18.7
Foreign ratio	%	78	77	–
Earnings before interest and income taxes (EBIT)	€ million	430	386	11.4
EBIT return on sales (EBIT ROS)	%	7.8	8.1	–
ROCE[1]	%	15.9	16.3	–
Earnings before taxes (EBT)	€ million	399	347	15.0
EBT return on sales (EBT ROS)	%	7.2	7.3	–
Profit or loss	€ million	299	270	10.7
Free cash flow	€ million	15	–239	>100
Capital expenditure[2]	€ million	90	73	23.3
Research and development expenditure	€ million	152	128	18.8
Balance sheet total 31/12	€ million	6,910	6,164	12.1
Shareholders' equity 31/12	€ million	2,222	2,051	8.3
thereof subscribed capital	€ million	102	102	–
Employees 31/12	FTE[3]	21,117	19,807	6.6
thereof Germany	FTE[3]	8,688	8,251	5.3
thereof abroad	FTE[3]	12,429	11,556	7.6
Earnings per preferred share[4]	€	2.94	2.65	10.9
Dividend per share – ordinary share	€	0.73[5]	0.66	10.6
– preferred share	€	0.75[5]	0.68	10.3

[1] EBIT of the "Intralogistics" segment as a percentage of average capital employed of the "Intralogistics" segment.
[2] Property, plant and equipment and intangible assets without capitalised development expenditure and right-of-use assets.
[3] FTE = full-time equivalents.
[4] Based on share of earnings attributable to the shareholders of Jungheinrich AG.
[5] Proposal.

2023 quarterly overview

Incoming orders in € million

4th quarter	1,365
3rd quarter	1,189
2nd quarter	1,334
1st quarter	1,350

Revenue in € million

4th quarter	1,526
3rd quarter	1,362
2nd quarter	1,367
1st quarter	1,291

Earnings before interest and income taxes (EBIT) in € million

4th quarter	91
3rd quarter	103
2nd quarter	116
1st quarter	120

Earnings after tax in € million

4th quarter	68
3rd quarter	68
2nd quarter	75
1st quarter	88

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To our shareholders

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Board of Management

Dr Lars Brzoska
Chairman of the Board of Management

"In the past financial year, the foundations were laid for advancing the transformation of Jungheinrich."

Christian Erlach
Member of the Board of Management, Sales

"With our trucks and automation solutions, we have once again provided our customers with the right answers to their intralogistics challenges in 2023."

Dr Volker Hues
Member of the Board of Management, Finance

"Despite a further deterioration in the macroeconomic conditions, Jungheinrich reached all-time highs in material key figures in 2023."

Sabine Neuß
Member of the Board of Management, Technics

"The new reach truck plant in Chomutov started production in 2023 – a vital element of our strategy that will allow us to increase the efficiency of the Jungheinrich Group further."

Foreword from the Chairman

Dear shareholders,

2023 was a year of tradition and transformation for Jungheinrich.

Tradition because 2023 was an anniversary for the company. In 1953, 70 years ago now, Dr Friedrich Jungheinrich established the company. The values of the company's founder are just as important today: reliability, integrity and solidarity as well as long-term thinking and action. Traditional values that we follow out of conviction and that we intend to follow in the future.

Transformation because we have to adapt and evolve quicker than ever before in a world of fast-paced technological changes, rising competitive pressure, geopolitical upheavals and a challenging economic environment. This includes focussing particularly on growing outside of Europe, becoming a driver of technical innovation and working more efficiently and sustainably.

In the past financial year, the foundations were laid for advancing the transformation of Jungheinrich.

With the acquisition of the Storage Solutions Group in the United States , which was the largest acquisition in Jungheinrich's history, we expanded our global presence and strengthened our position in North America, one of the most important growth markets for warehouse equipment and automation.

We also underscored our commitment to achieving our Strategy 2025+ targets in terms of inorganic growth and expanding the share of revenue generated outside of Europe.

With the complete takeover of the Munich-based robotics specialist Magazino, we also expanded our automation expertise in the past year. Together with the team at Magazino, we are driving forward the development of joint automation and robotics solutions, which are unique in the field of production supply in particular.

Production started at our new reach truck plant in Chomutov, Czechia, in 2023. This new location, with its modern production capacities, is an important factor in increasing Jungheinrich's efficiency. The same applies to our digital transformation program DEEP, which reached further important milestones in the past year.

Another important step was taken in our Moosburg plant last year when Jungheinrich's last IC engine-powered truck left the production lines. That makes us the first company in our industry that has completely left fossil fuels behind. We are fully committed to the decarbonisation of the intralogistics industry. The end of manufacturing combustion engines is the start of a more sustainable future for Jungheinrich, but it is also a nod to our company history that began seven decades ago with the manufacture of electric trucks.

Despite a further deterioration in the macroeconomic conditions, Jungheinrich recorded all-time highs in material key figures in the 2023 financial year. Incoming orders amounted to €5,238 million, revenue came to €5,546 million and EBIT reached €430 million. We anticipate profitable growth again in the 2024 financial year, and we will continue working on the transformation of our Group.

On behalf of the Board of Management, I would like to thank our more than 21,000 employees around the world for their tireless dedication, which is the foundation of our success. And thank you, our shareholders, for your trust in Jungheinrich. I would like to thank the Supervisory Board, chaired by Rolf Najork, for its close and constructive partnership. Once again, my special thanks go to our shareholder families Lang and Wolf for their ongoing trust. Jungheinrich's 70-year history is also your story – a success story that we will keep going into the future.

Sincerely yours,

Dr Lars Brzoska
Chairman of the Board of Management

Report of the Supervisory Board

Rolf Najork
Chairman of the Supervisory Board

Under ongoing difficult economic and geopolitical circumstances, Jungheinrich once again performed well in the year under review. The overall tendencies toward recession, triggered by Russia's continued war against Ukraine, the escalation of the Middle East conflict and other geopolitical risks, posed significant challenges. Jungheinrich was able to counter these with targeted action while also setting out a path for the future.

FOCAL POINTS OF SUPERVISORY BOARD ACTIVITY

The 2023 financial year was dominated by great economic and geopolitical challenges. The general reticence toward investment and the associated decline in demand were also felt by Jungheinrich. The company recognised these obstacles early on and reacted with appropriate measures, closing the 2023 financial year with a good performance once more, despite the difficult situation on the market.

The Board of Management continued its work to implement Strategy 2025+ in the reporting year, and with it consistently drove forward related projects concerning the company's future strategic alignment, notably with regards to processes, digitalisation, products and the organisation. In this regard, important milestones include the acquisition of the US-based Storage Solutions Group on 15 March 2023 and the total acquisition of the robotics specialist Magazino on 23 August 2023, with which Jungheinrich will boost the field of mobile robots as a future focus of intralogistics and expand its software expertise. The Supervisory Board was included in these projects at an early stage and kept fully informed. Another highlight in the reporting year was the start of production at the new Chomutov plant and the expansion of the joint venture for mobile automation solutions with Mitsubishi Logisnext in North America (Rocrich AGV Solutions).

The Supervisory Board was closely involved in efforts to implement and adapt individual points of Strategy 2025+ in the reporting year. At the organisational and personnel level, important decisions were made regarding the position of the company in the future, including the creation of a new Board of Management division for automation, effective 1 April 2024. Succession planning for the Board of Management was also a focal point of the Supervisory Board's work in 2023.

As in the past, the Supervisory Board accompanied and supported the Board of Management in all projects in an advisory capacity, and exchanged information closely with the Board of Management. In addition to the economic challenges, the focus was also on implementing regulatory requirements, further developing corporate governance and sustainability. For instance, the Supervisory Board again dealt with the ↗ remuneration report, the latest version of the German Corporate Governance Code and the overarching issue of IT security (cyber security) and sustainability reporting in 2023.

The Supervisory Board meetings were held both as virtual or hybrid meetings and in-person meetings in the 2023 financial year. The technical possibilities and the positive experiences made during the coronavirus pandemic have provided a great amount of flexibility in this regard. The Annual General Meeting in May 2023 was again held as a virtual event without the physical presence of the shareholders, in line with the possibilities provided for under the law. This took place for the first time in line with the new provisions of the German Stock Corporation Act, which replaced the former special regulations enacted during the coronavirus pandemic.

COOPERATION BETWEEN THE SUPERVISORY BOARD AND THE BOARD OF MANAGEMENT

Once again, the Supervisory Board and the Board of Management worked together very closely and in a spirit of trust during the year under review. The Board of Management involved the Supervisory Board early on and extensively in all relevant aspects of its work, as well as the business activities of the company and the Group companies. This enabled the Supervisory Board to discuss the relevant aspects in good time and to satisfy itself at all times of the legality, appropriateness and correctness of the company's management. The Supervisory Board was also kept informed in a timely manner by means of detailed written and oral reports, in particular on the following topics: the market situation and demand, the current and expected economic development in the individual regions of the world, the business development and financial situation in the individual Group companies (in particular by analysing key indicators such as incoming orders, revenue, EBIT and margin), the number of employees, the status of capital expenditure, the current challenges relating to supply chains and material procurement, the reactions to this and the effects of the war in Ukraine on the company, its employees, customers and suppliers. Furthermore, after careful review and deliberation, the Supervisory Board approved numerous transactions requiring its approval and presented by the Board of Management, the most important of which are listed in this report.

The Supervisory Board and the Finance and Audit Committee also examined the risk management system, the effectiveness of the internal control system, the monitoring of accounting and accounting procedures, the internal audit system, compliance within the company as well as sustainability and non-financial reporting. The Supervisory Board did not identify any irregularities or objections in any of these areas in the 2023 financial year. The Board of Management fully complied with its reporting obligations. This means that the Supervisory Board did not need to exercise its statutory rights to request and inspect. The Finance and Audit Committee recommended that the Supervisory Board again propose that PricewaterhouseCoopers GmbH, Wirtschaftsprüfungsgesellschaft, Hamburg, (PwC) be selected as the auditor for the 2023 financial year at the Annual General Meeting on 11 May 2023. The Supervisory Board and Annual General Meeting agreed with this proposal.

The Chairman of the Supervisory Board (acting simultaneously in his role as Chairman of the Personnel Committee) and the Chairman of the Finance and Audit Committee also reviewed important topics outside of the meetings in regular discussion with the Board of Management, in particular with the Chairman of the Board of Management and the Member of the Board of Management for Finance, and prepared points to be decided on in plenary sessions.

MAIN ISSUES ADDRESSED IN SUPERVISORY BOARD MEETINGS

The Supervisory Board convened on a total of eleven occasions in the 2023 financial year, three of which were extraordinary, and four resolutions were passed by written procedure. Three meetings were held as video conferences, five meetings were held in person, and three meetings were hybrid events, where the majority of members were physically present and individual members were connected via video link. In the majority of meetings, the Supervisory Board discussed individual agenda items alone, i.e. without the presence of the members of the Board of Management. The Board of Management reported on the Group's current state of business in the ordinary meetings. The Supervisory Board's Personnel Committee and the Finance and Audit Committee reported regularly and on an ad hoc basis on current topics regarding the committee's work. Resolutions were passed in numerous meetings on proposals of the Board of Management, of which only the most important are mentioned below.

At the beginning of the reporting year, the Supervisory Board dealt in detail with the acquisition of the Storage Solutions Group in three extraordinary meetings on 6, 10 and 19 January 2023 and provided its final approval for the transaction on 19 January 2023.

In a meeting on 6 March 2023, the Supervisory Board resolved to apply the discretionary factor with regard to the Board of Management's variable remuneration for the 2022 financial year and the remuneration report in accordance with Section 162 AktG. The Supervisory Board also resolved on its proposals for the Annual General Meeting for the upcoming elections to the Supervisory Board and approved donations for victims of the earthquakes in Türkiye and Syria.

The Supervisory Board held an accounts meeting for the 2022 financial year on 30 March 2023. This was to review and approve Jungheinrich AG's annual financial statements and consolidated financial statements together with the combined management report as of 31 December 2022. The Supervisory Board also endorsed the Board of Management's proposal for the appropriation of profits for the 2022 financial year to the Annual General Meeting, and approved the 2022 combined separate non-financial report for Jungheinrich AG and the Group. Moreover, the Supervisory Board passed a resolution on the actual values for calculating the variable remuneration for the members of the Board of Management for the 2022 financial year. Proposals for Board of Management decisions on individual projects, namely in relation to the development of several new models of trucks and a digital development tool changeover, were also approved at the meeting, and the creation of a new Board of Management division for automation was discussed.

At the beginning of April 2023, the Supervisory Board resolved by written procedure to grant the associate company Magazino GmbH a loan.

In its inaugural meeting on 11 May 2023, following the Supervisory Board elections at the Annual General Meeting and the employee representative elections, which were paused during the coronavirus pandemic, the Supervisory Board elected Mr Rolf Najork as the Chairman of the Supervisory Board and re-elected Mr Markus Haase as Deputy Chairman. The Supervisory Board also elected the members of the Mediation Committee, the Personnel Committee and the Finance and Audit Committee. In addition, the Supervisory Board resolved to reappoint Dr Volker Hues as a Member of the Board of Management and to create a Board of Management division for automation. Various current and planned projects were discussed.

In another resolution passed by written procedure, the Supervisory Board approved the inclusion of the AGV business that Mitsubishi Logisnext operates under the name Rocla in the joint venture MCJ Supply Chain Solutions LLC, a capital increase for the joint venture, and the renaming to Rocrich AGV Solutions LLC at the end of May 2023.

In the meeting on 30 June 2023, the Supervisory Board approved a further proposal made by the Board of Management regarding the development of a truck model and a change to the articles of association to delete a provision that had become obsolete. A variety of topics were also discussed in depth, specifically a number of current and planned projects, details regarding the new Board of Management division for automation and how to handle skills shortages.

At the end of July 2023, following detailed reporting and discussion, the Supervisory Board agreed through written procedure to the total acquisition of Magazino GmbH, in which the company had previously held a stake of approximately 22 per cent.

At the strategy meeting of the Supervisory Board on 20 September 2023, the status as regards Strategy 2025+ as well as a variety of focal topics and projects were presented and discussed in detail.

In an ordinary meeting on 21 September 2023, the Supervisory Board resolved on the pension arrangements for new members of the Board of Management and individual amendments to the adjustment rules for key figures relating to the effects from M&A transactions that are relevant to the variable remuneration of the Board of Management. Mr Udo Panenka was appointed to the Board of Management effective 1 April 2024, and will be responsible for the Automation division.

The Supervisory Board also resolved on the conclusion of a termination agreement with Ms Sabine Neuß, with which she will resign from her office on the Board of Management by 30 June 2024. Board of Management proposals regarding individual investments and projects were also approved, including new promissory notes to ensure the Group's financing is not dependent on banks, further projects were touched on and personnel management and recruitment were discussed.

In another written procedure in November 2023, the Supervisory Board resolved on an early reappointment of Mr Christian Erlach to the Board of Management.

In a meeting on 19 December 2023 regarding the DEEP (Digital End-to-End Processes) programme, the Supervisory Board was shown, as in previous years, further details of this ongoing long-term programme to realign structures, processes and the IT architecture against the backdrop of the digital transformation, and the current status of the work to implement it.

In the 20 December 2023 meeting, the Supervisory Board focused on the progress of the remuneration report preparations for the 2023 financial year, including Board of Management succession planning, amendments to individual Strategy 2025+ targets and current and planned projects, among other issues. The Supervisory Board decided to appoint Mr Maik Manthey as new member of the Board of Management from 1 July 2024 who would be responsible for the Technics division. In addition, the Supervisory Board resolved to adjust the remuneration system for members of the Board of Management as of 1 January 2024 and determined the targets for the Board of Management's variable remuneration. Ms Antoinette P. Aris was re-elected as a non-voting member of the Personnel Committee for the

2024 financial year due to her expertise in matters of remuneration. Selected adjustments to the rules of procedure for the Board of Management and the Supervisory Board were adopted and the plan for 2024 was approved. In addition, the Supervisory Board approved further proposals by the Board of Management regarding the DEEP programme, a truck development project, setting up an Experience Centre, renovating the main marketing and sales office in the UK, and concluding a control and profit and loss transfer agreement with Magazino GmbH. Finally, the Supervisory Board resolved on the annual declaration pursuant to Section 161 of the German Stock Corporation Act ("declaration of compliance") based on the recommendation of the Finance and Audit Committee.

ACTIVITY OF THE SUPERVISORY BOARD COMMITTEES

The Finance and Audit Committee convened on nine occasions in the reporting year, one of which was extraordinary. Five meetings were held in person, three meetings were held as video conferences, and one meeting was a hybrid event, where the majority of members were physically present and one member was connected via video link. Some of the issues the Committee considered were non-financial reporting, capital market communications, how to handle business activities in Russia, and all topics related to the annual and consolidated financial statements of Jungheinrich AG and the audit services (fee and order preparation, focal points of the audit, audit results, additional audit services). The Committee also carefully completed the tasks entrusted to it, including monitoring accounting and accounting processes, the effectiveness of the internal control system, risk management and internal auditing. The Committee also discussed the regular oral and written reports submitted by the Compliance Officer in detail and dealt with various compliance issues. In addition, the Committee dealt with regular reports from the departments responsible on non-financial reporting and sustainability topics. In an extraordinary meeting in December 2023, the planning for the 2024 financial year was also discussed in detail and prepared for the Supervisory Board plenary meeting. The Committee also met regularly without the Board of Management in the year under review.

The Personnel Committee convened four times in the reporting year. Three meetings were held in person and one meeting was a hybrid event, where the majority of members were physically present and one member was connected via video link. The Committee dealt with all tasks assigned to it on behalf of the entire Supervisory Board – particularly new and reappointments as well as contract and remuneration issues for members of the Board of Management, including the remuneration system and the remuneration report for the 2022 and 2023 financial year. The Personnel Committee also focused its attention on senior executives of interest who were responsible for important tasks in the Group.

The Mediation Committee, according to Section 27, Paragraph 3 of the German Co-Determination Act, did not convene.

OTHER INFORMATION

With the exception of two meetings of the Supervisory Board, which Mr Mike Retz was unable to attend, one meeting of the Supervisory Board which Ms Kristina Thurau-Vetter was unable to attend, and one meeting of the Supervisory Board which Ms Kathrin Elisabeth Dahnke was unable to attend, all meetings of the Supervisory Board and its committees were always attended by all members of the respective committee.

In the reporting year, there were no conflicts of interest of Board of Management or Supervisory Board members that would have had to be immediately disclosed to the Supervisory Board.

The members of the Supervisory Board take responsibility for the training and further education measures required for their tasks, such as those pertaining to changes in the legal framework or new technologies, and receive support here from the company, as do new members when they take up their position. The company thus offered a training event in the reporting year, which included internal and external experts, covering non-financial reporting and sustainability topics. All members of the Supervisory Board attended this event. New members of the Supervisory Board were instructed of their tasks, rights and duties as well as the organisational processes and IT infrastructure relevant to the Supervisory Board's work as part of the onboarding process.

ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS AS OF 31 DECEMBER 2023

The annual financial statements prepared by the Board of Management, the consolidated financial statements as of 31 December 2023, and the combined management report of Jungheinrich AG, were audited by PwC. The auditors had no objections regarding the financial statements or the accounting, and confirmed this in their unqualified audit report.

The results of the audit performed by the auditors were the topic of meetings of the Finance and Audit Committee and of the Supervisory Board. The members of the Supervisory

Board checked the Board of Management documents for the annual and consolidated financial statements in great detail using PwC's audit reports. As is also regularly the case, the majority of members of the Supervisory Board attended the Finance and Audit Committee meeting for the preparation of the entire Supervisory Board's resolution regarding the 2023 financial statements. All members of the Supervisory Board approved the Board of Management's proposal for the appropriation of profits for the 2023 financial year. According to the audit's results, there are no objections to the internal control system, the risk management system or the compliance management system. There were also no objections to the declaration of compliance pursuant to Section 161 of the German Stock Corporation Act.

Following its detailed inspection of the annual financial statements, consolidated financial statements and combined management report, the Supervisory Board had no objections to the financial statements and agreed with the results of the audit performed by the auditors in its accounts meeting on 27 March 2024. The Supervisory Board authorised Jungheinrich AG's annual financial statements and consolidated financial statements for the period ending 31 December 2023. Jungheinrich AG's annual financial statements as of 31 December 2023 are therefore finalised.

In its meeting on 27 March 2024, the Supervisory Board also seconded the Board of Management's proposal for the appropriation of profits for the 2023 financial year.

The Finance and Audit Committee and the Supervisory Board also considered the combined separate non-financial report as of 31 December 2023, which was prepared by the Board of Management. The Supervisory Board approved this report, which was audited by PwC.

PERSONNEL

The former Chairman of the Supervisory Board, Mr Hans-Georg Frey, resigned from office with effect from the end of the Annual General Meeting on 11 May 2023. The ordinary Annual General Meeting on 11 May 2023 elected Mr Rolf Najork to the Supervisory Board for a full term. Mr Najork was then elected Chairman of the Supervisory Board by the Supervisory Board and in this function also took up the chairmanship of the Personnel and Mediation Committees.

The ordinary Annual General Meeting on 11 May 2023 also elected Ms Kathrin Elisabeth Dahnke, who had been a court-appointed member since 1 December 2022, to the Supervisory Board for a full term. Ms Dahnke was also elected once more to sit on the Finance and Audit Committee by the Supervisory Board and was chosen to chair the said committee by its members.

Ms Dagmar Bieber resigned from the Supervisory Board effective 17 November 2023. Ms Eva Kohn, business IT specialist, software specialist at the company and member of various works council committees, has replaced her on the Supervisory Board as a substitute member elected by the employees. The Supervisory Board thanks Ms Bieber sincerely for her dedicated work.

Effective at the end of his appointment term on 31 March 2024, Dr Volker Hues has been reappointed as a Member of the Board of Management responsible for Finance for a further three years. At the same time, an agreement was entered into with Dr Hues regarding a premature termination of office, which allows him to resign from office after 1 July 2025 with the consent of the Supervisory Board. Mr Christian Erlach was reappointed early as a Member of the Board of Management, responsible for Sales, with effect from 1 January 2024 until 31 December 2024. An agreement was also entered into with Mr Erlach regarding a premature termination of office, which allows him to resign from office after 30 June 2024 with the consent of the Supervisory Board.

Mr Udo Panenka was appointed to the Board of Management effective 1 April 2024, and will be responsible for the Automation division.

A termination agreement was concluded with Ms Sabine Neuß, with which she will resign from her office on the Board of Management early by 30 June 2024. The Supervisory Board thanks Ms Neuß sincerely for her commitment and successful work for the company over the years. Ms Neuß left her mark on the Technics division in the most positive fashion, laying the foundation for outstanding developments in the future. Mr Maik Manthey was appointed as her successor in the Technics division effective from 1 July 2024.

The Supervisory Board acknowledges the exceptional performance of the Board of Management, senior executives and all employees in meeting the challenges of 2023 and would like to thank them all very much for their successful work.

Hamburg, 27 March 2024

On behalf of the Supervisory Board

R. Najork

Rolf Najork
Chairman

Members of the Supervisory Board

Rolf Najork (since 11 May 2023)
Chairman
Self-employed Management Consultant
Membership of other Supervisory Boards/ regulatory committees:
- HOERBIGER Holding AG, Zug (Switzerland)
- OTTO FUCHS KG, Meinerzhagen (Germany) (since 1 January 2024)

Hans-Georg Frey (until 11 May 2023)
Chairman
Membership of other Supervisory Boards/ regulatory committees:
- Fielmann AG, Hamburg (Germany)[1]
- HOYER GmbH, Hamburg (Germany)
- Blanc & Fischer Familienholding GmbH, Oberderdingen (Germany) (Chairman)
- Gottfried Schultz Automobilhandels SE, Ratingen (Germany)
- Rail Capital Europe Investment SAS, Saint-Ouen-sur-Seine (France) (Chairman) (since 1 March 2023)

Markus Haase[2]
Deputy Chairman
Service Consultant at Jungheinrich Vertrieb Deutschland AG & Co. KG
Chairman of the Group Works Council

Dipl.-Ing. Antoinette P. Aris, MBA
Senior Affiliate Professor of Strategy at INSEAD (Fontainebleau (France))
Membership of other Supervisory Boards/ regulatory committees:
- ASML N.V., Veldhoven (Netherlands)[1]
- Randstad N.V., Diemen (Netherlands)[1]

Dagmar Karin Bieber[2] (until 17 November 2023)
Business Manager
Quality Coordinator at Jungheinrich Service & Parts AG & Co. KG
Deputy Chairwoman of the Works Council at Jungheinrich Service & Parts AG & Co. KG
Member of the European Works Council

Dipl.-Ing. Rainer Breitschädel[2]
Head of Kaltenkirchen location at Jungheinrich Service & Parts AG & Co. KG
Executive Staff Representative

Kathrin Elisabeth Dahnke
Self-employed Management Consultant
Membership of other Supervisory Boards/ regulatory committees:
- B. Braun SE, Melsungen (Germany)
- Knorr-Bremse AG, Munich (Germany)[1]
- Aurubis AG, Hamburg (Germany)[1] (since 16 February 2023)
- Fraport AG, Frankfurt/Main (Germany)[1] (since 23 May 2023)

Beate Klose
Business Graduate
Self-employed Consultant

Eva Kohn[2] (since 17 November 2023)
Business IT Specialist
Software Specialist at Jungheinrich AG
Member of various works council committees

Wolff Lange
Businessman
Managing Director of LJH-Holding GmbH, Wohltorf (Germany)
Membership of other Supervisory Boards/ regulatory committees:
- Wintersteiger Holding AG, Ried (Austria) (Chairman)

Mike Retz[2]
Trade Union Secretary
IG Metall branch office for the region of Hamburg

Steffen Schwarz[2]
Assembly worker at Jungheinrich Norderstedt AG & Co. KG
Deputy Chairman of the Group Works Council

Kristina Thurau-Vetter[2]
Trade Union Secretary IG Metall District Management Küste
Membership of other Supervisory Boards/ regulatory committees:
- Airbus GmbH, Hamburg (Germany) (previously Premium AEROTEC GmbH, Augsburg (Germany))
- Airbus Aerostructures GmbH, Hamburg (Germany) (since 24 May 2023)

Andreas Wolf
Business Manager
Managing Director of WJH-Holding GmbH, Aumühle (Germany)
Managing Director of Sachsenwald Management GmbH, Aumühle (Germany)

[1] Listed.
[2] Employee representative.

COMMITTEES OF THE SUPERVISORY BOARD

Finance and Audit Committee
Kathrin Elisabeth Dahnke (Chairwoman)
Antoinette P. Aris (Deputy Chairwoman)
Steffen Schwarz[2]

Personnel Committee
Rolf Najork (Chairman) (since 11 May 2023)
Hans-Georg Frey (Chairman) (until 11 May 2023)
Markus Haase[2] (Deputy Chairman)
Wolff Lange
Steffen Schwarz[2]
Andreas Wolf
Antoinette P. Aris (non-voting member)

Mediation Committee
Rolf Najork (Chairman) (since 11 May 2023)
Hans-Georg Frey (Chairman) (until 11 May 2023)
Markus Haase[2] (Deputy Chairman)
Mike Retz[2]
Andreas Wolf

Members of the Board of Management

Dr Lars Brzoska
Chairman of the Board of Management Corporate
Labour Director

Christian Erlach
Member of the Board of Management Sales
Membership of other Supervisory Boards/ regulatory committees:
- Jungheinrich Heli Industrial Truck Rental Co. Ltd., Shanghai (China)[3]
- Rocrich AGV Solutions LLC (previously MCJ Supply Chain Solutions LLC), Houston, Texas (USA)[3] (until 14 September 2023)

Dr Volker Hues
Member of the Board of Management Finance
Membership of other Supervisory Boards/regulatory committees:
- A.S. Création Tapeten AG, Gummersbach (Germany)[1]

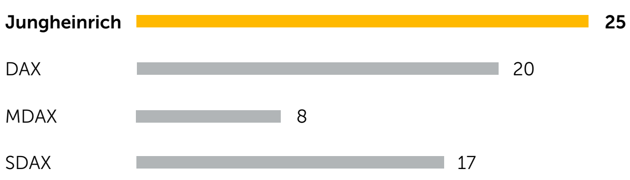
Sabine Neuß
Member of the Board of Management Technics
Membership of other Supervisory Boards/ regulatory committees:
- Continental AG, Hanover (Germany)[1]
- Valmet Automotive Inc., Uusikaupunki (Finland) (until 31 May 2023)
- JULI Motorenwerk CZ s.r.o., Moravany (Czechia)[3]
- Magazino GmbH, Munich (Germany)[3] (until 23 August 2023)

[1] Listed.
[2] Employee representative.
[3] Group or associated company.

Jungheinrich share

Besides the Russia-Ukraine war, events on the stock markets were dominated by high inflation and an escalation of the Middle East conflict in 2023. Nevertheless, the Jungheinrich share had a successful year on the stock market, gaining a significant 25 per cent in value. Moreover, Jungheinrich is planning to pay the highest dividend in the company's history of €0.75.

Share price performance 2023 in %



EQUITY MARKETS ON THE UP DESPITE CRISES

In 2023, both national and international stock markets were primarily impacted by the ongoing Russia-Ukraine war, rising interest rates, fears of recession and, at the end of the year, the escalation of the Middle East conflict. Stock indices rose sharply at the start of the year and were largely able to hold on to the early gains despite uncertainties until the end of the third quarter of 2023. Due to developments in the Middle East, the fourth quarter of 2023 got off to a negative start, but was also the starting point for a year-end rally and new highs for shares and indices. Geopolitical and macroeconomic uncertainties along with a potential lowering of interest rates in 2024 dominated the mixed picture of global investor sentiment at the end of the year.

The most important German stock market indices showed clear gains at the end of the year. The DAX ended 2023 with a comparably strong gain of 20 per cent at 16,752 points (previous year: 13,924 points). The MDAX closed the year with an 8 per cent gain, climbing to 27,137 points (previous year: 25,118 points), while the SDAX made a notable gain of 17 per cent and climbed to 13,960 points (previous year: 11,926 points).

JUNGHEINRICH SHARE PRICE UP 25 PER CENT

Starting from a closing price of €26.58 on the last trading day of 2022, the Jungheinrich share began the year under review at €27.04. The Board of Management published an ad hoc announcement on 25 January 2023 regarding the acquisition of the Storage Solutions Group. Following the announcement, the share reached an annual high of €36.76 on 2 February 2023. In light of the positive business developments in the first quarter of 2023, the forecast ranges were raised on 24 April 2023 and the proportionate effects of the acquisition of the Storage Solutions Group, which was completed on 15 March 2023, were outlined in more detail. This boosted the Jungheinrich share price, following a weak start to the second quarter, pushing it to significantly exceed the share price development of comparable indices in the first six months of the year at €33.54 on 30 June 2023.

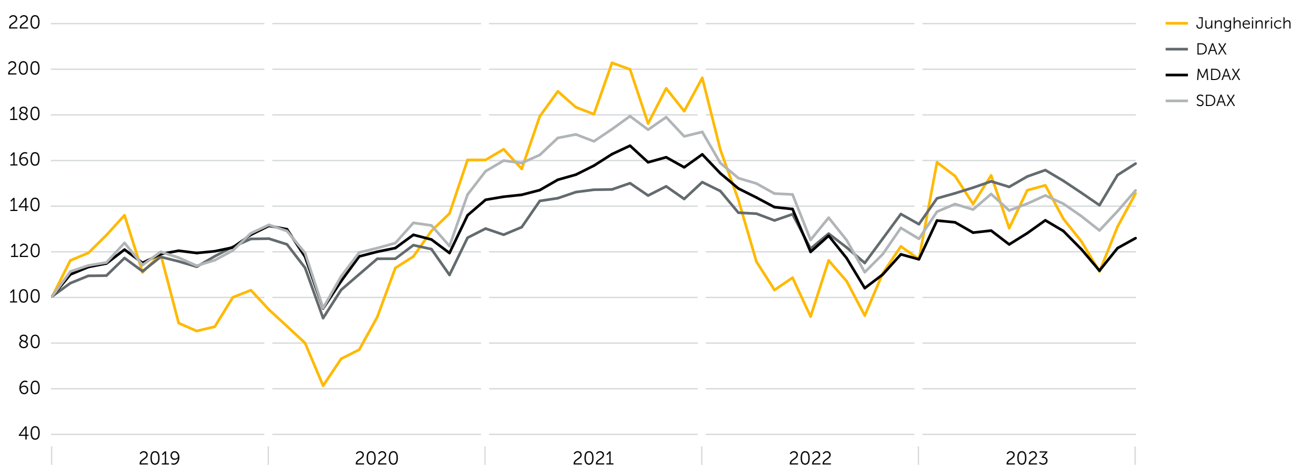
Uncertainties around the world dominated events in the third quarter and the beginning of the fourth quarter of 2023. The Jungheinrich share was not able to evade this negative market environment and hit an annual low of €24.84 on 30 October 2023. In light of the prospect of easing on the interest markets, losses were soon recuperated. Seen over the course of the year, shares ended trading for 2023 at €33.22, thus recording a clear 25 per cent gain over the previous year. Market capitalisation increased accordingly by €677 million during the year and stood at €3,388 million at the end of 2023 (previous year: €2,711 million).

With market capitalisation of €1,531 million (previous year: €1,318 million), which is relevant for index calculation, the Jungheinrich preferred share ranked 79th in the Deutsche Börse ranking list (previous year: 88th) at the end of December 2023. According to Deutsche Börse's definition of free float, this includes all stock-market-listed shares of Jungheinrich AG. Of the total number of Jungheinrich AG shares (102 million), only the 48 million no-par-value preferred shares are listed and widely distributed. The 54 million ordinary shares are not listed, and they are held equally by the families of each of company founder Dr Friedrich Jungheinrich's two daughters.

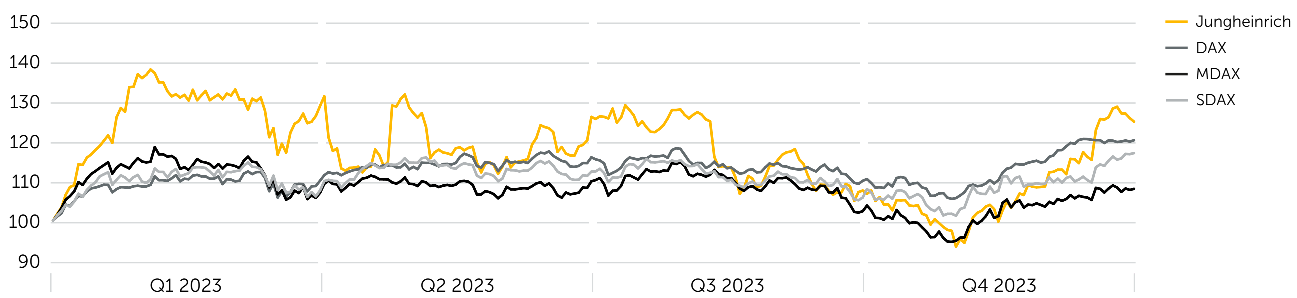
The ↗ shareholdings in Jungheinrich AG reportable pursuant to Sections 33 et seq. of the German Securities Trading Act (WpHG) have been published in accordance with Section 40 of the German Securities Trading Act (WpHG) in the notes to the annual financial statements of Jungheinrich AG and on the company's website.

SHARE PRICE DEVELOPMENT OVER TIME

Share price performance 2019 to 2023 in %



Share price performance 2023 in %



TRADING VOLUME BELOW PREVIOUS YEAR'S LEVEL

The Jungheinrich share is listed in the Prime Standard quality segment of the Deutsche Börse. It is traded on all German stock exchanges. The trading volume (Xetra and Frankfurt) amounted to 22.6 million shares in 2023, about 40 per cent down from the trading volume in the previous year (39.3 million shares). The average number of shares traded per trading day (Xetra and Frankfurt) also decreased about 40 per cent to 89.5 thousand shares compared to the previous year (152.8 thousand shares). The average daily trading volume amounted to €2.8 million (previous year: €4.0 million).

DIVIDEND RISES TO HISTORIC HIGH

Jungheinrich's dividend policy is fundamentally geared towards continuous dividend payments. The aim is to distribute between 25 per cent and 30 per cent of the profit after tax attributable to the shareholders of Jungheinrich AG.

The Board of Management and Supervisory Board of Jungheinrich AG will propose to the Annual General Meeting on 15 May 2024 that a dividend of €0.75 (previous year: €0.68) per no-par preferred share and €0.73 (previous year: €0.66) per no-par ordinary share be distributed. Subject to approval at the Annual General Meeting, this will result in a total payment of €75 million (previous year: €68 million).

The dividend payment will be made on the third working day after the Annual General Meeting. The payment ratio, which is calculated as the percentage of the total dividend in relation to the profit attributable to the shareholders of Jungheinrich AG, thus reaches 25 per cent as in the previous year.

REASONS TO INVEST IN JUNGHEINRICH SHARES

For more than 70 years, Jungheinrich has been a leading provider of sustainable intralogistics products and solutions. Reasons to invest in Jungheinrich shares:

- Attractive market: international size, sustainable growth opportunities, new operating segments
- Corporate structure and strategic orientation: family business with a corporate structure and strategy focussed on the long-term
- Complete solutions provider: everything from a single source – from hand pallet truck to fully automated warehouse
- Earnings and financial strength: top rates of return, cash flow and balance sheet figures in comparison with industry and competitors
- Resilient: intact market drivers, resilient customer structure, robust business model
- 100 per cent electric: the leader in lithium-ion technology
- Sustainability: among the top 1 per cent of sustainable companies in the world[1]

PROFITABILITY OVER FIVE AND TEN YEARS SIGNIFICANTLY BETTER THAN DAX, MDAX AND SDAX

The Jungheinrich share proves to be an attractive capital investment over the long term and consistently recorded a significantly better performance over both a ten- and five-year period than the DAX, MDAX and SDAX. A contrasting picture emerges over a three-year period, the Jungheinrich share merely shows a better performance than the MDAX.

Long-term performance of the Jungheinrich share

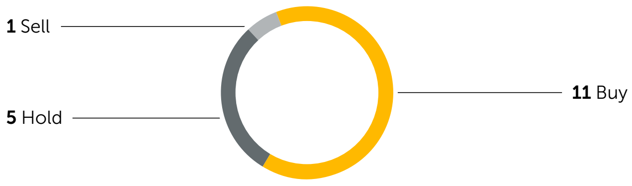
Investment period	10 years	5 years	3 years
Investment date	01/01/2014	01/01/2019	01/01/2021
Portfolio value at end of 2023	€24,956	€16,285	€9,157
Average return p. a.	9.6%	10.3%	–2.8%
Comparable return of German share indices p. a.			
DAX	6.0%	9.6%	6.9%
MDAX	5.1%	4.6%	–4.3%
SDAX	7.4%	7.8%	–2.0%

Please note: based on an initial investment of €10 thousand; assuming that annual dividends received were reinvested in additional preferred shares.

RISING INTEREST AMONG ANALYSTS: COVERAGE EXPANDED

Equity research is important for making investors aware of share issuances, as it serves as a vital foundation when deciding to invest. With Barclays and Jefferies taking up coverage in September 2023 and October 2023 respectively, the number of banks and equity research houses regularly analysing the Jungheinrich share has risen to 17 (previous year: 15). At the end of the year under review, eleven analysts recommended buying the share, five recommended holding and one recommended to sell. Based on the key analysts' valuations, the average target share price was €35.85. The lowest value was €23.50, and the highest was €49.00.

Analysts' recommendations As of: 31/12/2023



2023 Analyst coverage

Baader Helvea	Citigroup
Barclays	HSBC Trinkaus & Burkhardt
Berenberg	Kepler Cheuvreux
BNP Paribas	Morningstar
DZ Bank	Stifel
Hauck Aufhäuser	
Jefferies	Bank of America
Landesbank Baden-Württemberg	
Metzler	
M. M. Warburg	
ODDO BHF	

[1] Rating foundation: EcoVadis.

CONTINUAL CULTIVATION OF VALUABLE RELATIONSHIPS

The aim of Jungheinrich's investor relations work is to achieve a fair valuation of the Jungheinrich share through reliable, up-to-date and continuous communication. Key topics of capital market communication in 2023 were the acquisition of the Storage Solutions Group, the business development in light of the global geopolitical and macroeconomic uncertainties as well as the implementation progress of the Strategy 2025+.

The company informed the capital markets about particularly significant developments through ad hoc announcements as follows:

- Announcement on 25 January 2023: "Jungheinrich AG to acquire Storage Solutions Group"
- Announcement on 24 April 2023: "Jungheinrich raises forecast for 2023 and publishes preliminary figures as of 31 March 2023"

As in the past, communication with capital market participants took place both virtually and in the form of in-person events and meetings. For instance, the analyst conference for the 2022 financial year was again held as a video conference on 31 March 2023. The Annual General Meeting on 11 May 2023 was once again a virtual meeting, however, for the first time it was possible to pose questions during the event. While investor conferences exclusively took place in person, the roadshows were both physical and virtual events. This allowed for greater flexibility in terms of regional coverage of investor contacts.

With regard to the publication of its quarterly and half-year figures, Jungheinrich reported as usual in detail on the current business development of the Group in conference calls.

During the conference call on the business development as of 30 September 2023 on 10 November 2023, the Board of Management also presented its Strategy 2025+ status report. The focus was on the field of automation, which was dominated in the financial year by the acquisition and post-merger integration of the Storage Solutions Group and the expansion of the product and solutions portfolio through the acquisition of all shares in Magazino. Approximately 300 investors had contact with the company during the year. Further information on Strategy 2025+ can be found in the combined management report [page 23].

Basic information about the Jungheinrich share

Securities identification numbers	ISIN: DE0006219934 / WKN: 621993
Ticker symbol Reuters/Bloomberg	JUNG_p.de / JUN3 GR
Stock exchanges	Hamburg and Frankfurt stock exchanges and all other German stock exchanges
Designated Sponsor	ODDO BHF Corporates & Markets AG
IPO	30 August 1990

Comprehensive information regarding the ↗ Jungheinrich share is published on the Jungheinrich AG website. Along with financial reports, presentations, ad hoc announcements and press releases, the website also contains a total return calculator, analysts' recommendations, important IR dates, and contact details for Corporate Investor Relations.

Capital market key figures

			2023	2022
Dividend per share	Ordinary share	€	0.73[1]	0.66
	Preferred share	€	0.75[1]	0.68
Dividend yield	Preferred share	%	2.3	2.6
Earnings per share	Ordinary share	€	2.92	2.63
	Preferred share	€	2.94	2.65
Shareholders' equity per share		€	21.78	20.10
Share price[2]	High	€	36.76	46.18
	Low	€	24.84	20.20
	Closing price at end of year	€	33.22	26.58
Share price performance		%	25	–41
Market capitalisation		€ million	3,388	2,711
Stock exchange trading volume[3]		€ million	713	1,025
Average daily turnover		thousand shares	89.5	152.8
P/E[4]		ratio	11.3	10.0
Number of shares	Ordinary share	million shares	54	54
	Preferred share	million shares	48	48
	Total	million shares	102	102

[1] Proposal.
[2] Xetra closing price.
[3] Xetra and Frankfurt.
[4] P/E ratio = closing price/earnings per preferred share.

03

Combined management report

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Group principles

BUSINESS ACTIVITIES AND ORGANISATIONAL STRUCTURE

Integrated business model

Jungheinrich is one of the world's leading solutions providers for the intralogistics sector. With a comprehensive portfolio of material handling equipment, automation and services, Jungheinrich is able to offer customers solutions to the challenges posed by Industry 4.0.

The integrated business model encompasses the development, production and sale of new material handling equipment and the planning and realisation of automation projects, the short-term rental of new and used material handling equipment, the refurbishment and sale of used trucks as well as after-sales services. Jungheinrich also supplies stacker cranes and load handling equipment. In addition, customers receive their entire factory and office equipment from a single source. In addition to electric engines and drive controls, Jungheinrich also manufactures matching lithium-ion batteries and battery chargers. All trucks produced are battery-powered and almost all are available with a lithium-ion battery. Digital products based on the latest generation of the Jungheinrich Internet of Things platform in the cloud, complement the portfolio. Customers also have access to a comprehensive range of financial services. Jungheinrich aims to create sustainable value.

Business model of Jungheinrich

Production and refurbishment

The Group has twelve plants, seven of them primarily for the production of material handling equipment, three for stacker cranes and two for the industrial refurbishment of used trucks. In addition, Jungheinrich covers almost all demand for electric motors in a joint venture with another manufacturer of material handling equipment in Moravany (Czechia) and Putian (China).

Jungheinrich manufactures stacker trucks, reach trucks and horizontal order pickers in Norderstedt. In addition to truck production, the plant also manufactures electronic control units, lithium-ion batteries and battery chargers. The Lüneburg plant produces light-duty vertical order pickers, tow tractors and automated guided vehicles (AGVs) in addition to small-series and customised trucks. The Moosburg plant manufactures counterbalanced trucks, while the neighbouring factory in Degernpoint manufactures narrow-aisle trucks, heavy-duty vertical order pickers and AGVs. The production focus at the Landsberg/Saale plant is on low-lift trucks and double-decker trucks. Since June 2023, the new plant in Chomutov (Czechia) has also been manufacturing reach trucks. The Qingpu plant in China produces low-lift and stacker trucks, battery-powered counterbalance trucks and reach trucks, as well as control units and batteries. The MIAS Group manufactures stacker cranes and load handling equipment at its locations in Munich, Gyöngös (Hungary) and Kunshan (China).

Used equipment is industrially refurbished in a plant close to Dresden and in a plant in Ploiești (Romania).

The development of digital products is concentrated at the locations in Graz (Austria), Hamburg and Madrid (Spain). The software and hardware development services are based in Zagreb (Croatia).

Changes to the portfolio

On 25 January 2023, Jungheinrich announced its acquisition of the Storage Solutions Group (Storage Solutions), Westfield/Indiana (USA), a leading provider of solutions for racking systems and warehouse automation in the US. Jungheinrich has thus expanded its access to the US market for warehouse equipment and automation. With the completion of the acquisition on 15 March 2023, 100 per cent of the shares in the Storage Solutions Group were consolidated for the first time. The Storage Solution Group comprises seven companies based in the USA. Storage Solutions' proportional contribution to revenue in the 2023 financial year was €219 million.

In another important step towards strengthening its automation expertise, Jungheinrich acquired the remaining shares in the robotics specialist Magazino GmbH, Munich (Magazino), effective 23 August 2023. The company was fully consolidated from that date.

International sales with a focus on the direct sales and service network

Jungheinrich has established a global direct sales and service network with locations in 42 countries to offer the best-possible customer service. The Jungheinrich Group is also represented in approximately 80 other countries through partner companies. The Group's core market is Europe, where 80 per cent of Group revenue is generated. Of the European revenue, 27 per cent is generated in Germany.

With the acquisition of Storage Solutions in the reporting year, Jungheinrich is now also covering the US market for warehouse equipment and automation.

In North America, Jungheinrich also cooperates with Mitsubishi Logisnext Americas Inc. (MLA), a sales partner with a comprehensive dealership footprint, in the truck business. Firstly, equipment manufactured by Jungheinrich in Germany is marketed via MLA's sales organisation in North America. Secondly, MLA produces trucks in its plants that are developed by Jungheinrich locally in Houston. Jungheinrich has also been working on the joint venture Rocrich AGV Solutions LLC (Rocrich) (formerly MCJ Supply Chain Solutions LLC) with MLA since September 2023. Rocrich offers mobile automation and robotics solutions for warehouses and production plants.

In China, Jungheinrich serves the metropolitan regions of Shanghai, Changzhou, Guangzhou and Tianjin through a joint venture with Anhui Heli Co. Ltd., leasing material handling equipment via four subsidiaries.

To cover the constantly growing after-sales services business, Jungheinrich operates a central spare parts centre in Kaltenkirchen. With this warehouse, and others in Lahr, Bratislava (Slovakia), Shanghai (China), Birmingham (UK) and Singapore (Singapore), Jungheinrich can guarantee the global supply of spare parts for its after-sales services. Through the joint venture TREX.PARTS GmbH&Co. KG, Jungheinrich is tapping into additional market potential in the spare parts market.

Organisation and Group management

Jungheinrich AG is the listed management holding company of the Group. It controls company activities and is responsible for overarching functions such as strategy, financing, M&A, accounting, controlling, human resources management, sustainability, corporate communications, information technology, legal, tax, internal audit and compliance. The operating business is divided into the two reportable segments under IFRS: "Intralogistics" and "Financial Services". The Intralogistics segment comprises the business fields of new business, short-term rental and used equipment, as well as after-sales. New business consists of new manual material handling equipment, automated material handling equipment and facilities (including stacker cranes and load handling equipment), warehouse equipment, factory and office equipment, energy solutions and digital products. There is no further subdivision of the "Financial Services" reporting segment into business fields.

As part of a near-shoring concept, Jungheinrich has several Business Service Centers that pool internal services.

The Board of Management is responsible for the Group's strategic management and operational leadership. This involves determining and monitoring company targets, taking responsibility for leadership, management and controlling processes – including the internal compliance management system and the internal control and risk management systems – and resource allocation. The key figures and reports regularly presented to the entire Board of Management are based on Group-wide, economic performance parameters.

The supervisory and advisory body for the Board of Management is the Supervisory Board, which consists of twelve people, pursuant to the requirements of the German Co-Determination Act. There are an equal number of shareholder representatives and employee representatives on the Supervisory Board.

As the parent company, Jungheinrich AG holds shares directly and indirectly in both domestic and foreign subsidiaries and affiliates. The managing directors of the subsidiaries are responsible for operations and economic performance in the local markets. The companies receive support from the management of the holding company, but are independent from a legal perspective. The consolidated financial statements cover 102 fully consolidated companies – including Jungheinrich AG. The complete shareholdings in Jungheinrich AG can be found in the notes to the consolidated financial statements [page 174].

Important key performance indicators

The Jungheinrich Group uses selected key figures to determine budget targets as well as medium- and long-term company targets. The Board of Management considers key financial indicators predominantly in order to manage the Group. The return on capital employed (ROCE) and the free cash flow are used for management purposes, in addition to incoming orders and revenue, earnings before interest and income taxes (EBIT) or EBIT return on sales (EBIT ROS) and earnings before taxes (EBT) or EBT return on sales (EBT ROS). Another performance parameter is the ratio of trucks equipped with lithium-ion batteries.

The financial key figure ROCE represents the rate of return based on the EBIT generated in the Intralogistics segment in relation to the capital employed that can be attributed to this segment. This means returns can be determined regardless of whether a customer has financing from the Jungheinrich Group's Financial Services segment. Capital employed is calculated from fixed assets (without trucks for short-term rental and trucks for lease) plus trucks for short-term rental and working capital less other provisions. Working capital includes inventories as well as trade accounts receivable and contract assets less trade accounts payable and contract liabilities. The average of capital employed is calculated by including the figures as at the balance sheet date of the current quarter and the three quarters before this balance sheet date in order to prevent fluctuations in the capital employed on the balance sheet date. For interim reporting, the EBIT of the period is annualised and viewed in relation to the average capital employed. ROCE is not reported for the "Financial Services" segment as the EBIT return on capital employed (ROCE) is not a control parameter for this segment.

The free cash flow is defined as the sum of cash flows from operating activities and investing activities. Cash flow from investing activities is adjusted for payments for acquisitions and proceeds from the sale of securities as well as payments for and proceeds from time deposits. As a rule, securities and time deposits are assigned to Group liquidity (cash and cash equivalents and securities reported in the balance sheet). Changes in these items are therefore not part of the Jungheinrich Group's free cash flow.

In addition to this, the equipment ratio of trucks with lithium-ion batteries as part of both the short-term and long-term variable remuneration of the Board of Management is a material non-financial control parameter for the Jungheinrich Group. It symbolises the company's commitment to sustainability and is an integral part of the corporate strategy. It is also one of the central targets of Strategy 2025+. The equipment ratio of lithium-ion batteries is calculated from the ratio of incoming orders for lithium-ion battery-powered trucks (units; excluding purchased electric trucks with built-in batteries) to incoming orders for battery-powered trucks, regardless of type of battery (units; excluding purchased electric trucks with built-in battery).

The Board of Management follows developments in the figures indicated above as part of the regular reporting process. Where necessary, appropriate measures are launched and significant deviations analysed based on constant monitoring of target and actual figures.

Changes in various early indicators are monitored and evaluated in order to recognise possible future developments within the company in good time and to maintain a basis on which to base business policy decisions. These are primarily prognoses from economic experts on developments in gross domestic product in Jungheinrich's core markets, indices for evaluating the economic situation in the sector, and continual monitoring of incoming orders and orders on hand.

Geopolitical tensions continue to demand foresight in supply chain management

Global supply chains continued to stabilise over the course of 2023. The situation on the energy markets also eased, although further energy policy developments still need to be observed closely. However, the availability of electronic components remained unreliable. All of the measures introduced in recent years to ensure material and energy supply are still being applied. Supplier risk management consists of the regular monitoring of inventories, supply reach, and transport times in combination with close supplier controlling. In addition, swift action was taken to changes in demand in the reporting year thanks to adjusted and flexible inventory and demand planning management in close coordination with suppliers. The ongoing establishment of alternative procurement sources to reduce dependence and the expansion of the European supplier base were vital elements in securing stable supply. Both of these measures contributed to boosting Jungheinrich's negotiating position and attain competitive prices.

An increasingly critical factor on the procurement side was the availability of skilled personnel, leading suppliers to report early on about capacity issues resulting from personnel shortages. The cooperation with suppliers, built up over many years, proved its worth here in terms of the demand and production planning as well as targeted process management. Thus far it has been possible to avoid disruptions in the supply chains.

Although the energy supply situation in Europe continues to improve, geopolitical tensions can still have a considerable impact on energy supplies. The longer-term goal is to reduce dependence on gas supply and to substitute gas as an energy source. In this context, Jungheinrich relies on the use of alternative fossil and renewable energy sources for both process heat and heating, in addition to focused savings in consumption, in order to aid the decoupling from the gas supply.

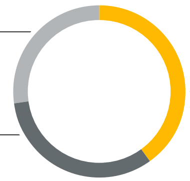
The task of establishing and optimising sustainable procurement in internal processes and with suppliers was continued in 2023. For instance, the requirements of the Act on Corporate Due Diligence Obligations in Supply Chains (LkSG) were integrated in Jungheinrich's procurement processes and the supplier qualification process. In addition, the existing management system for sustainable procurement was extended to include preventative and remedial measures and the organisational prerequisites were put in place to fulfil not only the LkSG requirements but also the strategic sustainability targets.

In light of the slight decline in production unit numbers and simultaneous reduction in safety stock levels, the purchasing volumes for production materials decreased. Mainly as a result of inflation, the purchasing volume for indirect materials and services on the other hand increased noticeably. This led to an increase in the purchasing volume overall to €3,215 million in the 2023 financial year following €3,118 million in the previous year.

The purchasing volume can generally be divided into:

- Production materials, including post-production materials
- Indirect materials and services
- Merchandise

Breakdown of purchasing volume in 2023



in € million	2023	2022	Change %
Production materials	1,300	1,387	–6.3
Indirect materials and services	1,043	903	15.5
Merchandise	872	828	5.3
Total	**3,215**	**3,118**	**3.1**

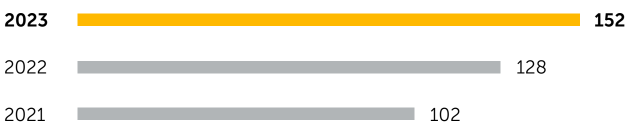
Due to Jungheinrich's strong presence in the European market and the production plants being primarily located in Germany, 90 per cent of the purchasing volume was attributable to Europe.

The top-selling commodity groups were batteries, warehouse equipment, steel components, electric drive trains and logistics services.

Research and development

The main research and development (R&D) activities in the financial year were the construction of new material handling equipment with a focus on the further development of efficient energy storage systems based on lithium-ion technology. There was also a focus on the development of mobile robots and the optimisation of automated systems. A further focal R&D point was digital products.

Research and development expenditure in € million



R&D expenditure consists primarily of internal services. Including the use of third-party services, it stood at €152 million in the Group, 18.8 per cent higher than in the previous year (€128 million). As in the previous year, this corresponded to a 2.7 per cent share of Group revenue. The increase in important product development work meant that the capitalisation ratio rose to 29 per cent (previous year: 24 per cent). In the reporting period, depreciation, amortisation and impairment losses on capitalised development expenditure included impairment losses of €3 million. These impairment losses were related to the development of a technology which will not be continued.

R&D received another personnel boost in the reporting year; the number of employees involved in development projects across the Group stood at an average of 1,017 in the reporting period (previous year: 885). The change was largely down to the full acquisition of Magazino. Jungheinrich AG, which is responsible for Group-wide basic and product development, accounted for 141 (previous year: 130) employees.

Research and development

in € million	2023	2022	Change %
Total R&D expenditure	152	128	18.8
thereof capitalised development expenditure	45	30	50.0
Capitalisation ratio	29%	24%	–
Depreciation, amortisation and impairment losses on capitalised development expenditure	14	16	–12.5
R&D costs (statement of profit or loss)	121	113	7.1
Total R&D expenditure/ Group revenue	2.7%	2.7%	–
Average number of R&D employees (FTE)	1,017	885	14.9
Number of patent applications	133	99	34.3
Number of patents granted	152	165	–7.9

Table contains rounding differences.

STRATEGY 2025+

We continued implementing Strategy 2025+ in the 2023 financial year. Despite the ongoing challenging conditions from both a macroeconomic and geopolitical point of view, initiatives and measures were still implemented in all six strategic fields of action.

Central targets reviewed and adjusted

Taking into account the acquisition and anticipated contributions from Storage Solutions and in light of other material macroeconomic challenges at the time the corporate strategy was published in November 2020, we have reviewed and partially adjusted our targets in the year under review. The aim is to increase Group revenue to €6.0 billion organically by the 2025 financial year (previously: €5.5 billion) and again achieve EBIT ROS of 8 to 10 per cent. Our target is to generate more than 20 per cent of the revenue outside of Europe, this increase in revenue will be both organic and inorganic. ROCE is anticipated to be between 14 per cent and 18 per cent (previously: 21 per cent to 25 per cent). The changes in the target ranges reflect that the goodwill of the acquisitions was taken into account. By 2025, 50 per cent (previously 70 per cent) of Jungheinrich trucks should be fitted with lithium-ion batteries. The considerable increase in cell prices have led to an adjustment of this target. We are aiming for an EBIT per employee of around €23,000. By 2025, the proportion of female managers is targeted to reach 20 per cent.

The minimum target for free cash flow is now more than €300 million (previously: at least €100 million). As far as sustainability is concerned, we have set ourselves various targets, but the main target is to achieve net-zero Scope 1 and 2 greenhouse gas emissions by 2030. To this end, our aim is to reduce direct CO_2e emissions in Scope 1 by 42 per cent compared to the baseline year of 2021 in line with the Science Based Targets initiative (SBTi) and procure 100 per cent of electricity from renewable sources by 2030.

Automation: key factor in envisaged growth
The focus of our measures in the automation strategic field of action is on mobile robots and automated storage& retrieval systems (ASRS). Mobile robots includes both Automated Guided Vehicles (AGV) and Autonomous Mobile Robots (AMR).

In the reporting year, we also initiated further development activities for the PowerCube, an automated compact storage system for containers that was brought onto the market in 2022. Jungheinrich also launched the EAE 212a in 2023, a newly developed mobile robot solution for low-lift trucks.

We increased our shareholding in robotics specialist Magazino to 100 per cent in the reporting year. The purchase price for the remaining shares came to €20 million. Magazino has a high-performance technology platform that allows the operation of logistics robots even in a mixed human-machine environment. With approx. 120 employees, Magazino boosts the autonomous robot business and increases Jungheinrich's software expertise.

We expanded the customer base for the AMR arculee in 2023. The autonomous mobile robot was launched in 2022 and is used in underload transport and in goods-to-person order picking.

We firmly believe that the high-volume global market for warehouse logistics automation is a market with above-average growth and we intend to keep expanding our position in this market. Accordingly, it was decided to create a new Board of Management division for automation. As a result, all customer-specific project business units and resources focussing on mobile robots, ASRS and warehouse equipment will be pooled in this division from 1 April 2024.

Digitalisation: further development of the IT infrastructure
The digital fleet management system, Jungheinrich FMS, has been available in three more countries – Latvia, Lithuania and Slovenia – since 2023. The system is now available in 25 countries. Expansion to further countries, especially outside Europe, is planned for the coming years. We added new software modules and functions to the Jungheinrich FMS in 2023. The migration of customers of the predecessor ISM Online to the new Jungheinrich FMS is also virtually complete. Since August 2023, almost every truck manufactured in Europe has a telematics box integrated as standard. That means the free Jungheinrich FMS starter kit can be activated for each truck with a telematics box and further premium modules can be added. The telematics box is the technical foundation for further data-based services in future such as remote diagnostics and predictive maintenance.

Jungheinrich's largest IT project to date – establishing a new IT infrastructure – was completed in 2023. The interconnectivity created between the private Jungheinrich cloud and IT providers' offers guarantees the secure, flexible and fast availability of IT services and products worldwide. On the basis of this infrastructure, Jungheinrich's ongoing digital transformation optimises the interconnectivity of processes, data and applications both in its own processes and the digitalisation of its customers' intralogistics processes.

Energy systems: sharp increase in demand in core business
Jungheinrich ceased manufacturing IC engine-powered trucks in March 2023 and since then manufactures 100 per cent electric trucks. We recorded a strong rise in demand for POWERLiNE trucks, which are considerably more compact than their predecessors thanks to integrated lithium-ion batteries and thus offer an advantage in tight warehouse environments, in the 2023 financial year. In addition, POWERLiNE trucks are CO_2e-neutral until delivery to the customer.

Efficiency: organisational and procedural transformation is progressing
Jungheinrich has been manufacturing the ETV 216i reach truck at the new Chomutov plant in Czechia since June 2023. A new 37,000 square-metre building was constructed that is both energy-efficient and carbon-optimised. The project budget of approx. €60 million was almost completely used in the reporting year. The new plant is a central building block to increase efficiency and profitability.

We also expanded our near-shoring organisation in 2023. In Madrid, the focus is on internal IT services and development services for digital products. At the end of 2023, the company employed a staff of almost 100 there. The personnel capacities in Braşov (Romania), where our internal administrative services are increasingly based, more than doubled in the reporting year to 140 employees. At the small location, in terms of capacity, in Zagreb, employees provide software and hardware development services for the entire Group.

Key measures to increase efficiency in the Jungheinrich Group, including the digital transformation of the company, are managed through the DEEP programme (Digital End-to-End Processes). DEEP is designed to achieve customer-focussed and lean, automated processes. The design and implementation phases were continued in 2023. We have achieved the first two programme milestones with the central master data solution and the central finance system. Development work on the Group-wide ERP system was continued along with the implementation of other important applications, for example a new internal service management solution for the after-sales service business.

Global footprint: present on the American market with Storage Solutions and Rocrich

Jungheinrich's strategic goal is to grow through acquisitions and partnerships, too. With the acquisition of the Storage Solutions Group, a leading provider of racking systems and warehouse automation in the US, we have significantly expanded our global footprint in the North America region. The purchase price was €325 million. With Storage Solutions, we now have access to the US market for warehouse equipment and automation and thus the ability to exploit further growth potential in this market. The post-merger integration of Storage Solutions is going according to plan and the business performance was in line with expectations in the reporting period.

We have established an optimised range of automation solutions in North America with the joint venture Rocrich. The combination of Mitsubishi Logisnext's (brand: Rocla) truck portfolio and Jungheinrich's AGVs, puts us in a position to serve the North American market with more than 570 Logisnext retail locations.

Sustainability: creating sustainable value remains the main focus

We participate in ratings and rankings in order to show the progress we are making in the field of sustainability. Based on communication with stakeholders and internal analyses, we focus on selected ESG ratings in order to specifically develop our externally evaluated sustainability performance.

EcoVadis awarded Jungheinrich Platinum status for the third consecutive time in 2023. The CDP rating of B in the previous year in the climate category was again confirmed for 2023 (in a nine-step scale from A to F) for transparency and commitment to climate protection. ISS ESG Corporate Rating again awarded Jungheinrich the sector-specific status Prime in the reporting year. Jungheinrich improved its rating to B– (12-step scale from A+ to D–). The Group again achieved a rating of A from MSCI ESG Ratings (seven-step industry-specific scale from AAA to CCC) in 2023.

A great deal of progress has been made throughout the Group in terms of sustainability, but the following is particularly noteworthy: By the end of the 2023 financial year, the transition to electricity from renewable energy was completed in 28 countries. We also expanded the CO_2e-neutral after-sales service to five markets. We formalised the Group-wide human rights management system and Jungheinrich published its first policy statement on respecting human rights. In addition, we joined the UN Global Compact Initiative.

We provide extensive information regarding our sustainability activities in the combined separate non-financial report in this annual report in accordance with the CSR Directive Implementation Act (CSR-RUG) [page 54].

Economic report

ECONOMIC AND SECTOR ENVIRONMENT

The regional focus of Jungheinrich's activities lies in Europe. Outside Europe, the focus is on North America and Asia Pacific. Each country's gross domestic product (GDP) as an economic indicator is key to evaluating business developments in these regions.

Europe holding back global economic growth

In 2023, the global economy recorded less growth than in the previous year, despite high GDP growth in the United States and China. The ongoing Russia-Ukraine war, rising interest rates, fears of recession and the latest escalation in the Middle East conflict all dominated the global economy and led to a much lower increase in economic output, particularly in the eurozone, in the reporting year.

Growth rates for selected economic regions

Gross domestic product in %	**2023**	2022
World	3.1	3.5
USA	2.5	1.9
China	5.2	3.0
Eurozone	0.5	3.4
Germany	–0.3	1.8

Source: International Monetary Fund (estimates as of 30 January 2024 with updated prior-year figures compared to the 2022 combined management report).

Thus, with a GDP increase of just 0.5 per cent, the eurozone showed noticeably lower growth in economic output than in the previous year (3.4 per cent). Following growth of 1.8 per cent in the previous year, Germany's export-oriented economy contracted by 0.3 per cent in 2023. Based on a GDP increase of 2.5 per cent in the previous year, the French economy only recorded an increase in economic growth of 0.8 per cent in the reporting year. Similar developments were seen in the Italian and British growth rates: the Italian economy grew 0.7 per cent in the reporting year, following 3.7 per cent in the previous year, while GDP in the UK rose 0.5 per cent following 4.3 per cent in 2022. Jungheinrich generates 45 per cent of its Group revenue in the four countries mentioned above.

STATEMENT FROM THE BOARD OF MANAGEMENT AND TARGET ACHIEVEMENT

In light of the latest corporate planning and the positive business performance in the first quarter of 2023, the Board of Management of Jungheinrich AG raised the forecast ranges for 2023 published in the 2022 annual report in an ad hoc announcement on 24 April 2023. The impact of the acquisition of the Storage Solutions Group on the individual forecast ranges was also provided in the adjusted forecast. The acquisition was taken into account in the previous forecast, but not individually quantified. Following the final purchase price adjustment and the completed purchase price allocation, the impacts of the acquisition of the Storage Solutions Group were updated in the interim report as of 30 June 2023 on 9 August 2023.

At €5,238 million, incoming orders in the Group was in the middle of the forecast range (€5.0 billion to €5.4 billion). Storage Solutions' contribution was expected to be €0.3 billion but came in lower at €0.2 billion due to demand. Group revenue amounted to €5,546 million and reached the upper value of the forecast range (€5.1 billion to €5.5 billion). Storage Solutions' contribution to revenue amounted to €0.2 billion as planned.

Despite an increase in personnel (including through acquisitions), tariff effects, a rise in the cost of materials and a slight decrease in number of units produced in comparison with the previous year, we were able to generate EBIT of €430 million thanks to appropriate measures and thus achieve a figure in the middle of the forecast range of €400 million to €450 million. The effect on EBIT from the Storage Solutions Group in the amount of €–5 million is also taken into account. This effect is the result of a positive operating contribution to EBIT and negative effects from transaction-related expenses, effects from the purchase price allocation and variable remuneration elements for the management of the Storage Solutions Group. EBIT ROS came to 7.8 per cent and was thus at the lower end of the range of between 7.8 per cent and 8.6 per cent.

At €399 million, EBT was in the middle of the expected range of €370 million to €420 million. EBIT ROS came to 7.2 per cent and was thus at the lower end of the forecast range of between 7.2 per cent and 8.0 per cent.

ROCE of 15.9 per cent was in the lower half of the forecast range of 15.0 per cent to 18.0 per cent. This was due to the increase in average capital employed in the reporting year as a result of the goodwill recognised for Storage Solutions and Magazino in the amount of €302 million.

Free cash flow came to €15 million and was significantly better than in the previous year (€–239 million), as anticipated. A negative free cash flow was originally expected, but thanks to the stable working capital compared to the previous year, even a slightly positive cash flow was generated in contrast to the forecast. The positive free cash flow figure takes into account the outflow of €326 million for the acquisition of Storage Solutions and Magazino.

Target-to-actual comparison

		Forecast		actual 2023
		March 2023[1]	April 2023[2]	
Incoming orders	in € billion	4.8 to 5.2	5.0 to 5.4	5.2
Revenue	in € billion	4.9 to 5.3	5.1 to 5.5	5.5
EBIT	in € million	350 to 400	400 to 450	430
EBIT ROS	in %	7.3 to 8.1	7.8 to 8.6	7.8
EBT	in € million	325 to 375	370 to 420	399
EBT ROS	in %	6.6 to 7.4	7.2 to 8.0	7.2
ROCE	in %	13.0 to 16.0	15.0 to 18.0	15.9
Free cash flow	in € million	significantly better, but still negative		15

[1] Annual report 2022.
[2] Ad hoc release from 24 April 2023 and interim report as of 31 March 2023.

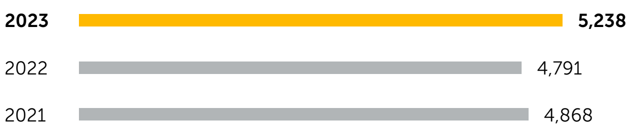
BUSINESS TREND AND EARNINGS POSITION

Orders on hand reflect normalisation of supply chains

At 122 thousand units, incoming orders in new business, based on units, which includes orders for both new forklifts and trucks for short-term rental, fell by 5.4 per cent (previous year: 129 thousand units). By value, incoming orders for the business fields of new business, short-term rental and used equipment, as well as after-sales services were 9.3 per cent higher than the previous year's level at €5,238 million (previous year: €4,791 million). The incoming orders attributable to Storage Solutions amounted to €157 million.

Orders on hand in new business amounted to €1,441 million as of 31 December 2023 (previous year: €1,595 million) and takes into account orders on hand of €51 million at the Storage Solutions Group. Developments in orders on hand are due to the further normalisation of supply chains, which led to a successive processing of existing orders.

Incoming orders in € million

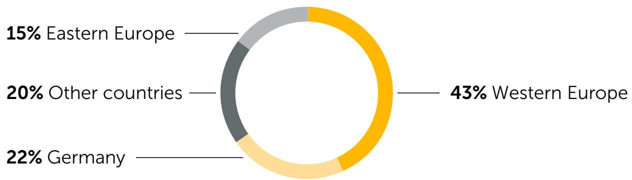


Revenue outside Europe exceeds €1 billion as a result of acquisition

Group revenue exceeded the previous year's figure (€4,763 million) by 16.4 per cent or €783 million and amounted to €5,546 million. Europe accounted for 80 per cent (previous year: 84 per cent) of revenue. Foreign revenue increased by 18.7 per cent to €4,341 million (previous year: €3,657 million). In addition to the rise in revenue outside of Europe, revenue in the UK, France and Italy also climbed considerably. The foreign ratio was 78 per cent (previous year: 77 per cent).

Outside of Europe, revenue jumped 45.7 per cent to €1,087 million (previous year: €746 million). The share of Group revenue from outside Europe thus increased to 20 per cent (previous year: 16 per cent). The main reason for this is the first partial inclusion of the Storage Solutions Group.

Revenue in 2023 by region



in € million	2023	2022	Change %
Germany	1,205	1,106	9.0
Western Europe	2,395	2,113	13.3
Eastern Europe	859	798	7.6
Other countries	1,087	746	45.7
Total	**5,546**	**4,763**	**16.4**

Like the developments in orders on hand, Group revenue also profited from the further normalisation of supply chains. The main driver of Group revenue was new business, with revenue growth of €526 million. In addition to the very positive growth in new trucks, the revenue from Storage Solutions (€219 million) accounted for under new business also contributed to this performance. Revenue in the short-term rental and used equipment business also increased and amounted to €761 million (previous year: €710 million). This was due to demand for trucks for short-term rental and used trucks. After-sales grew noticeably, with revenue amounting to €1,451 million in the reporting period (previous year: €1,310 million). The after-sales services share of Group revenue amounted to 26 per cent (previous year: 28 per cent). At €1,322 million, revenue in the "Financial Services" segment was higher than in the previous year (€1,131 million).

Breakdown of revenue

in € million	**2023**	2022	Change %
New business	3,384	2,858	18.4
Short-term rental and used equipment	761	710	7.2
After-sales services	1,451	1,310	10.8
"Intralogistics" segment	**5,595**	**4,878**	**14.7**
"Financial Services" segment	**1,322**	**1,131**	**16.9**
Reconciliation	–1,372	–1,245	10.2
Jungheinrich Group	**5,546**	**4,763**	**16.4**

Table contains rounding differences.

Gross profit benefits from higher revenue

Gross profit on sales increased by €251 million to €1,724 million (previous year: €1,473 million). In the reporting period, it benefited from the higher sales, despite increases in the cost of materials, including the first-time, pro rata inclusion of Storage Solutions, and appropriate measures to safeguard margins. The gross margin correspondingly rose from 30.9 per cent in the same period of the previous year to 31.1 per cent.

Cost structure (statement of profit or loss)

in € million	**2023**	2022	Change %
Cost of sales	3,822	3,290	16.2
Gross profit	1,724	1,473	17.0
Selling expenses	975	834	16.9
R&D costs	121	113	7.1
General administrative expenses	203	161	26.1

The increase in selling expenses was roughly proportional to revenue growth. This was primarily due to the increase in Sales personnel and the associated increase in personnel expenses. Effects from the acquisition of Storage Solutions also had an impact. Selling expenses represented 17.6 per cent of Group revenue (previous year: 17.5 per cent).

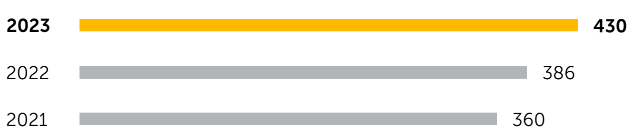
R&D costs rose by €8 million to €121 million (previous year: €113 million). This increase reflects the expansion of development activities related to expanding the product portfolio.

At 3.7 per cent of Group revenue, administrative expenses were slightly higher than the previous year's figure (3.4 per cent). The development in administrative expenses reflects expenses – including expenses for building up human resource capacities – associated with strategic projects on ongoing process optimisation, efficiency optimisation and digitalisation projects which also climbed compared to the previous year, as planned.

Other operating income decreased by €9 million to €8 million (previous year: €17 million). The previous year's high figure contained net income from the transitional consolidation of shares in JT Energy Systems GmbH (€5 million) and proceeds from the sale of real estate (€6 million).

Other operating expenses increased by €10 million to €12 million (previous year: €2 million). This was primarily due to transaction costs (€8 million) in connection with the acquisition of the Storage Solutions Group.

Earnings before interest and income taxes in € million

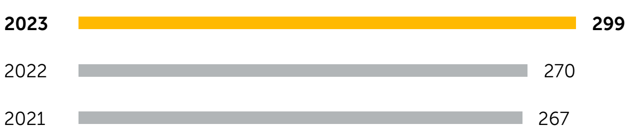


EBIT exceeds €400 million for the first time

At €430 million, EBIT exceeded the previous year's level (€386 million) by €44 million, or 11.4 per cent. The contribution to operating earnings from the Storage Solutions Group included in this figure amounted to €31 million. Taking into account the negative impacts from the costs related to the transaction (€8 million), the purchase price allocation (€13 million) and the variable remuneration components (€15 million), the Storage Solutions Group made a contribution to EBIT of €–5 million in total. The impact on EBIT from the full acquisition of Magazino totalled €–7 million. At 7.8 per cent, EBIT ROS was less than the previous year's level (8.1 per cent).

The financial income totalled €–31 million (previous year: €–39 million) and was particularly influenced by the results from the measurement of the securities and derivatives in the special fund. Profit was recorded here in the year under review; however significant losses were recorded in the previous year. In addition, there were positive effects from the currency hedge for the purchase price payments for Storage Solutions. At €399 million, EBT exceeded the previous year's figure (€347 million). EBT ROS amounted to 7.2 per cent (previous year: 7.3 per cent).

Profit or loss in € million



Income tax expenses increased in line with the development in earnings to €100 million (previous year: €78 million). The Group tax rate amounted to 25 per cent following 22 per cent in the previous year. The main reason for the higher tax rate in the reporting year was that, compared to the previous year, a much higher share of profits was generated in Germany. Profit or loss of €299 million (previous year: €270 million) was thus generated. The earnings per preferred share (based on share of earnings attributable to the shareholders of Jungheinrich AG) came to €2.94 (previous year: €2.65).

ROCE fell to 15.9 per cent (previous year: 16.3 per cent). This was due to the increase in average capital employed in the reporting year as a result of the goodwill recognised for Storage Solutions and Magazino in the amount of €302 million.

Dividend rises to historic high

The Board of Management and Supervisory Board of Jungheinrich AG will propose a dividend payout of €0.73 (previous year: €0.66) per ordinary share and €0.75 (previous year: €0.68) per preferred share to the Annual General Meeting on 15 May 2024. This dividend proposal will result in a total payout of €75 million (previous year: €68 million). The payment ratio of 25 per cent, as in the previous year, is in the company's target range of paying between 25 per cent and 30 per cent of profit to shareholders. Jungheinrich follows a policy of consistent dividend payments.

FINANCIAL AND ASSET POSITION

Principles and targets of financial management

The parent company, Jungheinrich AG, is responsible for the Group's financial management. It ensures that sufficient financial resources are available to cover strategic and operational requirements.

The Group treasury is primarily responsible for cash and currency management. It aims to provide Group companies with financial resources at the best interest and currency conditions, and to control cash flows. All financing possibilities provided by international money and capital markets are exploited in order to procure the short, medium and long-term financial resources that are required.

Ensuring that the Group has sufficient liquidity reserves is particularly important so that the Group is able, even in economically difficult times, to implement all necessary strategic measures and guarantee financial independence.

The Group takes a conservative approach to investing in order to ensure sufficient liquidity. The objective is not to maximise profit, but – considering current conditions in the international money and capital markets – to preserve assets.

A central working capital management system is in place to strengthen internal financing that ensures the optimisation and standardisation of material processes and systems.

Jungheinrich AG's capital requirements are covered through operating cash flows and short and long-term financing. Jungheinrich maintains a solid liquidity reserve. As of 31 December 2023, the medium-term credit agreements in place amounted to €305 million. These were supplemented by short-term bilateral credit lines amounting to €196 million and a commercial paper programme amounting to €300 million. Both the medium-term credit agreements and short-term credit lines were only used to a small extent. As at the balance sheet date, the commercial paper programme had not been used. In addition, separate guarantee facilities totalling €159 million were available, almost half of which were utilised. There were promissory notes in the total amount of €160 million as at the reporting date.

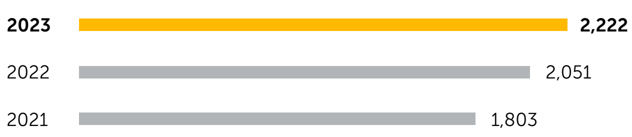
Bridge financing in the amount of €300 million was taken out specifically for the purpose of financing the acquisition of Storage Solutions. A credit agreement for €125 million was also concluded in the reporting year for the medium- and long-term financing of research and development expenditure. As of 31 December 2023, none of these funds had been used.

Credit or promissory note agreements do not contain financial covenants.

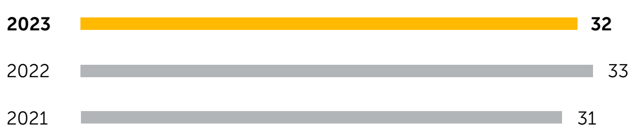
Net debt reflects acquisition activities

At €662 million at the end of 2023, cash and cash equivalents and securities were €127 million above the prior-year figure (€535 million). Working capital has remained stable in comparison with the previous year. The reduction in inventories was largely balanced out through the increase in receivables, the decrease in contract liabilities and trade accounts payable. As of 31 December 2023, net debt amounted to €262 million (previous year: €75 million). The marked rise of €187 million is first and foremost due to the purchase price payments for Storage Solutions and Magazino, which had a negative impact of €326 million on free cash flow.

Shareholders' equity in € million



Equity ratio in %



Capital structure

in € million	31/12/2023	31/12/2022	Change %
Shareholders' equity	**2,222**	**2,051**	**8.3**
Non-current liabilities	**2,236**	**2,130**	**5.0**
Provisions for pensions and similar obligations	180	159	13.2
Financial liabilities	357	420	−15.0
Liabilities from financial services	1,529	1,416	8.0
Other liabilities	170	135	25.9
Current liabilities	**2,451**	**1,983**	**23.6**
Other provisions	343	292	17.5
Financial liabilities	567	189	> 100.0
Liabilities from financial services	617	576	7.1
Trade accounts payable	560	556	0.7
Other liabilities	364	370	−1.6
Balance sheet total	**6,910**	**6,164**	**12.1**

Table contains rounding differences.

In addition to profit or loss, the main influencing factor in the €171 million increase in shareholders' equity in the reporting period was the offsetting negative effect with no effect on profit or loss from currency translation. This increase in shareholders' equity was offset by the dividend payment of €68 million (previous year: €68 million). Due to the higher increase in the balance sheet total, the equity ratio declined slightly to 32 per cent (previous year: 33 per cent). Adjusted for all effects from the "Financial Services" segment, the shareholder's equity for "Intralogistics" amounted to 47 per cent (previous year: 50 per cent).

Provisions for pensions and similar obligations rose to €180 million against the previous year (€159 million). This was primarily driven by the discount rate for the remeasurement of pension provisions in Germany decreasing from 4.2 per cent at the end of 2022 to 3.5 per cent as at the balance sheet date. The Group's non-current and current financial liabilities went up by €315 million to €924 million (previous year: €609 million). This was caused by the bridge financing of €300 million for the acquisition of Storage Solutions, which was recognised in current financial liabilities. At €2,146 million, current and non-current liabilities from financial services were up €154 million against the figure as of 31 December 2022 (€1,992 million), due to the higher level of contracts.

At €343 million, other current provisions were higher than the figure reported on 31 December 2022 (€292 million). This was primarily due to additions to provisions for personnel in the amount of €57 million. Trade accounts payable remained on a par with the previous year's level at €560 million (€556 million). Other current liabilities declined slightly to €364 million, mainly as a result of a decrease in contract liabilities (previous year: €370 million).

Free cash flow, the key performance indicator used to manage the Group's liquidity and financing, is determined as follows using the cash flow from operating activities and investing activities reported in the statement of cash flows:

Reconciliation free cash flow

in € million	**2023**	2022
Cash flows from operating activities	**472**	**–136**
Cash flows from investing activities	–430	79
Adjustment for payments for acquisitions and proceeds from the sale of securities as well as payments for time deposits and proceeds from time deposits	–27	–182
Cash flows from investing activities (adjusted)	**–457**	**–103**
Free cash flow	**15**	**–239**

Statement of cash flows[1]

in € million	**2023**	2022
Profit or loss	299	270
Depreciation, amortisation and impairment losses	447	401
Changes in trucks for short-term rental and trucks for lease (excluding depreciation) and receivables from financial services	–487	–465
Changes in liabilities from financing trucks for short-term rental and financial services	145	19
Changes in working capital	1	–364
Other changes	68	4
Cash flows from operating activities	**472**	**–136**
Cash flows from investing activities (adjusted)	**–457**	**–103**
Cash flows from financing activities	**117**	**37**
Net cash changes in cash and cash equivalents	**132**	**–202**

Tables contain rounding differences.

[1] Exchange rate effects were eliminated in the cash flow statement. Therefore the changes in balance sheet items shown there cannot be reproduced in the statement of financial position.

Cash flow from operating activities reflects relief from stable working capital

Cash flow from operating activities amounted to €+472 million for the period of January to December 2023, a significant increase of €608 million compared with the previous year (€–136 million). The unchanged working capital had a positive impact on cash flow of €365 million in comparison with the previous year. Additions to trucks for short-term rental and trucks for lease along with developments in receivables from financial services in connection with the underlying financing transactions had a positive impact of €104 million.

At €–457 million, the negative cash flow from investing activities in the reporting period was significantly higher than in the same period last year (€–103 million). €326 million from the purchase price payments for Storage Solutions and Magazino is included in cash flow from investing activities in the reporting period. Investments in property, plant and equipment included €16 million for the construction of the new plant in Chomutov, Czechia.

Free cash flow, the sum of cash flow from operating activities and investing activities, improved markedly to €+15 million (previous year: €–239 million). The positive free cash flow figure takes into account the outflow for the acquisition of Storage Solutions and Magazino (€326 million).

Financing of acquisitions dominates cash flow from financing activities

Cash flow from financing activities of €117 million in the reporting year climbed by €80 million compared to the same period last year (€37 million). The main reason for this was the purchase price financing of €300 million for the acquisition of Storage Solutions.

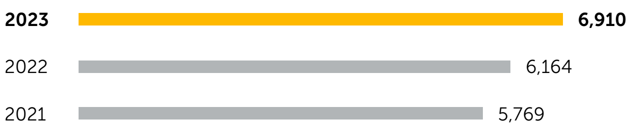
Acquisition leads to increase in non-current and current assets

The increase in intangible assets and property, plant and equipment by €437 million to €1,355 million resulted primarily from the acquisition of the Storage Solutions Group. This transaction resulted in customer relationships, brands, orders on hand and software/technologies totalling €53 million and €274 million for the remaining goodwill being reported under intangible assets as at the balance sheet date. Acquired technologies and the goodwill of Magazino came to a total of €40 million.

The carrying amounts for trucks for short-term rental and trucks for lease amounted to €1,038 million as at the balance sheet date. The carrying amount for trucks for lease increased slightly to €470 million following €459 million at the end of the 2022 financial year, while trucks for lease from financial services remained virtually unchanged at €568 million in comparison with 31 December 2022 (€567 million). Due to the expansion of business, non-current and current receivables from financial services increased by €189 million to €1,652 million compared with the figure in the previous year (€1,463 million).

The €67 million decrease in inventories to €927 million (previous year: €994 million) was a result of measures taken to reduce stocks. Cash and cash equivalents and current securities rose by €146 million as at the balance sheet date to €652 million (previous year: €506 million).

Balance sheet total in € million



Asset structure

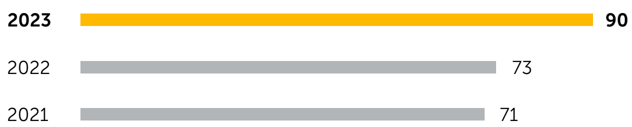
in € million	31/12/2023	31/12/2022	Change %
Non-current assets	**3,832**	**3,251**	**17.9**
Intangible assets and property, plant and equipment	1,355	918	47.6
Trucks for short-term rental and trucks for lease	1,038	1,026	1.2
Receivables from financial services	1,212	1,057	14.7
Other assets (including financial assets)	217	221	–1.8
Securities	10	29	–65.5
Current assets	**3,078**	**2,913**	**5.7**
Inventories	927	994	–6.7
Trade accounts receivable	955	899	6.2
Receivables from financial services	440	406	8.4
Other assets	105	108	–2.8
Cash and cash equivalents and securities	652	506	28.9
Balance sheet total	**6,910**	**6,164**	**12.1**

Table contains rounding differences.

Higher capital expenditure reflects capacity expansion in Czechia

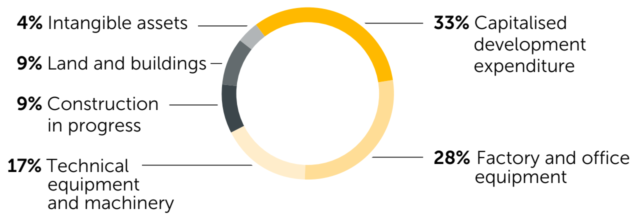
At €90 million, capital expenditure related to property, plant and equipment was up significantly on the previous year (€73 million). Of the project budget for the construction of the new plant in Chomutov (Czechia) (approx. €60 million), €16 million was used in the reporting year, while €7 million was included in the capital expenditure figure in the previous year. As at the balance sheet date, purchase commitments for property, plant and equipment alone amounted to €7 million. Capital expenditure was financed with the company's own resources.

Capital expenditure[1] in € million



[1] Property, plant and equipment and intangible assets excluding capitalised development expenditure and right-of-use assets.

Distribution of capital expenditure 2023[2]



[2] Property, plant and equipment and intangible assets excluding right-of-use assets.

FINANCIAL SERVICES

Financial services business secures long-term customer loyalty

All of the company's financial services activities are pooled in the "Financial Services" segment. This segment provides individual transfer of use and sales financing to promote the sale of trucks. The financial service agreements offered are always combined with full service or maintenance agreements. This business model's objective is to provide customer service for the entire duration of a truck's use and achieve long-term customer loyalty.

All risks and opportunities that result from the financial service agreements are assigned to the operating sales units of the "Intralogistics" segment, with the exception of customer receivable default risks and refinancing risks.

Jungheinrich is represented by its own financial services companies in eight countries: Germany, Italy, France, the UK, Spain, the Netherlands, Austria and Australia.

The "Financial Services" segment's structural and procedural organisation throughout the Group enables a financing structure with powerful domestic and foreign banks. The refinancing company Elbe River Capital S.A., Luxembourg, also enables refinancing to be obtained through the capital market. As in the previous year, the volume placed through this financing platform amounted to €301 million as of 31 December 2023.

In addition to the SAP standard software used by the financial services business to record and balance lease agreements, there is a software solution that uses a database (Global Lease Center) for smaller sales units.

Refinancing with matching terms and interest rates

Jungheinrich companies conclude financial service agreements either directly with customers or indirectly via leasing companies or banks (also known as vendor contracts). Agreements concluded directly with customers are reported as operating leases or finance leases pursuant to IFRS accounting regulations. These long-term customer agreements are refinanced with matching terms and interest rates and are reported under liabilities from financial services. Payments from customer agreements cover at least the refinancing payments to credit institutes for the transactions. For vendor agreements, deferred revenue stemming from sales proceeds already generated with an intermediate leasing company are stated under deferred income.

Key figures for financial services

in € million	**31/12/2023**	31/12/2022	Change %
Original value of new contracts[1]	971	851	14.1
Original value of contracts on hand	4,069	3,821	6.5
Trucks for lease from financial services	708	712	–0.6
Receivables from financial services	1,665	1,476	12.8
Shareholders' equity	122	120	1.7
Liabilities	2,589	2,418	7.1
Revenue[1]	1,322	1,131	16.9
EBIT[1]	17	25	–32.0

[1] 1 January–31 December.

Revenue from financial services significantly exceeds €1 billion

New long-term financial service agreements rose by €120 million in 2023 (previous year: €74 million). The independent financial services companies in the UK, Spain, Austria and the Netherlands are noteworthy with an increase in the value of new agreements of more than 30 per cent. Of the increase in agreements, 62 per cent was attributable to the eight countries with Jungheinrich financial services companies (previous year: 61 per cent).

At the end of 2023, existing agreements totalled 223 thousand units, 2.8 per cent more than the previous year (217 thousand units). This represents an original value of €4,069 million (previous year: €3,821 million).

Relative to the number of new trucks sold, 42 per cent were sold via financial service agreements (previous year: 40 per cent).

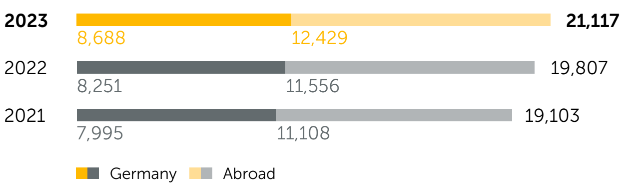
At €1,322 million, revenue in the "Financial Services" segment was higher than in the previous year (€1,131 million).

EMPLOYEES

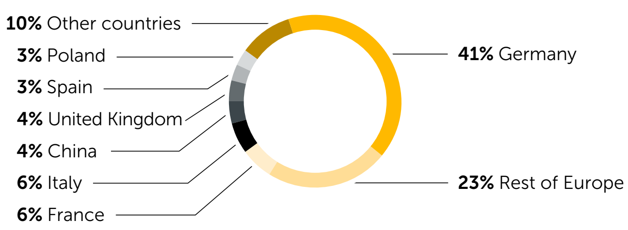
Number of employees worldwide rises to more than 21,000

The number of employees around the world rose by 1,310 in the reporting year. Accordingly, on 31 December 2023, the Group had 21,117 (previous year: 19,807) employees (measured in full-time equivalents). The main factors in this increase were the acquisitions of Storage Solutions (186 employees) and Magazino (117 employees), the expansion of the near-shoring organisation (177 employees) and the start of production at the new plant in Czechia (65 employees).

Employees in FTE; always on 31/12



Employees by region As of 31/12/2023



in FTE	2023	2022	Change %
Germany	8,688	8,251	5.3
France	1,259	1,242	1.4
Italy	1,174	1,113	5.5
United Kingdom	836	781	7.0
Poland	649	533	21.8
Spain	621	618	0.5
Rest of Europe	4,840	4,482	8.0
China	840	919	–8.6
Other countries	2,210	1,868	18.3
Total	**21,117**	**19,807**	**6.6**

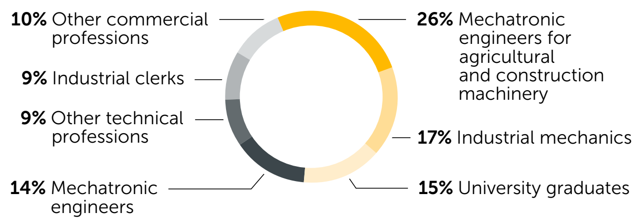
In order to be able to react more flexibly to workload fluctuation, temporary workers are employed alongside the permanent workforce in production plants. In light of the slight decrease in the number of units produced in the year under review, the number of temporary workers also decreased on average throughout the year to 491 (previous year: 635). As of 31 December 2023, the Group employed 438 temporary workers (previous year: 681). This corresponds to a ratio of temporary workers to workforce (in this case employees and temporary workers as of 31 December 2023 in full-time equivalents) of 2.0 per cent (previous year: 3.3 per cent).

After-sales services accounted for 42 per cent of the workforce or 8,950 employees (previous year: 8,497). Of this figure, 6,255 were after-sales service technicians located around the world (previous year: 6,022).

Jungheinrich offers 24 different apprenticeships

As of 31 December 2023, the Group had 511 (previous year: 496) trainees and apprentices, of which 329 (previous year: 334) were based in Germany. The Jungheinrich Group offers 24 different apprenticeships in Germany. This includes dual study courses in cooperation with universities. As in the previous year, the number of trainees and apprentices on dual study courses was 15 per cent in 2023 – based on the number of trainees and apprentices in Germany.

Apprenticeable professions[1] As of 31/12/2023



[1] Basis: 329 apprentices in Germany.

Personnel changes

The former Chairman of the Supervisory Board, Mr Hans-Georg Frey, resigned from office with effect from the end of the Annual General Meeting on 11 May 2023. The ordinary Annual General Meeting on 11 May 2023 elected Mr Rolf Najork to the Supervisory Board for a full term. Mr Najork was then elected Chairman of the Supervisory Board by the Supervisory Board and in this function also took up the chairmanship of the Personnel and Mediation Committees.

Mr Udo Panenka was also appointed to the Board of Management effective 1 April 2024, and will be responsible for the Automation division.

A termination agreement was concluded with Ms Sabine Neuß, under which she will resign from her office on the Board of Management early by 30 June 2024. Mr Maik Manthey was appointed as her successor for the Technics division effective from 1 July 2024.

Legal disclosure

CORPORATE GOVERNANCE STATEMENT PURSUANT TO SECTIONS 289F AND 315D OF THE GERMAN COMMERCIAL CODE (HGB)

Pursuant to Sections 289f and 315d of the HGB, as a listed stock corporation, Jungheinrich AG is obligated to issue a Corporate Governance Statement for the Group. This statement has been published on the company's website ↗ www.jungheinrich.com/en/investor-relations/corporate-governance.

COMBINED SEPARATE NON-FINANCIAL REPORT IN ACCORDANCE WITH THE CSR DIRECTIVE IMPLEMENTATION ACT

In accordance with the CSR Directive Implementation Act, which aims to regulate non-financial corporate reporting, the Jungheinrich Group and Jungheinrich AG are obliged to report on non-financial aspects, including at least environmental, employee and social aspects, along with respect for human rights and combatting corruption and bribery.

The Jungheinrich Group and Jungheinrich AG fulfil this obligation in the form of a combined separate non-financial report in accordance with Sections 289b Paragraph 3 and 315b Paragraph 3 of the German Commercial Code. This report is published as a separate chapter in the annual report. The annual report is published on the company's website ↗ www.jungheinrich.com/en/investor-relations/reports-publications-6224.

Internal control and risk management system

INTERNAL CONTROL SYSTEM[1]

Jungheinrich considers the Internal Control System (ICS) to cover all principles, processes and guidelines introduced to ensure the achievement of business objectives. The objective of the ICS is to ensure the functional capacity, safety and efficiency of material business processes and the reliability of financial reporting and compliance of all activities with laws and guidelines. Jungheinrich has established an ICS in accordance with Section 91 Paragraph 3 AktG. It is based on the Committee of the Sponsoring Organizations of the Treadway Commission (COSO) Internal Control – Integrated Framework (2013), which outlines the elements of a control system and sets the standards for evaluating the appropriateness and effectiveness of internal control systems. The ICS considers all material business processes and in addition to accounting also takes into consideration non-financial aspects, especially sustainability reporting. An effective and efficient ICS is crucial for managing risks in business processes.

A comprehensive expansion of the ICS was initiated in the 2023 financial year, including established responsibilities, methods, processes and new ICS software.

Overall responsibility for the ICS lies with the Jungheinrich Board of Management, which is therefore responsible for ensuring an appropriate and effective ICS. The Group Board of Management keeps the Supervisory Board and the Finance and Audit Committee informed on a continuous basis. In line with the Institute of Internal Auditors' three lines model, it is supported in this task in the second defensive line by the ICS organisation, which is responsible for the operational implementation of the ICS, in addition to risk management, and in the third defensive line by the internal audit department, which assesses the ICS in all audited companies for appropriateness and effectiveness within the context of the approved audit plan.

The Board of Management has established a risk management and internal control organisation to optimise and monitor the ICS process and drive the integration of standardisation of existing control activities in line with the legal and operational requirements. The organisation is a central function responsible for the guidelines, ICS process and methodology. The annual review of the scope of the guidelines ensures that all material elements are monitored by the ICS.

All Jungheinrich companies are part of the ICS. The extent of the implemented controls and the monitoring of the appropriateness and effectiveness of the controls varies and depends in part on the materiality of the companies and corporate processes for the Group and the specific risks associated with the company. The management of the respective company is obliged to establish an appropriate and effective ICS within its sphere of responsibility. Risk-based scoping (quantitative and qualitative according to the risk categories reporting, strategy & operations and compliance) for the companies and processes covered by the ICS is reviewed annually and adjusted as necessary. In addition to processes relevant to accounting, such as record to report, purchase to pay and order to cash, the processes also include other topics such as sustainability reporting and IT.

The main business processes are analysed together with the central process owners in order to identify relevant risks for financial and sustainability reporting. The corresponding controls to minimise risks are documented and set out in an overarching risk-control matrix. Moreover, the Jungheinrich Group has guidelines that define responsibilities, workflows and controls for all material processes. All employees can access these guidelines on the intranet. The ICS controls are based on the processes described in the guidelines. ICS guidelines and the manual outline the aims, scope and responsibilities of the ICS as well as the ICS process.

[1] Disclosure unrelated to the management report that is not subject to audit of the financial statements.

The legal representatives of the companies and the persons responsible for the organisational areas confirm at year closing whether the control and monitoring activities conducted over the course of the year discovered violations of laws or regulations or irregularities within the framework of the ICS. They also confirm the accuracy and completeness of the ICS documentation for their respective spheres of responsibility.

The internal audit department also regularly audits the ICS. These audits are either part of the risk-based annual audit plan or triggered as the result of certain events occurring. The Supervisory Board monitors the effectiveness of internal audit, risk management and the ICS.

The external auditor also audits the effectiveness of the parts of the ICS that are relevant to financial reporting as part of a risk-oriented audit approach. The Jungheinrich Supervisory Board Finance and Audit Committee monitors the effectiveness of the ICS in accordance with Section 107, Paragraph 3 AktG.

Taking into account the external and internal audits of the ICS carried out in 2023, no matters arose that would have led the Jungheinrich AG Board of Management to conclude that the ICS was not appropriate and effective in all material respects in the 2023 financial year.

Jungheinrich continuously develops the requirements for the ICS and adapts the control mechanisms to changing processes and requirements on an ongoing basis.

INTERNAL CONTROL SYSTEM FOR THE GROUP ACCOUNTING PROCESS

The following describes the key features of the internal control and risk management system with respect to the Jungheinrich Group accounting process:

- The Jungheinrich Group has a diverse organisational and corporate structure that ensures appropriate performance checks.
- The holistic analysis and management of earnings-critical risk factors and risks jeopardising the company's existence are handled by Group-wide governance, budgeting and controlling processes as well as a risk management and risk early detection system, which is described below.
- The functions of all Group accounting process departments (e.g. Corporate Accounting, Corporate Controlling and Group Treasury) are clearly assigned.
- IT systems employed in Corporate Accounting are protected from unauthorised access and are largely off-the-shelf software (primarily SAP systems).
- The Jungheinrich Group has guidelines in place determining accountabilities, workflows and controls for all material processes. All employees can access these guidelines on the intranet.
- A comprehensive Group accounting manual regulates the Group accounting process of the individual companies and consolidation at Group level, ensuring that business transactions are accounted for, measured and uniformly reported throughout the Group. The manual is updated regularly and made available to the areas involved in the Group accounting process. Regular sample inspections and plausibility checks are performed both decentrally and centrally to verify the Group accounting data's completeness and correctness. This is done either manually or using software.
- Material processes of relevance to accounting are subject to regular reviews. The establishment of the risk early detection system is examined as part of the statutory annual audit of the annual financial statements and consolidated financial statements. Findings derived from this audit are taken into account when considering the continual improvement of the Group-wide, Jungheinrich-specific system. The Corporate Compliance, Audit & Data Protection division reviews the effectiveness of the accounting-related internal controls.
- The Supervisory Board or its Finance and Audit Committee is responsible for, among other issues, dealing with material issues pertaining to Group accounting and risk management, compliance and the audit assignments and focal points of audits conducted by the independent auditors and the Corporate Compliance, Audit & Data Protection division.
- Another core element of risk governance is the audit of the companies by Internal Audit on the basis of a risk-oriented audit plan.

RISK AND OPPORTUNITY REPORT

The early identification of risks and opportunities and the steps to be taken in response are an important element of corporate governance at Jungheinrich. The basic principles and courses of action are defined as part of the risk management system in a Group guideline and a risk management manual, which are continually checked and developed further.

Objectives of the risk management system and risk culture

Risks and opportunities are fundamental components of all business activities. In a complex, global market in particular there are a number of external as well as internal influences on Jungheinrich's business activities. The objective of the company's risk management system is to recognise and evaluate the risks as well as the opportunities arising from these influences so that adequate control measures can be initiated. Another aim – in addition to creating transparency on risks and opportunities – is to actively promote a corporate culture with a consistent understanding of risks and opportunities throughout the Group.

Risks and opportunities include all future developments or events that could lead to a negative (risk) or positive (opportunity) deviation from targets. The Jungheinrich risk management system is based on the points of the auditing standard 981 of the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW) and it is integrated into a binding Group-wide guideline that is available to all employees.

Risk management system organisation and processes

The Jungheinrich Board of Management is responsible for the development and maintenance of an effective risk management system. Group Risk Management, a unit assigned to Corporate Controlling, defines and develops the risk management system's methods and processes on an ongoing basis and is also responsible for Group-wide quality assurance, coordination and analyses. All those involved with risk management processes continually receive training in the form of courses, at information events and through communication initiatives about the risk management system requirements, methods and news. The risk management system covers the length of the organisational structure at the Jungheinrich Group including decentral organisational units.

Identification

The managers of the central and decentral organisational units are responsible for identifying, evaluating and managing risks and opportunities. In addition to identifying risks and opportunities at regular management meetings, the risk managers perform a comprehensive inventory of risks and opportunities three times a year during the planning and projection processes. The risks and opportunities identified are assigned to predetermined risk areas that are based on the business environment and Jungheinrich's corporate targets.

Evaluation and management

Risks and opportunities are evaluated based on planned business development or the current projection. In addition to the current financial year, the period under consideration for evaluating the risks and opportunities includes the two following financial years. The likelihood of occurrence and the financial impact of the corporate risk on Group EBIT or the profit or loss for risks with a direct impact on the financial result or income taxes is estimated using standardised methods for each of the years considered. The financial impact is considered both before (gross) and after (net) any management measures. Management measures are systematically documented and monitored. Qualitative impacts on reputation, compliance, corporate strategy and operations are also recorded.

Analysing risks

All Corporate Controlling organisational units and designated risk managers perform a multi-stage quality assurance process for the risks and opportunities reported in each risk area. This allows the plausibility of the reported risks to be checked and any redundancies or interdependencies to be identified. Finally, the reported risks and opportunities are analysed by corporate risk management for impacts on the Group. Aggregating all substantial risks and opportunities through a stochastic simulation process allows potential impacts on earnings and Group-wide developments, and any interdependencies, to be identified early on. The key figure value at risk (VaR) is determined for the entire risk portfolio with a confidence level of 99 per cent.

[1] The value-at-risk indicates the maximum value that may not be exceeded before the end of a predetermined period with a certain probability (confidence level).

Monitoring the Group's risk-bearing capacity

To evaluate Jungheinrich's ability to bear risks, all risks identified are checked against the risk-bearing capacity, which takes into account both shareholders' equity and cash and cash equivalents. Other early warning indicators serve to continually monitor risk-bearing capacity and early risk detection.

Communication

The findings of risk analyses are reported in the Group Risk Committee, which is attended by the Board of Management. This includes statements on the ability to bear risks, substantial risks and opportunities and potential management measures. Ad-hoc reporting is also used to inform Group risk management and the Board of Management of all probable and highly probable risks and opportunities that would have a moderate impact or higher.

Monitoring effectiveness

The risk and opportunity situation is an integral part of the planning and projections reported to the Supervisory Board by the Board of Management. The Supervisory Board monitors the efficacy of the risk management system and whether risks and opportunities are handled appropriately. The Corporate Compliance, Audit & Data Protection department, as an independent authority, is tasked with checking that the risk management system functions and is effective.

Overall assessment of risks and opportunities

There were no risks identified in the reporting period that could jeopardise the Jungheinrich Group's continued existence.

Supply shortages and delays originating on the procurement side, along with volatility in the cost of materials are less pronounced than in the previous year, but they remain as central risks and can impact production stability through the value chain as well as delivery times to customers. Jungheinrich established a central crisis team and additional local crisis teams in its organisational units and factories in order to identify upcoming risks caused by supply-side shortages at an early stage and keep the impact of these risks as minimal as possible through timely, appropriate and coordinated measures.

Due to Jungheinrich's international operations, cyclical fluctuations involve risks for business development. Economic developments are continually observed and analysed based on regular market analyses for material handling equipment and automation, the competitive environment and capital markets, especially regarding fluctuations in exchange rates and interest rates. The objective is to discover information that could be relevant to future order development. Production plans are continually adapted to incoming orders in order to achieve the best-possible production capacity utilisation. Production capacity risks in the plants have increased in comparison with the previous year due to the rise in uncertainty in economic cycles. Jungheinrich counters the risk of a downturn in business by continually enhancing the Group's product portfolio, expanding the scope of services, further intensifying marketing and sales, offering financing solutions and implementing efficiency measures.

Cyber attacks also pose risks that are mitigated through security precautions, particularly the continual and targeted expansion of the information technology security management system. The assessment of the potential impacts of cyber attacks has increased in comparison with the previous year due to an increase in overall threats and a more professional assessment methodology for cyber risks including comprehensive quantitative analysis of various risk scenarios.

The ongoing Russia-Ukraine war and its humanitarian, political and economic consequences have resulted in diverse risks for the Jungheinrich Group that could develop into the full impairment of the Russian company due to expropriation.

The risk posed by the potential failure of gas or electricity supplies is lower than in the previous year, not least due to the measures taken to find alternative energy supplies.

Taking into account the external and internal audits of the risk management system and the compliance management system carried out in 2023, no matters became known that would have led the Jungheinrich AG Board of Management to conclude that the risk management system or the compliance management system was not appropriate and effective in all material respects in the 2023 financial year.[1]

[1] Disclosure unrelated to the management report that is not subject to audit of the financial statements.

Risk and opportunity situation

The following table gives an overview of the substantial risks and opportunities and their potential impact on the Jungheinrich Group for the next two financial years as well as the change compared to the previous year. The net impacts of risks and opportunities are presented separately and not offset against each other. Risks and opportunities are aggregated in risk areas at Jungheinrich, with risks classified according to their negative impact on the result based on VaR 99 per cent (loss value) and opportunities according to their positive impact on the result based on VaR 20 per cent (gain value). The prior-year comparison presented here refers to a change in the assignment to the impact class as of a minimum change of €2 million.

Risks and opportunities are divided into the following impact classes based on their net impact:

Very low	≤ €0.5 million
Low	> €0.5 million to ≤ €2 million
Moderate	> €2 million to ≤ €10 million
High	> €10 million to ≤ €20 million
Very high	> €20 million

Risk areas of Jungheinrich Group

	Net risk/net opportunity (aggregated)					
	Very low ≤ €0.5 million	Low > €0.5 million to ≤ €2 million	Moderate > €2 million to ≤ €10 million	High > €10 million to ≤ €20 million	Very high > €20 million	Prior-year comparison[1]
Operational risks and opportunities						
After-sales	Opportunity		Risk			→ →
Procurement		Opportunity			Risk	→ →
Digital products	Opportunity		Risk			→ →
Research and development	Opportunity		Risk			→ →
Information technology	Opportunity				Risk	↑ →
Production			Opportunity		Risk	↑ →
Product quality and safety	Opportunity		Risk			↑ →
Project business	Opportunity		Risk			→ →
Revenue and sales		Opportunity			Risk	→ ↓
Customs	Risk / Opportunity					→ →
Sustainability risks and opportunities						
Extreme events	Opportunity				Risk	→ →
Climate change and environmental protection	Risk / Opportunity					→ →
Personnel and social			Risk / Opportunity			→ ↑
Financial risks and opportunities						
Financial services	Opportunity		Risk			→ →
Foreign currency		Opportunity	Risk			→ →
Debt defaults	Opportunity	Risk				→ →
Financing and capital investment		Opportunity	Risk			→ →
Taxes		Risk / Opportunity				→ →
Legal and compliance risks and opportunities						
Compliance and data protection	Opportunity			Risk		→ →
Legal	Opportunity	Risk				→ →

Risk (VaR 99 per cent) Opportunity (VaR 20 per cent) ↑↓ Change risk (VaR 99 per cent) ↑↓ Change opportunity (VaR 20 per cent)

[1] The prior-year comparison presented here refers to a change in the assignment to the impact class as of a minimum change of €2 million.

The impact of the individual risks or opportunities are assigned to impact classes based on maximum value.

The description of the probability of occurrence for individual risks and opportunities is based on the following classes:

Improbable	≤ 25 per cent
Possible	> 25 per cent to ≤ 50 per cent
Probable	> 50 per cent to ≤ 75 per cent
Highly probable	> 75 per cent to 100 per cent

The risk areas are described separately in the following section. The gain value is shown if it has changed compared to the previous year. Material individual risks and opportunities with moderate or higher net impacts from €5 million upwards in each risk area are also described.

Operational risks and opportunities

After-sales

The risk area after-sales consists of risks and opportunities that could occur as part of our work with customers during the product life cycle. Jungheinrich continues to class the impact of after-sales risks as moderate overall.

The fundamental risk of potential supplier failures or delays due to material availability in spare parts operations remains but has reduced in comparison with the previous year. There is also a risk that material costs will rise further and these costs cannot be passed on to the customer. In order to avoid supplier risks in spare parts operations, despite the tense conditions on the market, regular task force meetings monitor the risk. A detailed description of the supplier risks is presented below in the procurement risk area. Materials are also stockpiled to ensure that materials are available despite any volatility.

Procurement

Risks and opportunities in the field of procurement include disruptions in the supply chain and fluctuations in the cost of raw materials, equipment and energy. Overall, procurement risks continue to be classified as very high.

Global supply chains continually stabilised over the course of the year, nevertheless, general deterioration of the already-tense market situation and trade restrictions along with potential supply chain disruptions due to production and logistics restrictions can result in materials shortages and a collapse in supply. Moreover, supplier insolvencies, cyber attacks on suppliers and geopolitical developments, especially with regard to China and the recent escalation in the Middle East conflict, represent further risks. The probability of occurrence has fallen in comparison with the previous year, and is considered improbable. In extreme scenarios the impacts remain very high and may lead to production downtimes and significantly higher costs for alternative procurement or necessary services.

To take preventive action against supply chain disruptions, Jungheinrich relies on control systems as part of its consistent supplier management system to monitor and analyse the financial health of the suppliers, the stability of the supply chains and transport routes. Supply chain management also analyses developments in the supply chains on a daily basis in order to react early to prevent possible materials shortages and developments in materials supply to guarantee the stability of the global supply chains to the greatest possible extent. Supply reach is also continually determined and alternative procurement sources and products are introduced.

Details with regard to a potential gas shortage or an under-supply of electricity grids are detailed in the extreme events risk area [page 44].

Uncertainties also remain with regard to energy price developments and the overall inflation trend. This is particularly evident in relation to the volatility of the gas and energy markets. Significant price increases, including those affecting alternative energy sources, are accepted in order to avoid a supply-side collapse in production. This concerns both the supply of energy to Jungheinrich's own sites and to suppliers' passing on higher energy costs to Jungheinrich. This may result in moderate impacts from both risks and opportunities.

The price of raw materials on the global market remains volatile, resulting in uncertainties when planning material costs. Procurement uncertainties for production materials and spare parts in the reporting period primarily affect electronic components, lithium-ion batteries and steel.

Digital products

Jungheinrich develops and distributes digital products, such as the warehouse management system (Jungheinrich WMS), steering software for conveyor systems and other digital solutions for material handling equipment. Jungheinrich operates a cloud-based fleet management system (Jungheinrich FMS) to connect the material handling equipment. Risks and opportunities from the development of software applications for mobile robots are also included and assessed in the digital products risk area. Risks from digital products are again classified as moderate.

A certified Information Security Management System in accordance with ISO/IEC 27001 has been put in place to enable the continuous improvement and maintenance of information security. The certification covers a large part of the development, maintenance and – insofar as it is Jungheinrich's responsibility – the operation of the end-customer software solutions. Further details on this certification are given in the information technology risk area (see below). Jungheinrich received a successful assessment according to the industry standard TISAX (Trusted Information Security Assessment Exchange) in November 2022.

Jungheinrich is also working continually on the expansion of its digital products. This includes the ongoing expansion of expertise in the field, which is accompanied by the Group's central functions.

Research and development

The research and development risk area covers both risks and opportunities from development projects and results. Overall, risks from research and development continue to be classified as moderate.

One fundamental risk exists in patent disputes; therefore innovations from research and development are protected by patents. Observance is monitored systematically and centrally and legal steps are taken whenever necessary.

Information technology

Risks in the field of information technology cover the general stability of the information infrastructure and include possible risks to information security and in particular the resilience of IT systems to cyber attacks. Overall, information technology risks have increased and are classified as very high.

The potential impact of the Group-wide risk of cyber attacks can be far-reaching if availability is affected, or confidentiality is breached or the integrity of information and IT systems is threatened due to security violations. Information technology systems are constantly reviewed and refined in order to limit IT risks and ensure that business processes are carried out securely, reliably and efficiently. Besides its effective IT emergency management system, Jungheinrich uses industry standards, redundant network connections and a mirror computing centre with a view to reducing failures of application-critical systems and infrastructure components. Jungheinrich mitigates the risk of unauthorised access to corporate data and of tampering with or sabotaging IT systems with Group-wide information security standards, the use of modern backup systems and regular reviews of the protective measures' effectiveness. Jungheinrich's Information Security Management System (ISMS) has been certified since November 2021 in key parts of the organisation in accordance with the international standard ISO/IEC 27001:2013. The scope was again expanded in November 2022. The above-mentioned measures are supported effectively by modern monitoring and analysis systems and are constantly monitored and developed by a dedicated cyber security team. Furthermore, the state of cyber security for the areas of IT, production and digital products is subject to an annual external maturity assessment. The probability of substantial damage occurring continues to be classed as improbable due to the comprehensive measures to mitigate the risk. The assessment of the potential impacts of cyber attacks has increased in comparison with the previous year. This is due to an increase in overall threats and a more professional assessment methodology for cyber risks including comprehensive quantitative analysis of various risk scenarios. The range of potential impacts is very large, however, ranging from moderate to very high in extreme scenarios.

The company is implementing more than 80 projects as part of the DEEP programme (Digital End-to-End Processes) for digital transformation and efficiency gains. Detailed control mechanisms are applied throughout the DEEP programme to reduce uncertainties in the planned project costs. These include weekly operational steering meetings, regular steering committee meetings and detailed programme controlling. Fluctuation in the planned project costs are still considered possible and may lead to low opportunities and moderate risks.

Production

Risks and opportunities in production relate to deviations in the product manufacturing process, such as a deviation from the capacity utilisation of production machinery or the planned production volume. Overall, the impacts of production risks have increased and are classified as very high. At the same time, the opportunities have increased slightly and classification has moved from low to moderate.

The stability of production is largely dependent on supply chains. Risks in the supply chains, such as the availability of raw materials, possible cyber attacks or supplier insolvency all constitute risks to the product manufacturing process. Supply chain management therefore analyses developments in supply chains on a daily basis in order to be able to initiate countermeasures early on. This significantly reduces the probability of production downtimes, but as in the previous year remains possible. The potential impacts of production downtime and the resulting number of units produced being below forecasts ranges from very low in the best-case scenario to very high in extreme situations.

Production plans are continually adapted to incoming orders in order to guarantee the best-possible production capacity utilisation. Uncertainties in the incoming orders that can be achieved lead in turn to uncertainties in the unit production numbers. Fluctuation in the number of units produced can have a very high impact when it comes to risks and a moderate impact when it comes to opportunities.

Furthermore, in improbable scenarios, production may be severely affected by interruptions to operations (for example, fires). However, comprehensive preventive safeguarding steps as well as insurance cover in the event of loss mean the impact of this risk is only classified as very low.

Risks of a failure in the power or gas supply also affect the product manufacturing process. These risks are assessed in detail in the extreme events risk area [page 44].

Product quality and safety

Product quality and safety risks cover risks and opportunities from expected deviations in product quality and the associated obligations. Compared to the previous year, the classification of risks has been increased to moderate.

Product quality obligations are associated with warranties and guarantees as well as additional expenses for goodwill gestures. The obligations also include adhering to applicable standards. In order to manage risks, product risk management observes individual cases closely and uses these to find opportunities to minimise risks, for instance through insurance policies, technical analyses and legal action.

Project business

In relation to the project business, risks and opportunities especially revolve around staying within budget, sticking to schedule and to the agreed product specifications. Overall, project business risks are still classified as moderate.

For complex, wide-ranging, international projects in particular, there can be some deviation from the project targets or promised product specifications, which in turn can lead to additional expenses for corrections or any compensation payments from breaches of contact. Jungheinrich counters this risk through targeted project risk management, which aims to recognise, manage and systematically monitor project risks at an early stage.

Revenue and sales

The risk area revenue and sales consists of risks and opportunities from the sale and rental of Jungheinrich trucks and associated services. Overall, revenue and sales risks have increased slightly in comparison with the previous year and are classified as very high. Opportunities in the risk area revenue and sales have been downgraded in comparison with the previous year and are classified as low.

The volatile market situation on both the procurement and sales sides and the general uncertainty about the future economic situation, especially in the eurozone, entail risks in the forecasting of incoming orders. These developments are continually analysed so that appropriate steps can be taken at an early stage. Nevertheless, fluctuations in the forecast number of incoming orders can have a moderate impact on both the risk side and the opportunity side. Additional knock-on effects from changes in incoming orders on production capacity utilisation are assigned to the production risk area [page 42].

The range of products and services are continually reviewed on the sales market and potential new customer solutions are added. Temporary sales promotion measures have been and are being developed and implemented to protect incoming orders. The result is better market penetration, increased customer loyalty and the incoming orders required for optimum utilisation of the plants. Nevertheless, uncertainty remains as to whether the measures can be implemented on the markets. Risks are deemed possible. The range of potential impacts is very large, however, ranging from very low to very high in extreme scenarios.

Customs

The customs risk area includes risks and opportunities that could arise in relation to customs tariffs for goods. The company has established operational processes for all customs and export control issues. These processes are monitored and continuously developed by a central customs department. Customs risks are closely monitored by Jungheinrich and are still classed as very low.

Sustainability risks and opportunities

Extreme events

Risks resulting from extreme events relate to unusual events, such as natural disasters, pandemics or acute geopolitical conflicts, and their consequences. The severity can lead to strategic risks and opportunities that would impact all areas of the company. The risks arising directly from the Russia-Ukraine war have also been included in the extreme events risk area. The risks in the extreme events risk area are still classified as very high overall.

Since the beginning of the war in Ukraine in February 2022, Jungheinrich has created a central crisis team in order to identify risks at an early stage and keep the impact of these risks as minimal as possible through timely, appropriate and coordinated measures. Local and topic-specific crisis teams also analyse various scenarios and underlying legal conditions regularly so that the Group is as well prepared as possible to face the constantly changing situation. The Jungheinrich Group has subsidiaries in Russia and Ukraine.

One focus of the measures of the crisis team is protecting the staff and their families. The war and its humanitarian, political and economic consequences result in diverse risks for the Jungheinrich Group.

The embargoes and sanctions imposed by the European Union and the USA and Russia's counter-sanctions have resulted in risks for the Russian Jungheinrich company that are classed as moderate in improbable scenarios. These may develop into risks resulting in full impairment through expropriation. This improbable scenario is assessed as having a very high impact.

In Ukraine, the risk is primarily a humanitarian one. The focus is on protecting and supporting Jungheinrich employees and their families as well as the local population to the best of the Company's ability.

Sanctions and counter-sanctions as well as geopolitical crises such as the current escalation in the Middle East conflict may lead to disruptions in the supply of materials or energy to Jungheinrich or Jungheinrich suppliers. The energy supply situation in Europe has eased in comparison with the previous year. The risk of gas supply no longer being sufficient for production and the associated production disruptions is assessed as improbable and may lead to very high impacts in extreme scenarios. An undersupply of power grids may also cause potential disruptions in production. This risk is classified as improbable, but may lead to high to very high impacts in extreme scenarios. Jungheinrich has put in place measures to reduce plants' dependence on electricity and natural gas and continues to expand these measures. Jungheinrich is also in constant contact with production material suppliers.

Risks from the coronavirus pandemic remain on a lower level. The coronavirus pandemic and potential new pandemics continue to pose a risk with regard to individual markets and in terms of local infection figures, which has an impact on Jungheinrich's business activities and global trade and supply chains.

Climate change and environmental protection

Jungheinrich supports various climate change mitigation and environmental protection measures and has enshrined key sustainability objectives in Strategy 2025+. Risks and opportunities in the risk area of climate change and environmental protection continue to be classified as very low overall.

Jungheinrich's sustainability strategy consists of six initiatives that are backed by concrete targets and give consideration to economic, environmental and social aspects.

The defined targets set out Jungheinrich's ambition to reduce emissions and preserve the environment and resources. At the same time, the initiatives promote the expansion of sustainable products and solutions and improve the health and safety of employees.

The implementation and achievement of these targets are crucial for the Jungheinrich Group. Failure will impact Jungheinrich's reputation. In response, targeted measures have been introduced at the level of the initiatives. As the sustainability strategy covers risk areas beyond just climate change and environmental protection, the measures also have an impact on the social and compliance risk areas. Jungheinrich considers itself to be well positioned to continue making important contributions to protecting the environment and the climate.

Further information can be found in the combined separate non-financial report in accordance with the CSR Directive Implementation Act [page 54].

Personnel and social

The personnel and social risk area includes risks and opportunities that have a direct impact on the availability, quality and costs of personnel, occupational safety and compliance with human rights. Overall, personnel and social risks continue to be classified as moderate. Opportunities can arise from fluctuations in the planned personnel costs. Opportunities in the risk area personnel and social have been upgraded in comparison with the previous year and are classified as moderate.

Personnel risks may arise if a company fails to recruit or retain qualified employees in sufficient numbers. This can impact the achievement of strategic and operational targets. In order to recruit junior engineers and IT specialists, both of which are vital to Jungheinrich, the company maintains good contacts with universities through university marketing. Jungheinrich responds to the fierce competition for skilled labour and executives and mitigates the associated risk of a loss of know-how caused by staff turnover by offering attractive qualification options and a performance-based remuneration system. A high number of trainee positions will be maintained or even expanded Group-wide in order to ensure that all future needs for skilled workers can be met. Jungheinrich employs temporary workers in order to avoid capacity utilisation risks and uses location-specific flexible working time accounts. The company also operates three Business Service Centers (BSC) in Spain, Romania and Croatia with highly trained, globally aligned experts. Uncertainties in personnel costs may result in moderate impacts from both risks and opportunities.

The continual increase in regulatory requirements with an emphasis on sustainability and human rights, as well as other social aspects along the value chain, poses risks in the event of non-compliance. Continuous monitoring of regulatory changes and compliance with existing requirements is essential for the Jungheinrich Group. Failure to comply with regulatory requirements can result in penalties. Any deviation can have a negative impact on Jungheinrich's reputation and impair its strategic goals or operational processes. In addition to the Act on Corporate Due Diligence in Supply Chains (LkSG), considerable relevance in this respect has been identified in the Batteries Act 2, Material Compliance, the EU taxonomy and the Corporate Sustainability Reporting Directive.

In order to comply with the LkSG, the Group supply chain risk analysis, put in place in 2019, was revised in 2022 and important risk factors were added, particularly those focused on strengthening the attention paid to human rights. In addition, the schedule of legal provisions database, including the monitoring of the measures and initiatives derived therefrom, was expanded for the LkSG and for all other relevant regulations. Jungheinrich therefore considers itself well positioned to comply with the regulatory requirements for sustainability.

Financial risks and opportunities

Financial services

Risks associated with financial services arise particularly from the leasing business and include risks and opportunities from changing residual values of leased items and the corresponding interest rate. Financial services risks continue to be deemed to be moderate overall. Detailed rules governing the identification and assessment of risks are documented in Group-wide guidelines and the financial service companies' internal process descriptions.

The risks and opportunities arising from the resale of truck returns from the financial services business are borne by the operating sales units. The residual value guarantees are calculated on the basis of a conservative uniform Group standard for maximum permissible residual values. The residual values of all individual contracts are subjected to a quarterly evaluation using the central financial services contracts database on the basis of their current fair value. If the originally calculated residual value is above the current fair value and the end of the term of the contract, this risk is appropriately taken into account depending on the classification of the long-term customer contract by reducing the carrying amounts for "trucks for lease from financial services" or "receivables from financial services" in profit or loss.

The refinancing risk is limited by applying the principle of matching maturities and interest rates for customer and refinancing agreements (no risk of a change in interest rates during the term of the contract) when refinancing financial service agreements. The "Financial Services" segment's Group-wide structural and procedural organisation ensures management of completed financial service agreements with a correlating financing structure and form through domestic and foreign refinancing banks. Moreover, an established financing platform enables us to obtain refinancing on the capital market. Sufficient lines of credit are at the company's disposal for financing the new business.

For refinancing, agreements were reached with the financing banks at an early stage in order to react flexibly to market and customer requirements. As at the balance sheet date, the scope of the required customer-specific payment agreements was negligibly small in light of this. The refinancing lines remained available to Jungheinrich in the reporting year as they were at the end of the previous financial year.

Customer defaults on receivables, insolvencies and free early terminations of contracts with break clauses in the financial services business remain at a low level.

Foreign currency

Due to its international activities and affiliates as well as dynamic developments on the financial markets, Jungheinrich is subject to exchange rate fluctuations. Overall, foreign currency risks continue to be classified as moderate. Jungheinrich uses financial instruments such as currency forwards, currency swaps and currency options to manage foreign currency risks.

Debt defaults

The debt default risk area covers risks arising from potential debt defaults on customer payments. These risks are still classed as low.

Jungheinrich protects itself against debt default risks by using an IT-based system to permanently monitor customers' creditworthiness and to regularly analyse outstanding receivables and their structure. The majority of foreign revenue generated from business with third parties is covered by credit insurance policies. Comprehensive system-reported creditworthiness checks performed before contracts are concluded, as well as revolving inspections during the terms of agreements, help keep default levels on receivables from customers very low. Forklift trucks prematurely recovered from customers are handed over to the "Intralogistics" segment's operational sales units for marketing. The return conditions are determined centrally.

Financing and capital investment

Financing and capital investment risks include all risks and opportunities that can arise when borrowing or investing capital. Risks in this risk area continue to be classified as moderate overall.

Jungheinrich's good credit rating and solid statement of financial position have a positive influence on obtaining credit. In addition to the high levels of cash and cash equivalents, confirmed medium-term credit facilities and short-term credit lines safeguard the Group's financial flexibility and liquidity. The confirmed credit facilities had only been partially used in the "Intralogistics" segment as at the balance sheet date.

In addition to bilateral financing, Jungheinrich can also obtain finance through the capital market, independent of banks. The instruments employed include a commercial paper programme in addition to issuing promissory notes. The maturities for the credit lines and existing promissory notes are very spread out, giving the company plenty of long-term leeway for arranging financing. None of the financial agreements are subject to financial covenants.

The company's cash and cash equivalents and existing credit agreements ensure that it can always fulfil its payment obligations. There is, therefore, no liquidity risk. The central cash and currency management for the Jungheinrich Group enables the Group-wide, international provision of financial resources at the best possible interest and currency exchange rates, and cash flow management for domestic and foreign Group companies.

Throughout the Group, Jungheinrich takes a conservative approach to investment and generally only invests in certain asset classes with flawless credit ratings and the option of liquidating its investments at any time. Part of the liquidity is invested in a special fund. The value of the capital investments held by Jungheinrich is subject to the normal fluctuations on the international capital markets. The severity of the fluctuation can have a moderate impact on the opportunities side and high on the risk side, depending on the point in time of the sale.

Further information regarding financial instruments can be found in the Jungheinrich AG consolidated financial statements [page 154].

Impairment risks are constantly monitored by Corporate Finance. This applies in particular to goodwill from company acquisitions, which has an indefinite useful life and is therefore not subject to amortisation. Goodwill is subjected to an impairment test in accordance with IAS 36 at least once a year, or more frequently if there are indications of a reduction in value. In addition, all assets that fall within the scope of IAS 36 are reviewed as part of an asset impairment test if there are such indications of a reduction in value.

Taxes

Tax risks continue to be considered to be low overall. They arise from the constantly changing requirements under tax legislation. Risks also arise when national tax authorities deviate from the international basic rules agreed between tax authorities with regards to cross-border matters. The risk increases when updated authority viewpoints are to be applied retroactively.

Legal and compliance risks and opportunities

Compliance and data protection

The compliance and data protection risk area covers all risks related to non-compliance with laws and general compliance regulations, especially corruption, fraud and money laundering prevention and data protection regulations. Risks in the compliance and data protection area are still assessed as high overall.

In both the valid Group guidelines, which apply to all employees, and the company's Code of Conduct, Jungheinrich has set out regulations and measures for the prevention of corruption, fraud and money laundering risks. Compliance with these requirements is regularly reviewed by internal audit. Further information about the Code of Conduct can be found in the combined separate non-financial report in accordance with the CSR Directive Implementation Act [page 54].

Jungheinrich is subject to the risk of fines in the area of data protection due to the General Data Protection Regulation (GDPR). These are addressed through a number of measures. Group guidelines are continually updated to reflect new data protection regulations. The necessary data protection agreement principles with suppliers and other business partners were also amended. Jungheinrich also ensured compliance with the requirements by implementing stricter technical and organisational measures. The data protection challenges in the context of the coronavirus pandemic, in particular due to the increase in mobile working, have been taken into account through corresponding instructions and recommendations. The Board of Management obligates all employees to comply with data protection regulations. Regular Group-wide training is in place. The data protection management system is continually monitored and will be improved further. Risks of fines due to a violation of the EU GDPR are assessed as improbable. The range of potential impacts is very large, however, ranging from very low to very high in the extreme scenario.

The compliance risk assessment was analysed in 2022 and optimisations were initiated in 2023 with an emphasis on close interaction between the risk management system and compliance risk assessment. The organisation and processes of the risk management system and close dovetailing between compliance risk assessment and the risk management system facilitates a clear reconciliation between the two systems. Further information about the compliance management system can be found in the combined separate non-financial report in accordance with the CSR Directive Implementation Act [page 54].

Legal

The Jungheinrich Group's companies are exposed to the legal risks that are customary in commercial enterprises, in particular regarding the liability for alleged non-compliance with contractual obligations or public law and for allegedly faulty products. Risks in the legal risk area have increased slightly against the previous year and are classed as low.

Material general contract risks are eliminated by applying Group-wide policies whenever possible. In addition, central support and legal advice is available to the individual departments for material contracts and other transactions with significant legal aspects. Appropriate provisions that are in line with the respective probability of occurrence are established to cover potential financial burdens resulting from risks relating to lawsuits. The Group has adequate insurance coverage for claims filed against Group companies on grounds of allegedly faulty products.

Forecast report

Anticipated global economic growth hampered by geopolitical tensions

The IMF anticipates that global economic growth will amount to 3.1 per cent as in the previous year in 2024. The main reasons stated for this forecast are the central banks' restrictive monetary policies and withdrawal of fiscal support. Geopolitical tensions in the Middle East in particular pose a risk for further growth in the opinion of the IMF. Slightly slower growth than in the previous year is expected for China and the USA. USA GDP is expected to climb by 2.1 per cent (2023: 2.5 per cent). An increase in economic output of 4.6 per cent (2023: 5.2 per cent) is forecast for the Chinese economy.

The IMF believes economic growth in the eurozone in 2024 will be determined by rising private consumption and catch-up effects as a result of the rise of energy prices and the slowdown in inflation. A recovery in GDP growth of 0.9 per cent is forecast for this region (2023: 0.5 per cent).

The IMF forecasts a slight rise in economic growth in Germany (0.5 per cent), following the 0.3 per cent contraction in the previous year. After growth of 0.8 per cent in the previous year, French GDP is also expected to perform slightly better in 2023 with 1.0 per cent growth. As in the previous year, for Italy an economic growth of 0.7 per cent is anticipated. For the UK, too, the economic growth of 0.6 per cent is expected to be along the lines of that seen in the previous year (0.5 per cent).

Growth rates for selected economic regions

Gross domestic product in %	2024 forecast
World	3.1
USA	2.1
China	4.6
Eurozone	0.9
Germany	0.5

Source: International Monetary Fund (as of 30 January 2024).

2024 incoming orders target: €5.2 billion to €5.8 billion

Despite a difficult market environment, we expect incoming orders to range between €5.2 billion and €5.8 billion in 2024 (2023: €5.2 billion). Providing supply chains remain stable and in light of the current interest rates and inflation, we anticipate Group revenue to range between €5.3 billion and €5.9 billion (2023: €5.5 million). This is based on the assumption that the geopolitical situation will not deteriorate.

2024 EBIT range: €420 million to €470 million

We estimate EBIT to be between €420 million and €470 million in the current financial year (2023: €430 million). Already in 2023, the Board of Management initiated measures to increase earnings that are bearing fruit in the current year and are countering especially rising personnel costs. Negative effects from purchase price allocations for the acquisitions made in 2023 of €13 million and from variable remuneration of €11 million have also been taken into account. We anticipate an EBIT ROS of between 7.6 per cent and 8.4 per cent (2023: 7.8 per cent).

Based on current assumptions, EBT is expected to reach a value between €380 million and €430 million (2023: €399 million). We forecast EBT ROS to be between 6.9 per cent and 7.7 per cent (2023: 7.2 per cent). The ROCE for the 2024 financial year should be between 14.5 per cent and 17.5 per cent (2023: 15.9 per cent). We have set a figure of over €200 million (2023: €15 million) for free cash flow.

Due to competition law, actual and target figures on the equipment ratio of lithium-ion batteries are not reported.

General statement concerning the Jungheinrich Group's anticipated development

We assume that the geopolitical situation will not deteriorate further in the 2024 financial year and that economic conditions will improve in the second half of 2024 at the earliest.

Our main goal is to achieve a solid EBIT ROS and EBT ROS. Beyond this, our focus is also on boosting ROCE and free cash flow.

We will continue to focus on our strategic fields of action automation, digitalisation, energy systems, efficiency, global footprint and sustainability. A key focus here will be on establishing the Board of Management division for automation and the expansion of the Group's automation portfolio. The post-merger integration of Storage Solutions and Magazino is also being driven forward. M&A activities will be continued to expand the Group's global footprint and digital transformation.

Opportunities continue to be presented by the intact and growing global trends that will push intralogistics, digital products and services, e-commerce-oriented portfolios and electric mobility and automation offers.

Negative impacts on revenue, EBIT and EBT are a possibility in an unchanged difficult market environment, particularly in the Group's European core markets, and as a result of high exchange rate fluctuations or persistently strong interest rate hikes.

Our business model and our resilient customer structure, combined with a sound balance sheet and liquidity, enables us to continue implementing the Strategy 2025+ even in the event that economic and market developments fall short of expectations.

Jungheinrich AG (HGB)

The annual financial statements of Jungheinrich AG follow the provisions of the German Commercial Code (HGB), while the consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS).

Jungheinrich AG is a management holding company and, in addition to the Group's central functions, also comprises Corporate Research & Development and Corporate Real Estate Management. As the parent company, it holds shares directly and indirectly in both domestic and foreign subsidiaries. Jungheinrich AG especially has direct business relations with the subsidiaries in Germany. The positive annual results of the subsidiaries managed in the legal form of AG & Co. KG are recognised in the same phase in the annual financial statements of Jungheinrich AG and reported under income from affiliates. In addition, there are some profit and loss transfer agreements with domestic corporations whose income and expenses are reported under separate items in the statement of profit or loss. The income from associates consisting of these three components are the material control parameter for Jungheinrich AG.

As of 31 December 2023, Jungheinrich AG had a total of 1,443 employees, including 153 trainees and apprentices (previous year: 1,320 employees, including 151 trainees and apprentices).

The overall economic and industry-related conditions correspond to those of the Group as described in the economic report [page 26].

BUSINESS TREND AND EARNINGS POSITION

The earnings position of Jungheinrich AG is determined by the business trend of the operating subsidiaries in Germany and abroad as well as the resulting income from affiliates. Jungheinrich AG's income from affiliates exceeded expectations in 2023, amounting to €362 million following €207 million in the previous year. The reason for this was the improvement in operating subsidiaries' business developments, primarily through appropriate measures to safeguard margins, which more than compensated for the increase in costs due to personnel expansion, tariff effects and increases in the cost of materials. Earnings from profit and loss transfer agreements increased by €120 million, taking the figure to €216 million. There was an appreciation in value in the carrying amount of an investment under financial assets in the amount of €37 million in connection with the acquisition of the Storage Solutions Group. The recognition of profits of subsidiaries in the same period resulted in an increase of €35 million to €146 million.

Jungheinrich AG's revenue in the 2023 financial year amounted to €261 million, compared to €259 million in the previous year. It includes remuneration for services, revenue from the rental of real estate and revenue from licensing agreements. Revenue from remuneration for services increased due to expansion in business volumes in the domestic operating companies in comparison with the previous year from €156 million to €160 million. Revenue from the rental of real estate to domestic Group companies of €39 million was similar to the previous year (€38 million). Revenue from licence agreements was 4 per cent lower at €63 million compared to the previous year's figure of €65 million.

Other operating income increased significantly from €94 million in the previous year to €164 million in the reporting year. This resulted from compensation payments received on the basis of transfer pricing adjustments of foreign companies of €51 million (previous year: €36 million). Due to the positive performance of the German production plants, income from adjustments amounted to €86 million (previous year: €42 million). Furthermore, other operating income includes cost transfers to affiliated companies of €16 million (previous year: €12 million).

Jungheinrich AG's expenses developed as follows:

in € million	2023	2022
Cost of materials	4	4
Personnel expenses	154	132
Depreciation and amortisation of fixed assets	26	25
Other operating expenses	389	317
Depreciation on financial assets and securities under current assets	4	4

The cost of materials mainly includes the energy costs for properties. Personnel expenses and other operating expenses include the administrative costs of the holding company and the central divisions. The increase in personnel expenses by €22 million resulted in part from the higher average number of employees (measured in number of employees, excluding trainees and apprentices) of 1,127 in 2022 by 92 to 1,219 employees in the 2023 financial year, the tariff increase, higher bonuses and the increase in pension liabilities.

Other operating expenses increased by €72 million from €317 million in the previous year to €389 million. The main reason for the increase was a €45 million rise in charges for external services, of which €22 million relates to IT services. R&D expenditure also rose by €19 million to €137 million (previous year: €118 million). This was mainly caused by the use of services provided by affiliated companies with higher development volumes.

The earnings trend of Jungheinrich AG in the reporting period was thus as follows:

in € million	2023	2022
Earnings before interest and taxes	213	78
Net interest	13	–3
Earnings before taxes	227	75
Taxes on income and other taxes	–22	–35
Net income	**249**	**110**

Table contains rounding differences.

Earnings before taxes increased by €152 million to €227 million. The effective tax expense rose accordingly. This was more than compensated for by the tax allocations made by the subsidiaries to Jungheinrich AG. This resulted in overall tax income of €22 million (previous year: €35 million).

Stable net income for the year was forecast for the reporting year compared to the 2022 financial year. Jungheinrich AG closed the 2023 financial year with a higher net profit of €249 million compared to the previous year (€110 million). This was due to the better than expected operating results of the subsidiaries. In accordance with Section 58, Paragraph 2 of the German Stock Corporation Act (AktG), €124 million of the net profit for the year was transferred to other retained earnings.

Capital expenditure

Additions to fixed assets amounted to €63 million in the reporting period and were thus significantly above the previous year's figure of €24 million. This was the result of acquiring the remaining shares in Magazino and the subsequent transfer of product technology totalling €44 million. As at the balance sheet date, Jungheinrich AG's capital expenditure commitments amounted to €2 million. Capital expenditure was financed with the company's own resources.

Jungheinrich acquired all remaining shares in the robotics specialist Magazino in August 2023. This caused the carrying amount of the portfolio company to go up by €19 million to €28 million.

Financial and asset position

As the parent company of the Group, Jungheinrich AG is responsible for the financial management of the Group and ensures the availability of sufficient financial resources. Further disclosures are included in the description of the principles and objectives of financial management [page 29].

The asset structure of Jungheinrich AG is as follows:

in € million	31/12/2023	31/12/2022
Non-current assets	787	758
Receivables from affiliated companies	1,019	705
Bank balances and securities	465	337
Other assets	51	51
Balance sheet total	**2,322**	**1,851**

The increase of €314 million in receivables from affiliated companies resulted from the higher claims of Jungheinrich AG compared to the previous year from the provision of cash and cash equivalents to Group companies as part of central liquidity management and from adjustments.

The increase in bank balances and securities of €128 million to €465 million in the 2023 financial year arose from an increase in time deposits of €158 million, which was partially offset by a reduction in securities of €23 million to €184 million and a €7 million decline in sight deposits to a total of €43 million.

The capital structure of Jungheinrich AG is as follows:

in € million	31/12/2023	31/12/2022
Shareholders' equity	1,366	1,186
Provisions for pensions	38	37
Other provisions	58	47
Liabilities due to banks	551	320
Liabilities to affiliated companies	277	227
Other liabilities	32	34
Balance sheet total	**2,322**	**1,851**

The shareholders' equity of Jungheinrich AG amounted to €1,366 million as at the balance sheet date and was thus €180 million higher than in the previous year (€1,186 million). The net income for the year of €249 million was offset by the dividend payments of €68 million for the previous financial year. As a result of the marked increase in total assets, the equity ratio fell to 59 per cent (previous year: 64 per cent).

Other provisions in the reporting year included the present value of a contingent purchase price payment in the amount of €11 million (previous year: €19 million) from the agreed earn-out clauses as part of the acquisition of arculus. This decline was caused by the early exit of a beneficiary.

Liabilities due to banks increased by €231 million year-on-year. This was primarily due to the bridge financing in the amount of €300 million that was taken out specifically for the purpose of financing the acquisition of Storage Solutions. On the other hand, current loans totalling €65 million were repaid through money market loans and commercial papers.

At €277 million, liabilities to affiliated companies were €50 million higher than in the previous year (€227 million) and were related to the increased liquidity of subsidiaries of Jungheinrich AG.

Risks and opportunities

Jungheinrich AG shares in the risks and opportunities of its subsidiaries. Detailed information is provided in the Risk and opportunity report [page 38].

Forecast report

We report on our prospects and plans for operations in our Forecast report [page 48].

Should revenue develop as expected, the operating results of the subsidiaries of Jungheinrich AG will be on a par with the previous year in 2024. As a result, the total income from affiliates and Jungheinrich AG's net income for the year should also be on a par with the previous year in 2024.

The explanations above are partially forward-looking statements that are based on the company management's current expectations, assumptions and assessments for future developments. Such statements are subject to risks and uncertainty that are largely beyond the company's control. This includes changes in the overall economic situation, such as impacts from geopolitical conflicts, natural catastrophes, pandemics and similar force majeure events, debt issues, within the intralogistics sector, in materials supply, the availability and price development of energy and raw materials, demand in important markets, developments in competition and regulatory frameworks and regulations, exchange and interest rates and the outcome of pending or future legal proceedings. Should these or other uncertainties or unknown factors apply or the assumptions on which these statements are based prove false, actual results may deviate significantly from the results stated or implied. No responsibility is therefore taken for forward-looking statements. Without prejudice to existing capital market obligations, there is no intention to accept any obligation to update forward-looking statements.

Hamburg, 12 March 2024

Jungheinrich Aktiengesellschaft
The Board of Management

Dr Lars Brzoska	Christian Erlach
Dr Volker Hues	Sabine Neuß

Non-financial report

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Sustainability strategy and organisation

ABOUT THIS REPORT

In this chapter, Jungheinrich is publishing the non-financial information required by law for the 2023 financial year (1 January to 31 December) in accordance with the CSR[1] Directive Implementation Act (CSR-RUG). Pursuant to Sections 289b, Paragraph 3 and 315b, Paragraph 3 of the German Commercial Code (HGB), this is the combined separate non-financial report for the Jungheinrich Group and Jungheinrich AG. Jungheinrich AG does not have any separate concepts and is managed by the Group. Jungheinrich uses the Global Reporting Initiative (GRI) management approaches as its framework in line with Section 289d of the German Commercial Code (HGB).

In publishing this report, Jungheinrich is also meeting the requirements of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable capital expenditure, and regarding the amendment of Regulation (EU) 2019/2088 (hereafter EU Taxonomy Regulation) [page 79].

All fully consolidated companies of the Jungheinrich Group according to the consolidated financial statements (as of 31 December 2023) are included. Deviations are indicated in the document. The companies Storage Solutions and Magazino, acquired in the reporting year, have not yet been fully integrated into the management approaches.

The report is published annually and is based on the 2022 non-financial report, which was published as part of the annual report on 31 March 2023. This combined separate non-financial report was subject to a limited audit in accordance with ISAE 3000 (Revised) by independent auditors PricewaterhouseCoopers, Cologne, (PwC), and was issued with an unqualified assurance opinion [page 96].

SUSTAINABILITY STRATEGY

Sustainability is part Jungheinrich's identity. As a family-owned listed business, uniting economic, environmental and social responsibility is the focus of all business activities. One focus of the sustainability strategy is on creating sustainable value for all stakeholders – that is for customers, employees, shareholders, business partners and also for society as a whole. Another focal point for Jungheinrich is minimising the negative impacts its activities have on people and the environment while building on the positive contributions it makes. Jungheinrich contributes towards the sustainable transformation of intralogistics with its products and services and thus sees itself as a sustainability enabler. This is why sustainability is one of the six fields of action and an integral part of the corporate Strategy 2025+.

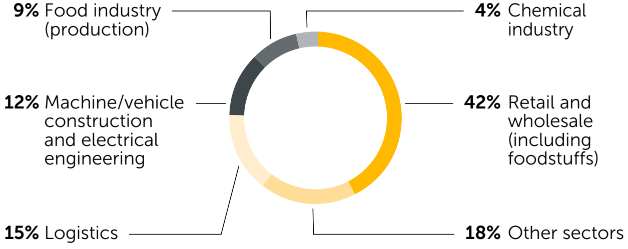
Integrated business model and customer structure

With a comprehensive portfolio of material handling equipment, automated systems and services, Jungheinrich is able to offer customers solutions to the challenges posed by Industry 4.0. The integrated business model encompasses the development, production and sale of material handling equipment and the planning and realisation of automated systems, the short-term rental of new and used material handling equipment, the refurbishment and sale of used forklifts, and after-sales services. Jungheinrich's product range also includes stacker cranes and load handling equipment.

[1] CSR: Corporate Social Responsibility.

Customers can therefore receive their entire factory and office equipment from a single source. Since 13 March 2023, all of our trucks manufactured have been battery-powered. In addition to electric motors and drive controls, Jungheinrich also manufactures suitable lithium-ion batteries and battery chargers. Digital products, such as the Jungheinrich warehouse management system and the fleet management system, which is based on the latest generation of the Jungheinrich Internet of Things platform in the cloud, complement the portfolio. A comprehensive range of financial services is also available to customers. Jungheinrich is active in around 120 countries both with its own direct sales and service networks, and through partner companies.

Customers by sector 2023[1]



Sustainable development highlights in 2023

As part of its corporate Strategy 2025+, Jungheinrich set measurable sustainability targets covering greenhouse gas emissions[2], waste management and occupational health and safety. This supports the company's long-term goal of becoming a sustainability enabler. The following are some of the measures put in place in 2023 as part of the sustainability strategy:

- Manufacture of battery-powered trucks only.
- Expansion of the CO_2e-neutral[3] after-sales service[4] to five countries.
- Reorientation of the sustainability organisation toward the ESG[5] structure in order to push through a more efficient implementation of the sustainability strategy.
- Introduction of a global, internal communication platform for sustainability that enables employees to get involved with the sustainable transformation.
- Use of electricity from renewable sources in 28 countries.
- Introduction of Jellow Way, the mission statement outlining behaviours that support Jungheinrich's ongoing success.
- Formalisation of the Group-wide human rights management system and publication of Jungheinrich's first policy statement on respecting human rights.
- Expansion of the sustainable procurement management system to include preventative and remedial action, and integration of the subsidiaries MIAS and Profishop.
- Performance of an external quality control audit by an external auditor on the compliance management system, and implementation of certain measures in 2022 and 2023.
- Expansion of commitment to sustainability initiatives such as the United Nations (UN) Global Compact and the sustainability network ecosense – Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V.

[1] Dvided according to incoming orders in units.

[2] There are a number of greenhouse gases that have various impacts on the climate; these include CO_2, CH_4, N_2O, FKW, PFC, SF_6 and NF_3. In order for these gases to be compared, they are indexed as CO_2 equivalents (CO_2e).

[3] For reasons of clarity, Jungheinrich uses the adjective CO_2e-neutral in certain contexts interchangeably with net zero greenhouse gas emissions. This formulation is used in connection with specific products and projects in order to point out that they exhibit net zero emissions.

[4] Jungheinrich will achieve neutrality by reducing emissions in after-sales service processes and through capital expenditure in certified compensation projects to offset CO_2e emissions. For more information, visit the ↗ website on CO_2e neutrality at Jungheinrich.

[5] ESG: environment, social, governance.

RATINGS AND RANKINGS IN 2023

ESG ratings are one of the tools that investors and other interested parties use to evaluate a company's sustainability performance. Based on communication with stakeholders and internal analysis, Jungheinrich has selected strategically relevant ESG ratings in order to develop the externally evaluated sustainability performance. Their relevance to active processing is regularly examined. The relevant ratings in Jungheinrich's view are EcoVadis, CDP, ISS ESG and MSCI ESG.

Platinum EcoVadis rating

EcoVadis, the world's biggest provider of sustainability ratings with more than 100,000 companies analysed, awarded Jungheinrich with a platinum rating (top 1 per cent) for the third consecutive time, making it one of the world's leading companies in the fields of environment, ethics, labour and human rights as well as sustainable procurement.

CDP rating B

CDP is a global non-governmental organisation that rates companies with regard to their environmental management in the categories of climate, forests and water security. Jungheinrich again received a rating of B (in a scale from A to F) for its transparency and commitment to climate protection.

ISS ESG rating B-

ISS ESG Corporate Rating offers comprehensive ESG data and ratings. Jungheinrich again received the industry status Prime and improved its rating to B- (12-step scale from A+ to D-). This places Jungheinrich among the leading companies in its industry.

MSCI ESG rating A

MSCI ESG ratings measure a company's resilience with regard to long-term ESG risks. Jungheinrich again achieved an above-average rating of A (seven-step industry-specific scale from AAA to CCC).

INITIATIVES AND MEMBERSHIPS IN 2023

Jungheinrich is active in various sustainability initiatives and networks with the aim of achieving international sustainability goals and cooperating across industries on relevant sustainability topics:

- Science Based Targets initiative (SBTi)
- The Climate Pledge
- UN Global Compact
- Sustainability & Climate Leaders
- econsense – Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e. V.
- Bundesdeutscher Arbeitskreis für Umweltbewusstes Management (B.A.U.M.) e.V.

Stakeholder dialogue

Internal and external stakeholders of relevance for Jungheinrich

As part of the sustainability strategy development process at Jungheinrich, the material internal and external stakeholders were identified and prioritised by a team of experts from the Corporate Sustainability, Health & Safety, Marketing and Corporate Communications divisions. Stakeholders are weighted according to their importance for Jungheinrich, including direct contact with products, impacts on Jungheinrich plants and other connections to the company. The following stakeholder groups for Jungheinrich were identified in the analysis:

- Employees
- Management and executives
- Customers
- Job applicants
- Suppliers
- Investors and analysts

The dialogue with stakeholders takes a variety of different forms, such as direct conversations, exchanges over online platforms, and surveys.

Engagement on sustainability through the new communication platform

In the 2023 financial year, Jungheinrich introduced a global communication platform on sustainability in order to actively include its workforce of more than 21,000 employees in the company's sustainability transformation. The platform promotes global networking among employees, self-sufficiency in terms of sustainability in a corporate context, and enables knowledge transfer. Best practice examples, guidelines and practical tips help with the implementation of the sustainability strategy. Thanks to interactive formats, the platform makes it possible to exchange information and get actively involved. By contributing their own ideas and through the intrinsically motivated implementation of measures, the resulting community represents a transformation from within.

Six sustainability strategy initiatives

The aim of the corporate Strategy 2025+ is to create sustainable value. It contains six fields of action[1]. One field of action is sustainability, which has a decisive impact on corporate targets. The sustainability strategy in turn is divided into six strategic initiatives that apply to all of the company's divisions:

1.	Climate neutrality[2]
2.	Eco efficiency and circular economy
3.	Employees and societies
4.	Governance
5.	Sustainable business models, products and services
6.	Sustainability in the brand

The sustainability strategy was based on the results derived from dialogue with relevant internal and external stakeholders, the analysis of existing business processes and management systems, and the existing materiality analysis. The materiality analysis identified topics that are highly relevant for Jungheinrich with regards to sustainability. These topics were evaluated by important stakeholders and internal experts and approved by the Board of Management. Of the 33 topics originally identified, 17 were classed as particularly relevant. The materiality analysis was examined in 2023 and it was confirmed that it is up to date. During preparation of the combined separate non-financial report in accordance with CSR-RUG, the material topics of the analysis were checked and prioritised with regard to both their relevance to the business and their degree of impact, in line with the principle of double materiality pursuant to Section 289c, Paragraph 3 of the German Commercial Code.

The following table shows the sustainability strategy's six initiatives, assigns them to material topics and shows the aims of the initiatives.

[1] The fields of action are: automation, digitalisation, energy systems, efficiency, global footprint and sustainability. Further information on the corporate Strategy 2025+ can be found in the combined management report [page 23].

[2] The term climate neutrality describes a state in which human activities have no net impact on the climate system. In addition to greenhouse gas emissions, such man-made impacts also include biogeophysical aspects, for example the contamination of soil and water, the consumption of raw materials or the loss of biodiversity. Jungheinrich pursues climate neutrality as its vision. The focus here is currently on achieving the target of net zero greenhouse gas emissions along the entire value chain.

	Initiative	Description	Requirements in accordance with Section 289c, Paragraph 3 HGB	Material topics	Targets
1.	Climate neutrality	Vision of climate neutrality in the value chain [page 62] and, in addition, supporting customers in achieving their climate targets and contributing to regulatory requirements.	▪ Environmental concerns	▪ Energy (consumption and renewable energy)	**By 2030:** » Reduction of absolute Scope 1 emissions by 42 per cent according to SBTi » Increase in annual sourcing of renewable electricity from 70 per cent to 100 per cent (Scope 2) according to SBTi » Reduction of absolute Scope 3 emissions by 25 per cent according to SBTi » Net zero greenhouse gas emissions[2] in Scopes 1 and 2 including neutralisation of emissions in accordance with internal guidelines **By 2040:** » Net zero emissions in Scopes 1, 2 and 3 including neutralisation of emissions in accordance with The Climate Pledge[2] **By 2050:** » Reduction of absolute emissions in Scopes 1, 2 and 3 by 90 per cent according to SBTi » Net zero emissions in Scopes 1, 2 and 3 including neutralisation of residual emissions according to SBTi
2.	Eco efficiency and circular economy	Targeted improvement of the eco-efficiency of products and promotion of the circular economy in order to minimise environmental impact and conserve resources.	▪ Environmental concerns	▪ Energy (consumption and renewable energy) ▪ Waste and recycling ▪ Materials (resource-saving products) ▪ Environmentally friendly products ▪ Material compliance	**By 2025:** » No landfill waste from the German plants » Landfill waste from global locations to be reduced by a third (base year: 2019) **By 2030:** » Worldwide no landfill waste generated by internal work processes, at locations in countries with established recycling systems
3.	Employees and societies	Laying the foundation for effective, healthy and satisfied employees.	▪ Employee concerns ▪ Social concerns ▪ Respecting human rights	▪ Occupational health and safety ▪ Training and education ▪ Good employer	**By 2025:** » Improving LTIR (accident rate) to 12.5 » Increase the proportion of female managers to 20 per cent
4.	Governance	Making sustainability part of the corporate DNA using transparent processes, data and management systems, at the same time as acting responsibly at all stages of the value chain on the basis of ethical principles (e.g. safeguarding human rights).	▪ Environmental concerns ▪ Social concerns ▪ Respecting human rights ▪ Combating corruption and bribery	▪ Compliance and anti-corruption ▪ Responsible management ▪ Norms and standards ▪ Transparency in the supply chains	**By 2025:** » 80 per cent of global relevant purchasing volume to be sustainable spend **Ongoing:** » Achieving top ratings as proof of sustainability performance (EcoVadis, CDP, MSCI ESG Ratings und ISS ESG)
5.	Sustainable business models, products and services	Sustainability as the basis for new business opportunities and an opportunity to boost Jungheinrich's unique selling points.	▪ Environmental concerns ▪ Social concerns	▪ Customer satisfaction ▪ Competitiveness ▪ Research and development ▪ Product quality and enhancement ▪ Customer health and safety	**By 2025:** » 50 per cent of the trucks delivered by Jungheinrich will be equipped with lithium-ion batteries **Ongoing:** » Increasing revenue with sustainable products pursuant to the EU Taxonomy Regulation
6.	Sustainability in the Jungheinrich brand	Creating proven added value for customers and society.	–	–	**Ongoing:** » Internal and external perception of Jungheinrich as a sustainability enabler

[1] Jungheinrich understands this to mean balancing out emissions of the greenhouse gases CO_2, CH_4, N_2O, SF_6, HFCs, PFCs and NF_3, which are listed in the Kyoto Protocol.

[2] In contrast to the SBTi, The Climate Pledge does not specify the proportionate composition of reduction and compensation measures in order to achieve the stated target.

Material impacts, risks and opportunities arising from sustainability

Non-financial risks for Jungheinrich's business operations pursuant to Section 289c, Paragraph 3, Items 3 and 4 of the German Commercial Code (HGB) are reviewed and evaluated as part of the regular risk management. The detailed risk and opportunity report [page 38] can be found in the combined management report. Pursuant to Section 289c, Paragraph 3, Items 3 and 4 of the German Commercial Code, no material risks with highly likely serious negative impacts in the aspects outlined in CSR-RUG were identified for business operations, business relationships, products or services. No reportable correlations with the figures in the consolidated financial statements were discovered.

Contribution to the Sustainable Development Goals (SDG)

The SDG are a framework for social development from the UN that applies globally. As such, they enable companies to show how they contribute to sustainable development within their core business. Jungheinrich is committed to contributing to the achievement of the 17 SDG. With the focal points of its sustainability strategy, and as a sustainability enabler in intralogistics, Jungheinrich believes it can have a particular impact on the following SDG:

SDG		Definition	Areas where Jungheinrich can make an impact
3 GOOD HEALTH AND WELL-BEING	**Good health and well-being**	Ensure healthy lives and promote well-being for all at all ages.	Solutions and assistance systems to contain potential hazards and prevent accidents in warehouses (360-degree protection). Optimised ergonomics of workstations in the warehouse through the use of material handling equipment and automation solutions.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	**Industry, innovation and infrastructure**	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.	Innovative approaches to decarbonise the industry, for instance by switching to electric in the agricultural and construction machinery sectors (referred to as Jungheinrich Powertrain Solutions).
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	**Responsible consumption and production**	Ensure sustainable consumption and production patterns.	Ensuring sustainable production and procurement by developing products in accordance with eco design criteria, refurbishment of used trucks, and waste management.
13 CLIMATE ACTION	**Climate action**	Take urgent action to combat climate change and its impacts.	Sustainable business models, products and services to increase efficiency and decarbonisation within intralogistics, such as energy-efficient lithium-ion trucks (POWERLiNE).

SUSTAINABILITY ORGANISATION

Expanding sustainability organisation

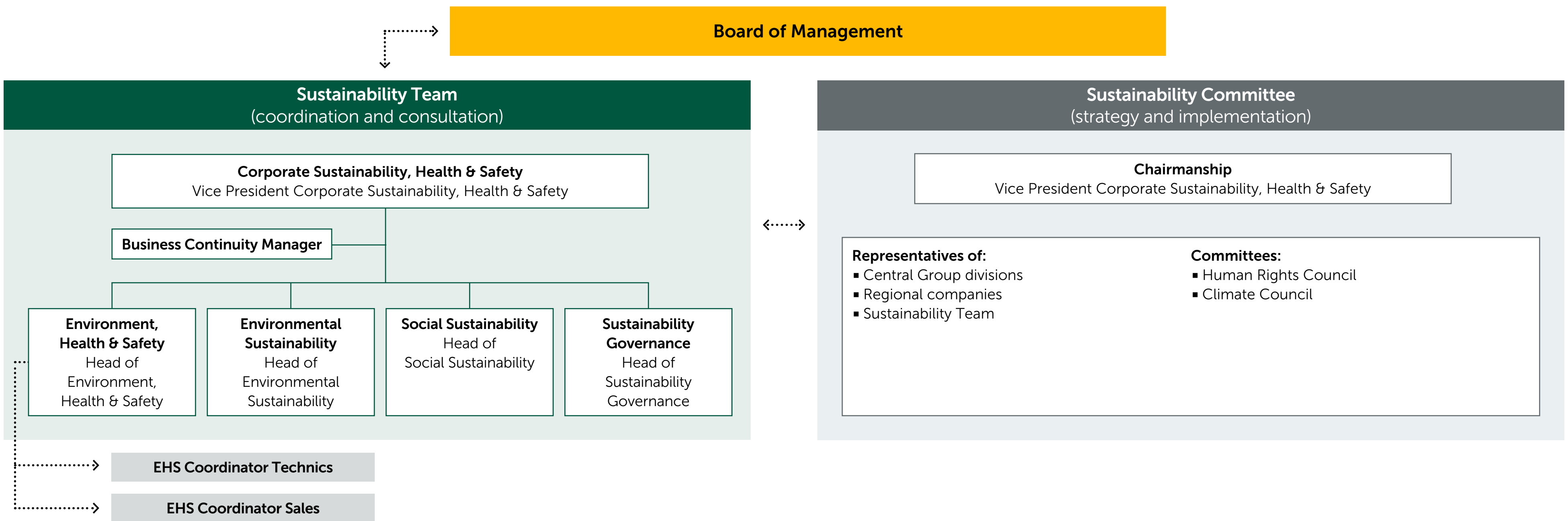
The targets, focus areas and programmes developed for Jungheinrich's sustainability strategy are implemented through standardised processes and clearly defined responsibilities. In order to keep making improvements in this regard, the company adopted a new sustainability organisation in the 2023 financial year, which came into force on 1 January 2024.

Sustainability Team

The Sustainability Team coordinates the integration of the sustainability strategy in the company and reports directly to the Board of Management. In the reporting year, it was divided into the Environment, Health & Safety (EHS) and Sustainability Management & Performance departments. Since 2024, the Sustainability Team is composed of EHS and three new departments: Environmental Sustainability, Social Sustainability and Sustainability Governance. The EHS Coordinators will be responsible for EHS-related topics in the companies and will serve as multipliers for further sustainability topics. The EHS-related topics will be pooled in the local EHS teams and established in the Group organigram by 2025. The plan is to further standardise the global structural and procedural organisation and areas of responsibility.

These new departments will strengthen sustainability at Jungheinrich. The aim of this new organisation is a more focussed implementation of the sustainability strategy, which is based on the ESG structure.

Sustainability organisation at Jungheinrich



Sustainability Committee
The Sustainability Committee was established in the 2022 financial year, and it meets every quarter. It consists of representatives from the central Group divisions, regional companies and the Sustainability Team. Major decisions are made by the Board of Management and confirmed by the Supervisory Board. The Committee plays a key role in passing sustainability decisions and directives throughout the organisation and is the platform for monitoring and managing project progress. The new Human Rights Council, a sub-committee of the Committee, plays a central role in implementing ethical goals. Its purpose is to help shape Jungheinrich's approach to respecting human rights. In addition, the Sustainability Committee along with the Climate Council, which was established in the reporting year, manages the implementation of the Group-wide measures to reduce GHG emissions.

Environment

CLIMATE NEUTRALITY INITIATIVE

The term climate neutrality describes a state in which human activities have no net impact on the climate system. In addition to greenhouse gas emissions, such man-made impacts also include aspects like the contamination of soil and water, the consumption of raw materials or the loss of biodiversity. Jungheinrich contributes to climate neutrality by pursuing its net zero greenhouse gas emissions target[1]. Adapting to climate change is vital for Jungheinrich, too, in order to prepare for existing and future climate changes. For this purpose, Jungheinrich analyses potential climate risks and opportunities and derives the necessary measures.

Jungheinrich's net zero targets

In the 2015 Paris Climate Agreement, 195 nations committed to restrict the man-made global increase in temperatures[2] to 1.5 degrees Celsius in comparison with pre-industrial levels. In turn, Jungheinrich committed itself to SBTi to support this target and as a company plans to achieve net zero Scope 1 to 3 greenhouse gas emissions by 2050. This target was officially validated by SBTi in December 2023. Achieving the final target by 2050 will be accompanied by interim targets set for 2030 and 2040:

Target	Base year	Target year	Objective
42-per-cent reduction in absolute Scope 1 emissions	2021	2030	SBTi
Increase in procurement of renewable electricity from 70 per cent to 100 per cent per year (Scope 2)	2021	2030	SBTi
25-per-cent reduction in absolute Scope 3 emissions	2021	2030	SBTi
Net zero emissions in Scopes 1 and 2, including the neutralisation of emissions	2021	2030	Internal target
Net zero emissions in Scopes 1, 2 and 3, including the neutralisation of emissions	2021	2040	The Climate Pledge[3]
90-per-cent reduction in absolute Scope 1, 2 and 3 emissions	2021	2050	SBTi
Net zero emissions in Scopes 1, 2 and 3, including the neutralisation of residual emissions	2021	2050	SBTi

[1] Jungheinrich understands net zero greenhouse gas emissions to mean balancing out emissions of the greenhouse gases CO_2, CH_4, N_2O, SF_6, HFCs, PFCs and NF_3, which are listed in the Kyoto Protocol. Jungheinrich will achieve net zero greenhouse gas emissions initially by reducing directly and indirectly responsible emissions in Scopes 1, 2 and/or 3 through appropriate measures. The remaining unavoidable greenhouse gas emissions will then be balanced out in terms of volume through capital expenditure on carefully selected climate mitigation projects.

[2] cf. Intergovernmental Panel on Climate Change (IPCC) (2021): Sixth IPCC Assessment Report Working Group I Contribution: The Physical Science Basis.

[3] In contrast to SBTi, The Climate Pledge does not set any targets regarding the proportional composition of reduction and compensation measures in reaching the published target.

Greenhouse gas management: Achieving net zero in four steps

Jungheinrich is pursuing a four-step management approach to achieve its net zero targets.

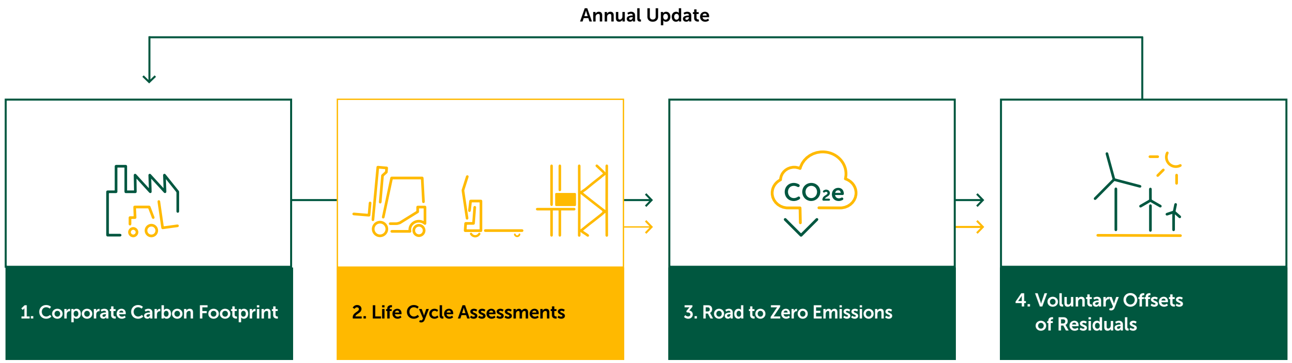
The basic prerequisite for achieving net zero is knowing the Group-wide greenhouse gas emissions, which Jungheinrich calculates annually using the (1) corporate carbon footprint. The ongoing creation of (2) product life cycle assessments [page 67] completes this data. The (3) Road to Zero Emissions is based on the data generated and continually updated. It contains important milestones and all central measures for systematically reducing Jungheinrich's emissions. In future, remaining emissions will be compensated for in the final step (4) to achieve net zero.

Greenhouse gas management activity is coordinated centrally at Jungheinrich, and implemented in close cooperation with all relevant departments and Group companies. The majority of the greenhouse gas emissions are created in the value chain. In order to influence these greenhouse gas emissions, which are only indirectly caused by the Group, Jungheinrich remains in close contact with customers, suppliers and other partners.

Corporate carbon footprint

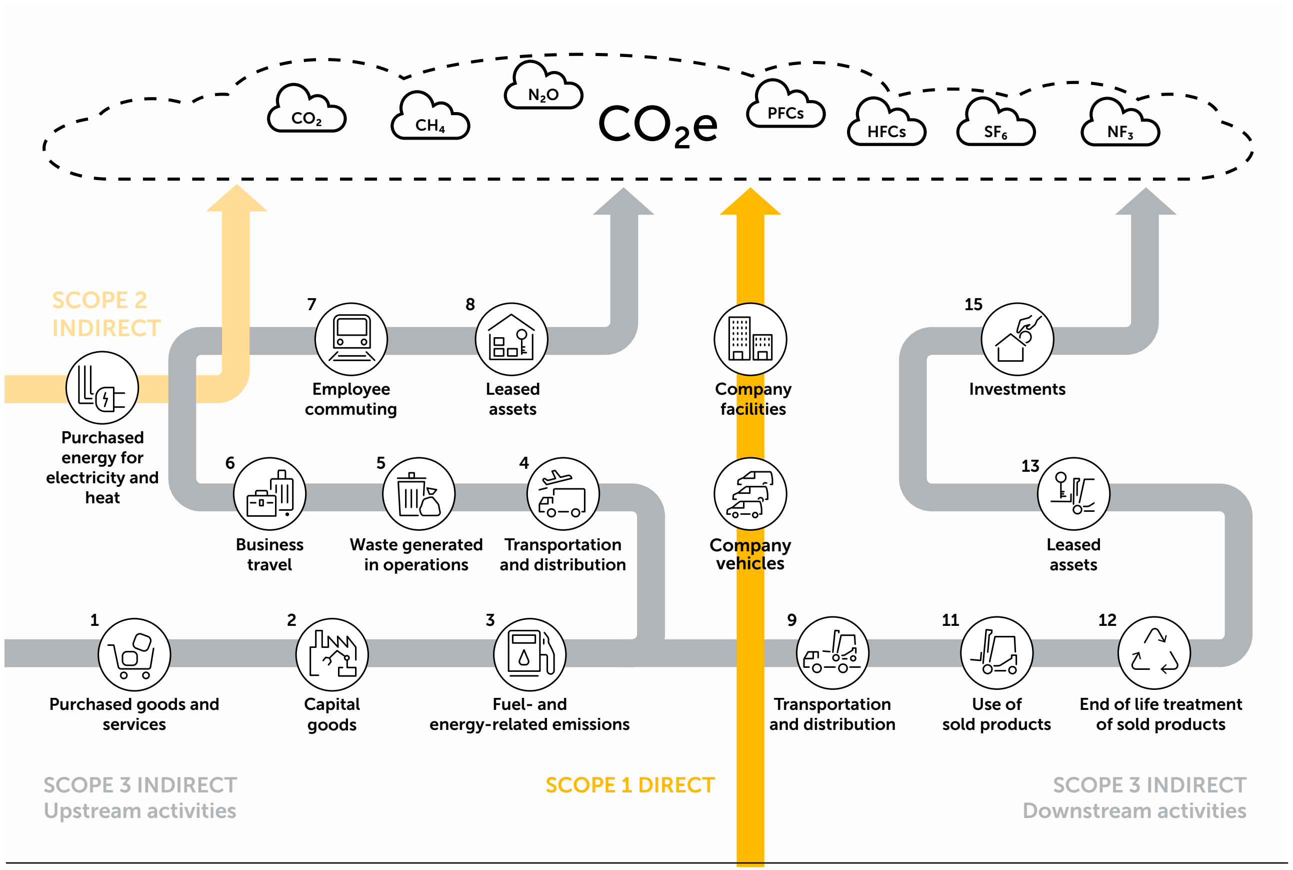
Jungheinrich records its corporate carbon footprint in accordance with the requirements of the Greenhouse Gas Protocol (GHGP). The control approach is used for this purpose. Scope 1 to 3 emissions are calculated separately and in detail for all companies in which Jungheinrich holds a voting and capital share of more than 50 per cent. All other companies are included in the statistics as investments (pursuant to Scope 3.15 GHGP). Scope 1 consists of all of Jungheinrich's direct emissions. Scope 2 contains emissions caused indirectly through the purchase of energy. Scope 3 covers all indirect emissions along the value chain.

Structure of climate management at Jungheinrich



A schematic diagram illustrates the emission scopes according to GHGP that apply at Jungheinrich. Jungheinrich's corporate carbon footprint amounted to 2,733 thousand tonnes of CO_2e in 2023. Of this figure, 1.9 per cent were Scope 1 emissions, 0.3 per cent Scope 2[1] (market-based) and 97.8 per cent Scope 3. Based on Jungheinrich's Group revenue, the intensity of the greenhouse gas emissions was 0.49 thousand tonnes of CO_2e/€ million (2022: 0.62).

Greenhouse gas emissions in the Jungheinrich Group according to the GHGP



Greenhouse gas emissions

in thousand tonnes of CO_2e[2]	2023	2022	2021
Scope 1	51.3	51.2	55.7
Scope 2 market-based	7.7	7.8	9.3
Scope 2 location-based	26.7	26.7	24.6
Scope 3 total	2,674.2	2,886.8	2,555.9
Scope 3 upstream	1,127.1	1,215.7	1,209.9
Scope 3 downstream	1,547.1	1,671.1	1,346.0
Intensity of greenhouse gas emissions (Scopes 1 to 3)	0.49	0.62	0.62

Total greenhouse gas emissions declined by 7.2 per cent in 2023 against the previous year. Scope 1 CO_2e emissions fell 7.9 per cent in comparison with 2021 and remained virtually on a par with the previous year with an increase of 0.2 per cent. While a more efficient use of fossil fuels helped to reduce emissions, the slight increase in comparison with the previous year is due partly to the acquisition of companies and the expansion of production capacities. A constant reduction in Scope 2 (market-based) greenhouse gas emissions can be seen in comparison with the previous years. The reason for this is the gradual, global switch of electricity supplies to renewable energy sources at the company's locations. Upstream and downstream CO_2e emissions in

[1] Scope 2 emissions can be calculated using two methods: location-based and market-based. In the location-based method, energy consumption is calculated using average national emissions factors. In the market-based method, the CO_2e emissions are calculated using the individual emissions factors of the company's own energy provider. This method is therefore more specific, and thus more relevant to Jungheinrich.

[2] The emissions factors used correspond to the usual sources (for example, International Energy Agency [IEA], Department for Environment, Food and Rural Affairs [DEFRA], Environmental Protection Agency [EPA]). The key figures are partially based on commonly-used extrapolation logic. For example, some key figures were calculated pro rata using comparable companies or types of companies. Depending on the situation, information regarding full-time equivalents (FTE), revenue and/or surface area was used for this purpose.

Scope 3 decreased by 7.4 per cent against 2022, despite the positive business performance. This decline is also due to the improvement in emissions factors.

Road to Zero Emissions

Jungheinrich takes systematic action to reduce its greenhouse gas emissions based on the findings of the corporate carbon footprint and the product life cycle assessments.

With regards to Scope 1 emissions, switching the vehicle fleet, both company cars and after-sales vehicles, to electric power is an important milestone on the road to achieving net zero. The transition of the after-sales fleet to fully electric vehicles began at the end of the 2023 financial year. The proportion of electric vehicles, including company cars, is constantly being expanded. Charging infrastructure is also being expanded step-by-step at company locations, and there are now more than 50 new charging points at the Group headquarters in Hamburg.

An important milestone for Scope 2 is the transition at all company locations to electricity that comes entirely from renewable energy sources. The German locations completed this transition back in the 2021 financial year. International locations are scheduled to transition by 2030 at the latest. The transition was completed in 28 countries by the end of the 2023 financial year. The Norderstedt plant has also been using CO_2e-neutral district heating since 2021, as has the Finnish marketing and sales office since 2023. In addition, Jungheinrich has been installing photovoltaic equipment at appropriate locations worldwide since 2022. Eight locations in Germany alone have photovoltaics equipment fitted to generate their own electricity or are in the process of having it fitted. In 2023, for instance, the roof of the car park at the Group headquarters in Hamburg was covered with 630 photovoltaic modules over the 1,100 square-metre surface.

Jungheinrich is also striving to reduce Scope 3 emissions. In the 2023 financial year, systematic measures were identified to reduce emissions from purchased products and services (Scopes 3.1/3.2), opportunities were developed to optimise the sustainability of packaging (Scopes 3.1/3.12), and awareness for the use of electricity from renewable sources was raised among initial important partners when using products (Scope 3.11)[1]. Jungheinrich has been manufacturing exclusively battery-powered trucks since March 2023. In comparison with forklift trucks with an internal combustion engine, emissions from battery-powered trucks are lower during product use (Scope 3.11). In addition, the aim is to continuously increase the efficiency of material handling equipment (Scope 3.11) and to ensure that these products are designed with ease of disassembly in mind from the outset (Scopes 3.1/3.12). By refining its requirements for eco design, Jungheinrich is also planning to advance the viability of circular economy or climate friendly alternative materials [page 66]. Further measures along the entire value chain are continually being evaluated and systematically implemented.

Voluntary compensation and neutralisation of remaining GHG emissions

In order to reach the net zero targets from 2030, Jungheinrich has decided to compensate remaining CO_2e emissions through voluntary capital expenditure in climate change mitigation projects. A comprehensive catalogue of criteria was developed to enable the identification of such climate change mitigation projects that fulfil recognised quality standards and Jungheinrich's own high standards when it comes to compensation. This catalogue was updated in 2023 due to the specific requirements of STBi regarding the neutralisation of greenhouse gas emissions. The quality and effectiveness of the projects and their regional connection to Jungheinrich are the characteristics looked for when choosing compensation projects.

Adapting to climate change

Companies are subject to potential negative impacts from climate change, whereby it is differentiated between physical and transitory climate risks and opportunities. Physical climate risks include potential damage to buildings due to storms or heavy rainfall. Transitory climate risks can impact companies in the form of changes in demand for lower-emission technology. In meeting the requirements of the EU Taxonomy Regulation [page 79] Jungheinrich's first step was to analyse the physical climate risks at selected locations in a structured manner and examine existing solutions as well as potential solutions for adaptation. The focus was on plants where material handling equipment or lithium-ion batteries are produced, the spare parts centre in Kaltenkirchen and the Group headquarters in Hamburg. In total, the analysis covered 14 locations in Germany, one in China and one in Czechia.

The guideline provided by the German Federal Environment Agency that substantiates the requirements of the EU Taxonomy Regulation was used for the climate risk analysis. Software was deployed for the analysis at Jungheinrich that processes and prepares the climate risk data from Intergovernmental Panel on Climate Change (IPCC) reports. If a climate threat is relevant for a particular location, a risk analysis is performed for the actual threat based on historical data and for the future development of the climate threat based on optimistic and pessimistic IPCC climate scenarios[2] up to 2050. The climate risks identified and evaluated by the software are validated according to their economic relevance together with employees at the location from the Production, Environment, Health & Safety and Facility Management divisions. The climate risks are then

[1] Due to a lack of definitions in the GHGP, no separate figure for Scope 3.11 is presented in accordance with the market-based approach.

[2] Representative Concentration Pathways (RCP) lay out certain greenhouse gas concentration scenarios. Jungheinrich uses RCP 2.6 as the optimistic scenario and RCP 8.5 for the pessimistic scenario for its climate risk analysis.

assigned to the qualitative categories of high, medium and low, without a financial assessment. High risks for some locations are storms, floods, heavy rainfall and drought/water stress. The same risks are classed as medium for other locations. Heatwaves and cold snaps are also medium risks. Then an evaluation is performed for all locations to see whether any adaptation measures are already in place for high and medium risks in order to reduce potential impacts. This has shown that all of the locations examined already fully protect themselves against current and future climate threats. Adaptation measures implemented against the threat of heatwaves include full air conditioning in office buildings with comprehensive insulation or targeted cooling of temperature-sensitive equipment. The threat of heavy rainfall or floods is countered through seepage reservoirs or mobile protection systems (for example, sand sacks). Adaptation plans are made if there are no or insufficient adaptation solutions for high climate risks. Adaptation plans must be designed in such a way that adaptation solutions that can significantly reduce high climate risks are implemented within five years. For medium risks, a list of adaptation solutions is created that must be taken into account for future projects at the site.

The Group intends to expand the physical climate risk analysis to more locations in 2024. In addition, there are plans to analyse the transitory climate risks and opportunities for Jungheinrich. The financial and strategic implications of the climate risks and opportunities will also be evaluated.

ECO EFFICIENCY AND CIRCULAR ECONOMY INITIATIVE

Jungheinrich is aware of the environmental impact and the limited resources in light of the climbing global demand for resources. That is why the company has decided to further break its growth away from resource consumption. The targeted improvement of the products' ecological efficiency and promoting circular economies are therefore of vital importance to Jungheinrich. Considering the increasing scarcity of resources, a circular economy in which every single end product of a consumption or production process is the basis for further processes is gaining in importance. Ideally, this should result in no waste or emissions. The use and preservation of resources in a circular economy and the development of resource- and energy-efficient products also support the path to climate neutrality.

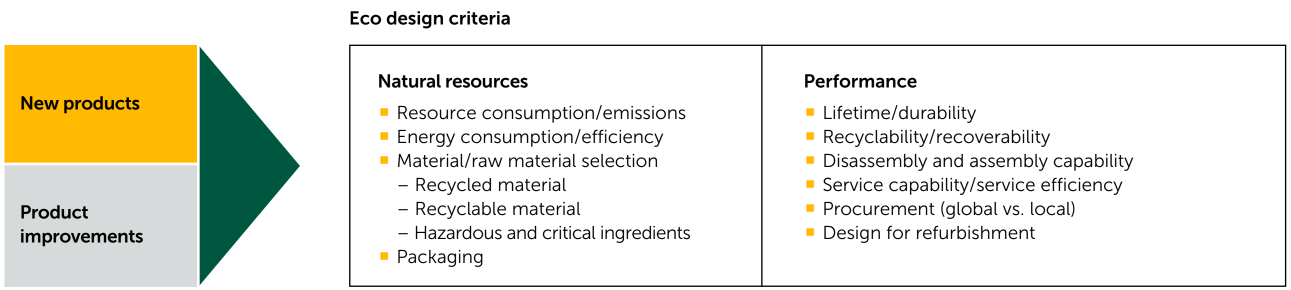
Eco design and product life cycle assessments

Eco design

Product design has an economic and ecological role to play as early as the development phase at Jungheinrich, as the largest share of the environmental impact of the product's life cycle is determined in this phase. Jungheinrich therefore integrates the principles of circular economies and the environmental efficiency of new trucks from the beginning using predetermined criteria for eco design.

Using product environmental compatibility assessments, Jungheinrich explores the potential to achieve energy and resource efficiency from the beginning. Defined milestones in the product development process ensure that the various eco design criteria are recorded, evaluated and implemented. Aspects of both resource efficiency and performance are taken into account. The Group plans to expand the existing eco design requirements to include the aspects illustrated in the image in close cooperation with the departments.

Eco design criteria in product development



The design of new products is increasingly dependent on requirements relating to critical ingredients. Jungheinrich ensures material compliance by taking the following criteria into consideration:

- Jungheinrich meets the legal requirements for regulated hazardous ingredients such as the REACH Regulation[1] (Registration, Evaluation, Authorization and Restriction of Chemicals) requirements or the RoHS Directive[2] (Restriction of Hazardous Substances) for relevant products.
- Jungheinrich goes beyond the legal requirements and strives to exclude materials in its products that are controversial from a social or ecological point of view, even if they are not yet legally regulated.
- Jungheinrich demands comprehensive material declarations from suppliers.

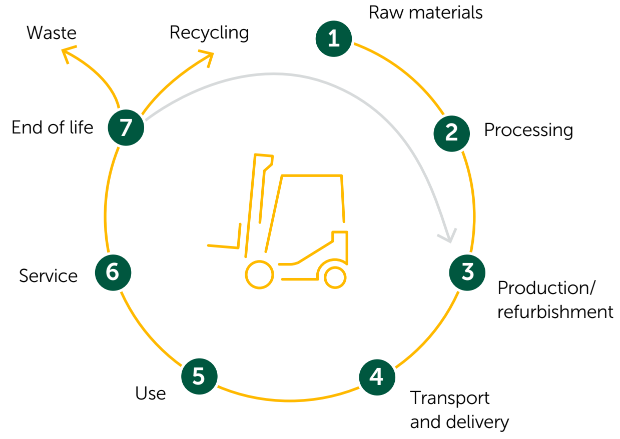
In a multi-stage material compliance project, launched in the financial year 2020, Jungheinrich created a central approach to take into account legal and internal requirements in the product development process for trucks, batteries and battery chargers. The intention is to safeguard the procurement, availability and evaluation of relevant information. Transparency regarding regulated substances is created by including the relevant suppliers of materials directly used in the production of the previously mentioned product groups. With this in mind, Jungheinrich developed a centralised IT system to document the material compliance status of these suppliers. The relevant requirements are provided in the Supplier Manual in order to include suppliers in the development process at an early stage. As a result, prohibited materials are not used in the supply chains and the procurement of restricted or hazardous materials is avoided. The recognition of material compliance requirements is systematically established for new suppliers in the supplier qualification.

Product life cycle assessments

Jungheinrich has been working consistently on improving its products' ecological efficiency, and especially that of trucks. The company prepares life cycle assessments to evaluate and monitor the sustainability performance of its products, which are developed in accordance with its eco design requirements. These assessments help Jungheinrich to meet regulatory and customer requirements. As part of a software expansion, Jungheinrich plans to systematically create life cycle assessments for new developments and calculate CO_2e emissions for all phases of the life cycle. This will enable the detection of emission reduction potential early on in the development process.

Comprehensive life cycle assessments have already been created for the following products: a forklift truck (ETV 216i), two batteries for material handling equipment (lithium-ion and lead-acid) and a stacker crane. These assessments were also performed and certified in accordance with the principles of DIN EN ISO 14040/14044. Other environmental factors besides CO_2e emissions were included in the assessments and the product life cycle phases analysed more closely. The detailed analysis of all components and phases from raw material extraction to the end of the product life cycle has created transparency in the value chain and supplied important findings for future product development. The product life cycle assessments performed by Jungheinrich have shown that the majority of CO_2e emissions for material handling equipment occur in the use phase, and that they are highly dependent on the energy requirements of the battery used as the drive technology. Jungheinrich has compared lithium-ion and lead-acid batteries using product life cycle assessments.[3] The lithium-ion battery caused around 20 per cent less CO_2e emissions in total across its life cycle, and 15 per cent less emissions were caused during its use. This result confirms Jungheinrich's target of ensuring that 50 per cent of material handling equipment is equipped with lithium-ion batteries by 2025. Jungheinrich's POWERLiNE series, equipped with integrated lithium-ion batteries, makes an important contribution to achieving this target.

Life cycle phases of the trucks



[1] REACH Regulation (EC) No. 1907/2006 is an EU chemicals regulation that came into force on 1 June 2007.

[2] The RoHS Directive 2011/65/EU relates to restrictions on the use of certain hazardous substances in electrical and electronic equipment.

[3] The functional unit for this assessment was based on the average lifespan of the lithium-ion battery used in the ETV 216i truck (15,000 operating hours). Based on this functional unit, the comparable battery systems are defined as follows: a functional battery system with a lithium-ion battery and a functional battery system with 2.3 lead-acid batteries.

During preparations to meet the requirements of the EU Taxonomy Regulation, Jungheinrich calculated the CO_2e emissions of 19 reference trucks in the 2023 financial year from the highest revenue-generating models. The CO_2e emissions saved over the entire life cycle of the trucks analysed were also calculated. Significantly reduced emissions were the result, particularly where lithium-ion batteries were used instead of lead-acid batteries as the drive technology.

The result of the product life cycle assessment comparison showed that an average reduction in CO_2e emissions of 23 per cent was achieved with lithium-ion battery-powered trucks. The CO_2e emissions were calculated using the ISO 14067 method and the result audited by an external auditor.

Establishing a circular economy

Jungheinrich launched a process in the 2023 reporting year to develop a holistic strategy to advance the circular economy. Starting with the identification and definition of material circular economy terms, the relevant fields of action for Jungheinrich are determined and measures for expanding the circular economy in the relevant fields created. Company- and product-related programmes to support the breakaway from resources have also been implemented:

- **Truck rental models:** Jungheinrich offers material handling equipment rental models that save resources and also keep ownership rights for raw materials and materials with the company. This enables Jungheinrich to ensure recyclability in the long term.

- **Used trucks:** Jungheinrich has been refurbishing its own material handling equipment at the refurbishment plant in Dresden since 2006. The demand for reconditioned forklifts led to the opening of a plant in Ploiești, Romania, in 2022. In 2023, Jungheinrich industrially refurbished 7,491 trucks (2022: 5,588) with a reuse ratio of around 92.0 per cent (2022: 93.0 per cent). The proportion of older trucks in for refurbishing rose in comparison with the previous year, which required more parts to be changed. The reuse ratio decreased slightly for this reason. At the same time, customer requirements regarding the functional equipment of the used trucks impacted the refurbishment process. This resulted in a rise in the replaced and recyclable components to 7.3 per cent (2022: 6.1 per cent). A total of 99.3 per cent (2022: 99.1 per cent) of a truck's materials were returned to the loop in 2023. Through refurbishment, which saves raw materials and energy, Jungheinrich can extend the life cycle of material handling equipment and minimise the use of new parts.

- **Optimised battery life cycles:** Jungheinrich is aiming to extend battery life cycle phases. Lithium-ion batteries that have previously been used in new trucks are refurbished for use in a used truck. Battery cells with insufficient capacity for material handling equipment are used in stationary energy storage systems before they are recycled.

Definition of environmental standards in environmental and energy programmes

Jungheinrich has made a collection of measures for environmentally friendly conduct available on the internal sustainability platform. These contain best practice examples and suggestions for sustainable transformation at the Jungheinrich locations. 17 companies had ISO 14001-certified environmental management systems in place in the 2023 financial year, and seven had ISO 50001-certified energy management systems.

The principles of energy efficiency and the sparing use of natural resources are implemented based on Jungheinrich's internal environmental standards, which go beyond the legal requirements in some cases. These environmental standards include but are not limited to the following principles:

- improving energy efficiency
- increasing the recyclability of resources
- efficient water and effluent management
- preserving and promoting biodiversity
- active hazardous substance management

The key figures for 2021 presented in this report do not include all fully consolidated companies and therefore are only comparable with the figures for 2022 and 2023 to a limited extent. The key figures are partially based on commonly-used extrapolation logic. For example, some values have been extrapolated for the whole of the year under review based on actual figures available for part of the year. Additionally, some key figures have been calculated pro rata using comparable companies or types of companies.

Energy management

The integration of sustainable energy solutions remains an important building block for future energy management. Energy management includes increasing security of supply, improving the energy efficiency of equipment, and reducing dependence on price fluctuations and supply bottlenecks through the use of a decentralised energy supply. Jungheinrich consistently focusses on the use of electricity from renewable sources and its own decentralised energy generation.

Energy consumption is optimised through targeted energy-saving measures and the use of efficient technology. The continual improvement of energy management is reviewed in internal and external audits and ensured through measures derived from the audits.

Measured against Group revenue, Jungheinrich's energy consumption of 295,113 MWh[1] (2022: 292,221 MWh) corresponded to an energy intensity of 53.3 MWh/€ million (2022: 61.3 MWh/€ million) in the reporting year. Consumption of electricity generated by the Group from renewable sources was recorded for the first time in 2023 and came to 488 MWh.

The following table shows energy consumption in the Jungheinrich Group:

	2023	2022	2021
Natural gas in kWh[2]	51,407,555	52,099,655	50,393,583
Heating oil in kWh	1,288,111	1,346,004	1,514,197
Diesel in l	12,996,470	13,366,426	10,094,990
Petrol in l	3,900,233	2,815,367	450,141
Ethanol in l	68,416	75,457	48,365
LPG in kg	50,449	43,934	–
Public electricity in kWh	66,243,009	68,503,026	56,333,950
Consumption of electricity generated by the Group from renewable sources in kWh	488,002	–	–
District heating in kWh	12,519,820	12,784,725	11,563,197

Waste and recycling management

Jungheinrich aims to continually increase its ability to recycle resources, and is guided by the principle of prevention before recycling, recycling before disposal. The targets in this context are:

- no landfill waste at German plants by 2025
- reducing the global landfill waste by a third by 2025 (base year: 2019)
- no landfill waste created by internal work processes at locations in countries with established recycling systems by 2030

The project team for introducing central waste management achieved the following in the reporting year:

- transparency on waste streams at the plants
- uniform internal waste statistics
- comparison of recycle/disposal procedures
- measures to optimise disposal channels

The waste statistics show that the majority of waste is recycled. Total waste in 2023 rose partially due to the expansion of production capacities and an increase in the volume of old batteries disposed.

Total amount of waste

in tonnes	2023	2022	2021
Total hazardous waste	10,704	7,696	5,239
Recycling of materials	8,876	6,087	3,791
Thermal recovery	735	812	353
Disposal	1,093	797	1,095
Total non-hazardous waste	13,310	13,473	11,036
Recycling of materials	11,463	11,527	8801
Thermal recovery	1,036	1,119	1,057
Disposal	811	827	1,178

Water and effluent management

The Group's environmental management system views water and effluent management as an important environmental aspect that it has a direct influence on. Jungheinrich is committed to handling water efficiently in order to reduce water consumption and the volume of effluent produced on an ongoing basis. Circular economy solutions are vital in this regard. A production water treatment facility is in operation at one production location with the aim of creating internal water cycles. An effluent pretreatment facility at another plant also allows for production effluent to be fed back into the sewage systems; this means effluent does not have to be picked up by a specialist disposal company. Ways of treating and feeding water back into the sewage system is also being examined for other plants. One action taken to reduce water consumption was the substitution of a wet chemical pretreatment process in a powder coating facility, meaning that this process will no longer require water in the future.

The Group withdraws a total of 293 megalitres of water (2022: 315 megalitres), of which 165 megalitres is groundwater and 128 megalitres water from third parties, such as municipal water companies. The remaining water withdrawal comes from surface water, seawater and own water sources. Groundwater is primarily withdrawn for the Moosburg and Degernpoint production plants' cooling systems, where the water is used in closed loops and returned.

[1] The key figure provided is based on commonly-used conversion factors.

[2] Including natural gas consumption for the production of electricity through the cogeneration unit at the Degernpoint plant.

Preserving biodiversity

To promote the biodiversity of ecosystems and agricultural systems, Jungheinrich has launched local initiatives around the world and encourages all employees to get involved. Various measures to promote biodiversity are suggested on the internal sustainability platform that can be implemented at the sites: Opening up sealed surfaces, greening walls and roofs, planting easy-maintenance gardens for wild animals on unused outdoor areas, planting domestic and wild-life-friendly plants, setting up insect hotels and beehives and setting out drinking water for animals. Measures are also taken to promote biodiversity when new plants are constructed. The Chomutov plant in Czechia, for instance, is located on a 1.5-hectare green space with native bushes and trees and thus contributes to the promotion of local biodiversity.

Hazardous substance management

The development, production and operation of material handling equipment currently requires the use of hazardous substances that can have an impact on the environment and the health of employees. Strict regulatory requirements must therefore be applied to the handling of hazardous substances. The Group has clear guidelines in place for the use of hazardous substances. There is a defined process for the approval of these substances that includes the double-check principle and the inclusion of work safety and environmental experts. Ongoing hazard assessments, including substitution evaluations, are performed as part of Jungheinrich's active hazardous substance management. During these assessments, possibilities for substituting hazardous substances or processes with alternatives are evaluated (substance, mixture, product or process). This leads to a lower endangerment of the workforce and the environment overall. The employees affected are regularly trained in the safe use of hazardous materials.

Society

EMPLOYEE INITIATIVE

As a global enterprise with more than 21,000 employees, Jungheinrich has managed to combine growth with the values of a family-owned business and a management culture based on trust in the employees. In this financial year, Jungheinrich introduced Jellow Way, which outlines the attitude to management and cooperation. This mission statement outlines behaviours that support Jungheinrich's ongoing success. Jellow Way presents the corporate culture and serves as a foundation for discussions, feedback and development and as a guide.

Some of the key figures in this chapter relating to employee numbers exclude temporary workers, apprentices and trainees. These figures exclude the companies MIAS USA, MIAS Holding Asia, JFS United Kingdom, JFS Spain and JFS Italy as these companies have fewer than 10 employees. Magazino and Storage Solutions are also excluded as these were only fully consolidated in the current financial year. 98.4 per cent of FTEs at the Jungheinrich Group are covered by these figures. All other key figures relating to FTE employees at the Jungheinrich Group fully include apprentices at all companies.

Low staff turnover and long periods of employment

Demographic change and the associated labour shortage are posing significant challenges on the labour market in this decade. As an employer, Jungheinrich strives to retain employees and gain talented young people for the company. Various measures are in place to safeguard the stability of the workforce, such as promoting personal development, supporting a work-life balance, flexible working hours, company pensions and training offers. Indicators of the stability of the workforce is the average period of employment of 9.7 years[1] (2022: 9.8 years), and low staff turnover of 4.9 per cent worldwide[2] (2022: 6.6 per cent) which equates to 1,003 resignations (2022: 1,273). Overall, the number of employees has increased by 1,310[3] against the previous year (2022: 704). At 98.1 per cent[1,3], a high number of employees have permanent employment contracts (2022: 97.9 per cent).

[1] Reporting date 1 December 2023.
[2] Average number of employees.
[3] Employees in FTE.

Jungheinrich cultivates a pleasant work atmosphere and a future-oriented, supportive feedback culture (feedforward) through a new structure for annual employee appraisals, which will be rolled out worldwide. It promotes trust between managers and employees and strengthens Jungheinrich's corporate culture. This exchange supports the development and common understanding of cooperation in the company. Jungheinrich's modern management approach is also defined here. The managers are responsible for creating an environment that promotes innovation, achieves results, has a focussed direction and encourages employees to act on their own initiative.

Jungheinrich again gained 22 talented young individuals from around the world this financial year for the Jungheinrich International Graduate Programme. Besides Germany, Italy, Spain and Thailand, the Group also welcomed its first trainees from Denmark, India, Singapore, the Netherlands and Belgium in 2023.

Employees by region and gender

	FTE 2023[1,2]	FTE 2022[1,3]	**Headcount female 2023[1,2]**	Headcount female 2022[1,3]
Germany	8,688	8,251	1,692	1,587
France	1,259	1,242	271	273
Italy	1,174	1,113	304	287
United Kingdom	836	781	133	131
Spain	649	533	147	127
Poland	621	618	150	145
Rest of Europe	4,840	4,482	1,022	916
China	840	919	196	219
Other countries	2,210	1,868	411	367
Total	**21,117**	**19,807**	**4,326**	**4,052**

Fair working conditions and promoting occupational health and safety

Jungheinrich has adopted numerous measures to achieve its overarching target of preserving and furthering employees' health and satisfaction. The employee health ratio reached 96.9 per cent in the financial year 2023 (2022: 96.5 per cent). The working conditions at Jungheinrich are flexible wherever possible, which is reflected in the range of offers such as working from home, working remotely and hybrid models. The following measures were taken in 2023:

- Amending employment contracts to allow employees in suitable positions to permanently work remotely for up to 50 per cent of their contracted hours or up to 20 per cent from home.
- Providing materials for remote working spaces, such as height-adjustable desks and chairs.
- Equipping meeting rooms for hybrid meetings to enable virtual cooperation.
- Launch of a Group-wide initiative for the future-oriented design and use of office space to promote both hybrid and analogue collaboration.

Measures to promote worker health include:

- subsidised occupational health check-ups
- vaccination advice and health checks
- company sports programmes at different locations
- regular, decentralised health awareness days on special topics and expert fitness and health advice
- access to the "Balloon" app, which features a growing library of audio meditations on topics such as stress, sleep, calmness
- promoting mental health through mindfulness training
- continuing the series of "Yes I Care" workshops for managers to raise awareness of employee health issues
- firmly integrated processes for employees returning to work
- regular physical threat analyses with follow-up planning and optimisation measures
- introduction of JobRad, a cooperation for subsidised bikes leases

Jungheinrich is currently working on a health offer for all employees and establishing global company health management. Protecting employees' health is Jungheinrich's top priority. Vision Zero underscores the importance placed on health with the target of zero accidents for employees in the Group, including temporary employees, staff from temping companies, trainees and apprentices. The health of every member of the workforce is decisive in preserving the individual's ability to work and thus Jungheinrich's ability to perform and be successful over the long term.

Jungheinrich has implemented overarching programmes in the field of safety and health management. Material work safety tools and processes were harmonised during the process. For instance, in 2023 the Group began standardising the processes for recording safety-relevant events. The integration of health and safety guidelines in workflows is being driven forward. Managers provide briefings on occupational health and safety topics annually. E-learning offers provide support for achieving work safety targets. In addition, special training courses on workspace conditions are carried out on site. This includes training safety officers, first aiders, and fire safety and evacuation assistants. The first training courses to raise awareness for health and safety were held for managers and individual departments in 2023. This series of training is scheduled to be continued and rolled out further

[1] Employees in FTE.
[2] Reporting date 1 December 2023.
[3] Reporting date 1 December 2022.

in 2024. Jungheinrich's aim is to contribute to the overall strengthening of the social aspects of sustainability in the corporate culture.

The aim of conducting systematic analyses of accidents and their causes is to prevent such accidents and reduce downtimes. All safety-relevant events are included and a preventive approach is adopted. The measures taken in the 2023 financial year have led to an improvement in work safety. This is reflected in the key figures, whereby accidents in the workplace with at least one lost day are included in the statistic:

- The LTIR in 2023[1] was 13.7 (2022: 13.8). The aim is to reduce this figure to 12.5 by 2025. LTIR is based on the frequency of work accidents per one million working hours.
- There were 464 accidents in the workplace throughout the Group in the year under review[1] (2022: 471).
- Each accident in the workplace resulted in an average of 14.8 lost days[1] (2022: 15.2).

Communication concepts to promote exchanges and synergies across locations are being developed. Jungheinrich is pushing forward with the digitalisation of EHS processes. Jungheinrich continued combining the documents and processes that have already been drawn up into an occupational safety management system in 2023. The system is to be certified according to DIN ISO 45001 in future.

Employee personal development

Boosting the company's adaptability is one of the success factors for the implementation of the corporate Strategy 2025+. Jungheinrich supports employee personal development with a comprehensive range of training. This can be seen in the various initiatives:

- Training for managers, project leads and employees is as much a part of the portfolio as the establishment of an internal network of change facilitators who provide support during the design of change processes at Jungheinrich.
- The Jungheinrich Academy offers qualifications that meet employees needs in the form of e-training and in-person courses. Special training courses for after-sales and sales employees are offered in the Group's own training centres worldwide. The range of offers also covers training courses in the field of HR, finance, IT and production as well as personal development. This range will be expanded to include target group-specific sustainability training from 2024. The range is completed with a comprehensive and international Train the Trainer programme. The range of training available is supplemented by Jungheinrich CAMPUS, an internal learning management portal with digital, modular training formats.
- In the 2023 financial year, the internal Group-wide learning hours were recognised for the first time. They amounted to 813,053.6 hours[2]. That is equivalent to an average of 38.3 learning hours per employee. The amount of external learning hours will be recorded from 2024.
- In their annual appraisals, employees agree on development measures together with their manager to safeguard their employability and personal development. Training managers and personal development professionals provide employees with advice regarding their training needs in order to guarantee long-term learning success.

Equal opportunity and diversity form the foundation of the company's success

The diversity of the workforce is a major factor in Jungheinrich's success. Jungheinrich fosters a variety of perspectives, ideas and solutions in a team-oriented and tolerant environment. It is important to Jungheinrich that salaries are fair and competitive and in line with the employees' positions. Within Germany, the Jungheinrich Group employs people from 75 (2022: 76) countries, including people with disabilities.[3]

In order to establish the common values internationally, Jungheinrich regularly sends senior executives from Group headquarters to the subsidiaries. Jungheinrich's long-term goal is to fill senior management level posts in the subsidiaries with local managers, as they are familiar with the local conditions and the national culture. As part of the corporate Strategy 2025+, Jungheinrich plans to increase the share of international managers in the workforce. In 2023, 88.5 per cent of the managers abroad came from the country they were working in (2022: 89.6 per cent)[3]. The share of female employees in the Jungheinrich Group in 2023 came to 20.8 per cent[4] worldwide (2022: 20.5 per cent) and 19.8 per cent[4] (2022: 19.4 per cent) in Germany and is thus higher than in the previous year. This exceeds the average in the German machine construction industry of 17.2 per cent. The share of women on the Board of Management is 25.0 per cent (2022: 25.0 per cent), while the Supervisory Board has a 41.7 per cent share of female members (2022: 41.7 per cent).

[1] Employees, excluding employees on parental leave, partial retirement (passive phase), employees who have been signed off as unfit for work.

[2] This figure relates to all fully consolidated companies and includes employees from temping companies, apprentices and trainees. External people participating in Jungheinrich CAMPUS training are not included.

[3] The calculation method for the share of locally recruited managers abroad was adjusted from the previous year to exclude international managers at German locations. The previous year's figure was also recalculated and presented anew.

[4] Reporting date 1 December 2023.

The share of women in management positions was 15.1 per cent (2022: 15.3 per cent). In line with the Strategy 2025+, Jungheinrich is aiming for a share of female managers of 20.0 per cent. The CEO remuneration ratio was calculated for the first time in 2023. This figure amounted to 35.8[1].

SOCIAL INITIATIVE

The central aim of the corporate Strategy 2025+ is to create sustainable value. This also includes Jungheinrich's social responsibilities. The company is committed to supporting long-term cooperations and projects in the field of emergency humanitarian aid and education. The main initiatives are:

- **Partnership with ↗ action medeor:** For more than ten years, Jungheinrich has been working with action medeor, an organisation committed to improving the health of people living in the world's poorest regions. Jungheinrich provides financial support and its intralogistics expertise. Another project that the company supported in 2023 was a multi-year project to promote mother and child health in the Democratic Republic of the Congo. Donations in kind were made to optimise the medication warehouse at action medeor's headquarters in Tönisvorst.
- **Internal Donate your pennies campaign:** Jungheinrich employees collect donations for action medeor with the Donate your pennies campaign. The monthly penny amounts on the pay slips of employees participating in this campaign are given to select projects once a year. So far around €300 thousand has been raised. Some of the money raised through this campaign in 2022 was donated to the earthquake victims in Türkiye and Syria in the year under review. The rest of the money raised went to the WASH project in Nepal.
- **The cooperation with ARCHE:** Jungheinrich has been supporting ARCHE, a Christian child and youth charity in Hamburg-Jenfeld, for more than a decade. The charity's objective is to improve the learning opportunities and quality of life of children and youths in the local area. Jungheinrich regularly makes financial donations and donations in kind and volunteers time at events such as the 2023 summer festival.

In addition to its long-term partnerships, Jungheinrich also provides support in unexpected emergency situations. In 2023, the company rallied support for the earthquake victims in Türkiye and Syria as well as for people affected by the flooding catastrophe in Slovenia. In both cases, one of the things Jungheinrich did was double the donations collected by its employees.

Besides centrally initiated donation campaigns, the Group units also get involved in local charity projects, like those below.

- **Brazil – education:** Jungheinrich Brazil is committed to supporting the expansion of environmental education. A children's book was published together with the organisation Copaíba, that teaches children about sustainability, protecting the environment and the Atlantic Forest. All proceeds go to Copaíba: A tree is planted in the Atlantic Forest for every book sold and two children from state schools are invited to visit the organisation. The 10,000 copies published can be obtained at private schools, through Copaíba and the Brazilian Jungheinrich online shop. Some copies were donated to children in state schools.
- **Romania – education:** Jungheinrich Romania taught pupils about sustainability, recycling, sustainable innovation and lithium-ion batteries over the course of two event days. Trees were also planted at the Virgil Madgearu Economic College (Bucharest) and the High School of Sports (Brașov) as part of the project.
- **Thailand – social commitment:** While visiting the Asia Center Foundation (ACF), Jungheinrich employees from the Asia-Pacific region built a playground on the organisation's premises and played a number of educational games with the children. Several donations in kind were also made, such as toys, teaching materials and building materials for the playground. ACF is committed to improving the lives of at-risk children in Thailand by offering them access to education, care, healthy food and the opportunity to learn life skills in a safe environment.

[1] This figure represents the ratio of the Chairman of the Board of Management's annual total remuneration to the average total annual remuneration of all employees in Germany. All German companies were included with the exception of MIAS, Profishop, arculus, ISI and Magazino. To calculate the average total remuneration, all relevant elements of personnel costs such as wages and salaries, provisions and bonuses, other personnel costs and long-term incentives were included.

Governance

GOVERNANCE INITIATIVE

Jungheinrich is committed to value-oriented corporate governance that promotes efficiency, a sense of responsibility, sustainability and long-term corporate success at all levels. The company's understanding of corporate governance is orientated towards the regulatory frameworks relevant to the company and to best practices, including the German Corporate Governance Code that serves as a guideline for governance internally and externally.

The foundations of Jungheinrich's entrepreneurial activity also include the clear distribution of tasks, rights and responsibilities, transparent internal and external corporate communications and responsible risk management. Effective internal control and risk management and compliance management system (CMS) play a central role in governance. Responsible business practices cover Jungheinrich's entire value chain and especially include procurement processes. Jungheinrich strives to be viewed as a reliable partner by customers, suppliers, employees, shareholders and all other stakeholders. Further information about ↗ corporate governance at Jungheinrich, including nominations to the Board of Management, Supervisory Board and Committees and their working methods, and Board of Management and Supervisory Board remuneration are published on the company's webpage.

Compliance, with clearly defined responsibilities

Jungheinrich understands compliance to mean complying with laws and internal guidelines and rules in a systematic manner. The Group's CMS, which sets out clear responsibilities within the company, covers all organisational structures and processes, which are themselves regularly adapted to changing circumstances. The CMS requires correct behaviour and integrity from employees in everyday business, based on the principle of prevention, detection and response. This means that Jungheinrich proactively prevents violations and risks, offers Group-wide ways to report any suspected violations and conducts fair and confidential investigations. Jungheinrich has followed these compliance principles and the existing structures for many years, meaning no significant official investigations or fines have been launched against the company or its managers/executive bodies.

The Jungheinrich Compliance Committee met on set dates in the 2023 financial year ensuring the further development of the CMS from a Group perspective. In addition, the Jungheinrich AG Supervisory Board was regularly informed of compliance-relevant issues. Corporate Compliance, Audit & Data Protection was subject to a quality audit performed by an external auditor in 2022 to ensure that the processes and structures still met the increasing regulatory requirements. The implementation of the agreed further developments began in 2023.

Various tools and measures for implementing internal rules and regulations are at the core of the CMS, including:

- a uniform Code of Conduct that is mandatory for all employees, the Board of Management and the Supervisory Board
- clear reporting channels, for instance via Jungheinrich's compliance portal OpenLine
- Group-wide compliance training for all employees, including members of the Board of Management
- regular audits performed by the Corporate Compliance Audit & Data Protection division
- compliance along the entire value chain, including external suppliers and sales partners

Consistent Code of Conduct

Jungheinrich makes binding guidelines and standards, including a Group guideline for compliance with clearly defined responsibilities, processes and structures available to all employees. In addition, a new Group guideline on preventing corruption was adopted and communicated throughout the Group in the 2023 financial year. A Code of Conduct that covers ten different compliance topics and applies throughout the company is also part of the Jungheinrich Compliance Management Guideline:

- avoiding conflicts of interest
- dealing with external business partners
- avoiding bribery and corruption
- antitrust regulations
- the environment
- data protection and information security
- confidentiality and non-disclosure
- human resources compliance
- financial compliance
- capital market compliance

The company is committed to transparency in its donations as well as sponsoring, and does not tolerate inappropriate structures designed for tax evasion. The company also declares it will not support any political parties or projects, or any organisations or persons with a political background. Jungheinrich follows the arm's-length principle, whereby taxes are paid in the country in which it has generated the earnings.

Compliance with personal rights and protecting company secrets are of the utmost importance. An internal guideline that takes into account legal requirements stipulates how personal data is to be handled.

Clear reporting channels for violations

A process that has been clearly communicated and applies internationally is in place for compliance issue reports and the notification of suspected violations. The process stipulates three channels for reporting: to direct supervisors, local compliance officers or the central compliance team. The ↗ Jungheinrich OpenLine portal was launched as a fourth option in the CMS in the 2017 financial year. Employees can ask questions or report violations with their name or anonymously using the portal. The portal has also been available for external notifications since 2019. Jungheinrich is currently expanding the number of languages that the portal is available in, in order to make the portal accessible to as many people who wish to make a report as possible.

Raising awareness for compliance

Awareness of compliance issues is raised among employees in order to encourage appropriate conduct. Jungheinrich has made various compliance e-learning modules available through the Jungheinrich learning platform CAMPUS. These include training sessions covering the Jungheinrich Code of Conduct, data protection and IT security. They were again rolled out as mandatory training courses in 2023 to all employees who have access to Jungheinrich CAMPUS. Alternatively, customised and updated training materials for in-person training and specific information events was made available and offered at plants and sales locations. In the 2023 financial year, there were 28 compliance briefings (2022: 24). Jungheinrich also organised additional training for relevant groups on topics such as anticorruption and antitrust via Jungheinrich CAMPUS in 2023. Jungheinrich CAMPUS has also been offering the option of training partners who have to meet compliance requirements since 2019. New Jungheinrich companies are always briefed on relevant compliance topics in a defined process.

Ongoing audits

To inspect suspected cases of violations against legal or internal requirements fairly and confidentially, incoming reports are checked by the Head of Corporate Compliance, Audit & Data Protection – after the Chief Compliance Officer has been informed. Further steps are taken if necessary, such as receipt audits, interviews and disciplinary measures. Over the course of the reporting year, there were no reports of any incidents which, following an internal investigation, would have to be classified as significant cases of corruption (2022: 0). To prevent corruption, all Jungheinrich locations are regularly checked for risks by the Corporate Compliance and Audit & Data Protection division. The standard procedure includes reviewing receipts, financial transactions and internal controls. Donations made by the Group and sponsorships are also regularly examined. In 2023, 23 audits were conducted (2022: 20). Appropriate documentation and traceability of the audits performed are an important part of the compliance reporting process and meet all regulatory requirements. Jungheinrich's Finance and Audit Committee is also informed of the audits performed and their results every quarter.

Compliance along the value chain

Jungheinrich also expects the same high compliance and data protection standards from its external suppliers and sales partners. The Group expects them to behave ethically and apply the same high standards as Jungheinrich does. This includes guaranteeing the basic principles of free and fair competition, ensuring data is protected, and preventing corruption. These standards and compliance with environmental requirements along with labour rights and working conditions are laid out in the Supplier Code of Conduct. Suppliers are also informed of the existing reporting channels at Jungheinrich via the Supplier Code of Conduct.

Respecting human rights

Jungheinrich is firmly committed to respecting human rights. Human rights due diligence obligations are established both within the business processes at Jungheinrich's own locations and within the supply chains. In determining the nature of its obligations, the company follows international guidelines and standards such as the UN Human Rights Charter, the United Nations Guiding Principles on Business and Human Rights (UNGP), the OECD Guidelines for Multinational Business and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. In accordance with these guidelines, Jungheinrich obliges its employees, customers and business partners worldwide to act in a responsible, ethical and legal manner.

This includes the following protected legal positions:

- the prohibition of child labour, including the worst forms of child labour
- the prohibition of forced labour, human trafficking and slavery
- occupational health and safety
- freedom of association
- prohibition of discrimination and harassment
- appropriate pay
- the prohibition of affecting human populations through environmental changes
- the prohibition of forced evictions and expropriation of natural resources
- making demands on private and state security forces
- compliance environmental obligations
- fair working conditions and working hours
- the right to data protection and privacy

With the revision of the ↗ Jungheinrich Code for Human Rights and Occupational Health and Safety, the adoption of a Group guideline on Corporate Due Diligence, and the publication of a ↗ Policy Statement to Respect the Human Rights, Jungheinrich met further requirements of the Act on Corporate Due Diligence in Supply Chains (LkSG) in the reporting year. The Human Rights Council established in 2022 is a decisive sign of the Group's attitude with regards to respecting human rights.

Jungheinrich performs appropriate risk analyses relating to its human rights and environmental obligations in its own business and at direct suppliers at least once a year to recognise, evaluate and prevent potential or actual negative impacts. The priority human rights and environmental risks for Jungheinrich determined by the risk analyses are presented in the following:

Own business

- **Appropriate pay, fair working conditions and working hours:** Jungheinrich complies with the applicable minimum wages around the world. An analysis of the production locations also confirmed that Jungheinrich pays a living wage at least at these locations. Jungheinrich also complies with statutory regulations on working hours. Overtime may occasionally be required during working hours. However, this does not represent a systematic or structural deviation but rather one-off cases.
- **Discrimination:** Jungheinrich employs more than 21,000 people worldwide. There may therefore be individual cases of discrimination within the workforce. However, Jungheinrich does not systematically or structurally discriminate against people or groups of people.
- **Occupational health and safety:** Jungheinrich creates value through production, sales and after-sales services (maintenance, repair and spare parts service). In production and the after-sales service in particular, work safety risks can be higher, which is why EHS-related topics [page 71] are given high priority.
- **Freedom of association:** Jungheinrich operates worldwide. This includes countries where the freedom of association is legally restricted.

Direct suppliers

The risk analyses for direct suppliers were performed according to product groups. The following product groups with higher abstract human rights risks were identified: logistics, third-party assembly services, event marketing, facility management, printed circuit boards. The following abstract risks were determined and prioritised for these product groups:

- **Occupational health and safety:** There is a latent risk in the field of work safety in particular when it comes to Jungheinrich suppliers' labour-intensive value creation and services. Depending on the precautions taken by the suppliers, varying levels of remaining occupational health and safety risks cannot be excluded.
- **Forced labour and slavery:** Jungheinrich suppliers operate in different cultural, social, economic and political contexts around the world. This can result in varying levels of dependence on the part of the employees.
- **Discrimination:** Jungheinrich's suppliers are at different stages of development when it comes to managing equal opportunities and operate in different cultural contexts. They have many employees and there may be discrimination in individual cases.

In the coming financial years, Jungheinrich will implement further measures relating to its human rights due diligence obligations, including:

- annual publication of a Jungheinrich Human Rights Declaration
- expanding and embedding the management approach
- checking the efficacy of the measures and procedures introduced
- creating a global organisational structure in the Group to implement the measures
- raising awareness among Group employees, suppliers, customers and business partners regarding human rights and how to handle human rights issues in business practices

Jungheinrich sees fulfilling its human rights due diligence obligations as an ongoing process. Regulatory developments, such as the LkSG and the planned EU Directive on human rights due diligence obligations will therefore be translated into appropriate internal measures.

Establishing sustainable procurement

Sustainable procurement is an integral part of the Jungheinrich sustainability strategy. Including suppliers within a holistic supplier management process is of vital importance and contributes to stability of supply. The careful selection of suppliers that share Jungheinrich's approach to sustainability is an important prerequisite for sustainable supplier management. Potential suppliers must fulfil uniform approval criteria throughout the Group. The most important aspects are the Supplier Code of Conduct, the Supplier Manual and the sustainability self-assessments. The Supplier Manual was updated in the 2023 financial year. Suppliers are regularly classified for risk according to economic, ecological and social criteria. Appropriate measures are taken depending on the risk class.

The integration of sustainable procurement in internal processes and at suppliers, including the implementation of LkSG requirements, was continued in 2023. The management system for sustainable procurement was expanded to include preventative and remedial action. The preventative measures form part of a four-step model that stretches from the Supplier Code of Conduct to potentially on-site social audits. An internal workflow was designed for remedial action which enables a swift and appropriate response to any incident in Jungheinrich's supply chains.

In order to increase key-supplier transparency, they now undergo a sustainability self-assessment, which is carried out via the ↗ Integrity Next platform. Currently, more than 750 of the potential approximately 1,500 key suppliers are participating, which equates to 74 per cent of the Group purchasing volume[1]. The management system was expanded to the Jungheinrich companies Profishop AG & Co. KG, Profishop AG, Profishop GmbH and MIAS Group in 2023 in order to formalise their sustainable procurement processes further. The sustainability self-assessment comprises the following topics:

- anti-corruption and anti-bribery
- occupational safety
- energy management
- conflicts of interest
- human and labour rights
- environmental protection
- responsibility in the supply chains

The sustainability self-assessments form the basis for calculating the sustainable spend key figure. This figure was introduced in 2021 with the aim of classifying at least 80 per cent of the relevant purchasing volume as sustainable by 2025. Sustainable spend stood at 75 per cent in 2023 (2022: approximately 70 per cent).

Future sustainable procurement measures include procurement training for buyers and suppliers, direct supplier risk analysis, expansion of sustainability self-assessments and audits, and focussing on reducing CO_2e emissions in the supply chains.

SUSTAINABLE BUSINESS MODELS, PRODUCTS AND SERVICES INITIATIVE

As a sustainability enabler, Jungheinrich wants to support its stakeholders in achieving their sustainability targets and considers sustainability to be an opportunity. The company's sustainable orientation releases potential to increase the company's innovativeness, expand the portfolio of solutions and generate competitive advantages, for example. Sustainable business models, products and services are a decisive driver for Jungheinrich, as they support customers in particular in achieving their sustainability and climate targets and contribute to customer retention. Product quality and safety are also vital factors when it comes to customer satisfaction.

Sustainability as a growth driver

Jungheinrich offers a broad range of products that support customers in their sustainability efforts:

- Since March 2023, all of the trucks manufactured have been battery-powered. However, the electric ratio was almost 100 per cent in previous years, too.
- The company offers lithium-ion solutions through its own research, development and production capacities. These provide customers with fully networked systems where the battery, charger and truck all perfectly complement one another.

[1] Due to changes in business relationships, these figures are only a snapshot at a given point in time; they may fluctuate over time.

- The POWERLiNE truck series, launched in 2022, consists of CO_2e-neutral[1] lithium-ion trucks manufactured with renewable electricity and that consume around 20 per cent less energy during daily operation in comparison with lead-acid trucks.
- A CO_2e-neutral after-sales[2] service had been introduced in five countries by the end of 2023, with plans to expand to more countries.
- Jungheinrich operates two refurbishment plants and other refurbishment facilities for used trucks, and offers customers truck rental models. These actions support a circular economy.
- The company enables improvements in energy efficiency and warehouse and material flow optimisation with its digitalisation and automation solutions and targeted customer consulting.
- Jungheinrich's 360-degree protection programme also offers solutions and assistance systems that focus on customer safety.

Jungheinrich is also applying its energy skills to new application areas outside of warehouse logistics. For instance, Jungheinrich offers customised consulting and drive train components under the name Powertrain Solutions, from the engine to the control units and including lithium-ion batteries and battery chargers, for the agricultural and machine construction sectors.

Product quality and customer safety

Jungheinrich has established ISO 9001 quality management systems in the majority of its plants in Germany and abroad in order to guarantee the quality of its products and customer safety. The Group's central quality organisation standardises processes and establishes uniform standards for suppliers. This guarantees that the product materials procured meet the highest quality standards. Active participation in standardisation processes and associations is important to Jungheinrich, as standards promote innovation through sustainable product optimisation and create the foundation for increasing the products' safety and reliability further. Standards also promote legal certainty, facilitate export and create competitive equality. Taking these aspects into consideration, Jungheinrich actively participates in these processes by sending experts to the standardisation and association process committees. These include DIN standardisation committees (German Institute for Standardisation), European standardisation bodies (CEN/CENELEC), and bodies of the globally active International Organization of Standardization (ISO), VDI working groups (Verein Deutscher Ingenieure), Verband Deutscher Maschinen- und Anlagenbau (VDMA) committees, and European Materials Handling Federation (FEM) committees. Jungheinrich also particularly observes competition law regulations when participating in standardisation processes and associations.

Jungheinrich's tight service network plays a decisive role when it comes to customer safety. It enables direct consultation on site and a fast response to product disruptions. The majority of the service reports prepared by after-sales service technicians is analysed with system support. Based on this data, measures are derived to improve safety and reduce product downtimes. In the event of product incidents, appropriate processes including direct contact are initiated.

[1] This is achieved by reducing emissions during the manufacturing processes and investing in certified compensation projects to offset CO_2e emissions. The greenhouse gas emissions for the trucks up until the point of delivery is calculated using recurring life cycle assessments based on DIN EN ISO 14040 specifications. For more information, visit the ↗ website on CO_2e neutrality at Jungheinrich.

[2] Jungheinrich will achieve neutrality by reducing emissions in after-sales service processes and investing in certified compensation projects to offset CO_2e emissions. For more information, visit the ↗ website on CO_2e neutrality at Jungheinrich.

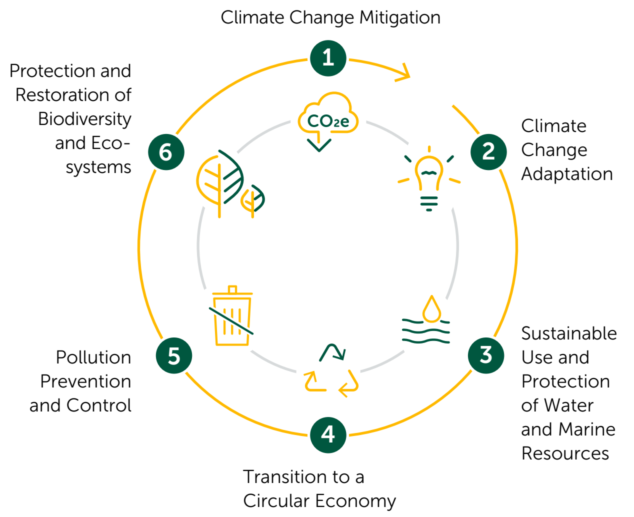
EU Taxonomy Regulation

BACKGROUND AND OBJECTIVES

As part of the European Green Deal, the European Union (EU) aims to create a modern, resource-efficient and competitive economy that will achieve net zero greenhouse gas emissions by 2050, detach growth from the use of limited resources and not disadvantage people or regions. In order to achieve these targets, the EU Commission created an action plan to redirect capital flows to a more sustainable economy. One material component of this action plan is the EU Taxonomy Regulation, which provides a classification system for environmentally sustainable economic activities. For this purpose, economic activities are evaluated according to their contribution to one of the six environmental objectives.

In accordance with the requirements (see Article 8 of the EU Taxonomy Regulation and Article 8 and Article 10 of the Delegated Act on reporting obligations under Article 8), the following section contains the required disclosures according to the EU Taxonomy Regulation. Here, amongst other figures, Jungheinrich presents the taxonomy-aligned, taxonomy-eligible and taxonomy-non-eligible shares of Group turnover (turnover), as well as capital expenditure (CapEx) and operating expenses (OpEx) for the first and second environmental objectives of the Climate Delegated Act for the 2023 financial year.

Environmental objectives of the EU Taxonomy Regulation



For the third to sixth environmental objectives of the Environment Delegated Act, disclosures relate to the taxonomy-eligible and taxonomy-non-eligible shares of Group turnover (turnover), as well as CapEx and OpEx. The key figures are differentiated according to the relevant economic activities.

IMPLEMENTATION OF REGULATORY REQUIREMENTS

Jungheinrich's business model as a solutions provider for intralogistics is relevant to the environmental objectives "Climate Change Mitigation" and "Transition to a Circular Economy". The manufacture of electric material handling equipment can contribute to climate change mitigation. Their repair and refurbishment as well as the rental and lease business can support the transition to a circular economy. The substantial contribution made to climate change mitigation can be proven for several lithium-ion battery-powered trucks.

In order to report on the taxonomy-aligned and taxonomy-eligible economic activities in the 2023 financial year, Jungheinrich has taken the following steps:

- established a project team, including experts from Corporate Controlling, Corporate Sustainability and Health & Safety, to implement the requirements of the EU Taxonomy Regulation, support the units to the fullest extent possible, and consolidate and verify the reported data
- reviewed business activities and identified taxonomy-eligible economic activities
- evaluated taxonomy alignment of taxonomy-eligible economic activities and the associated turnover, CapEx and OpEx at central and decentral levels
- performed a test run for the first half of 2023 to optimise the Group-wide implementation of the EU Taxonomy Regulation and to try out the initial application of the Environment Delegated Act

Assessment of taxonomy-eligible economic activities

Economic activities that are described in the Climate Delegated Act or Environment Delegated Act are taxonomy-eligible. Jungheinrich examined relevant, taxonomy-eligible economic activities for machine and plant construction and discovered that the Group can make substantial contributions in particular to climate change mitigation and a circular economy. The taxonomy-eligible activities identified by Jungheinrich for environmental objective 1 are also taxonomy-eligible for environmental objective 2 due to the description of the activity. However, as no turnover from enabling activities and no separate CapEx or OpEx exist that specifically contribute to adapting to climate change, Jungheinrich has assigned the corresponding taxonomy-eligible economic activities to the "Climate Change Mitigation" environmental objective. Economic activity 7.2. from environmental objective 1 is also taxonomy-eligible for environmental objective 4. This is assigned to the "Climate Change Mitigation" environmental objective as it does not contribute to a circular economy. Beyond this, Jungheinrich did not identify any taxonomy-eligible economic activities for the other environmental objectives.

Taxonomy-eligible economic activities "Climate Change Mitigation" environmental objective

Number	Name	Description
3.4.	Manufacture of batteries	▪ Manufacture of lithium-ion batteries
3.6.	Manufacture of other low carbon[1] technologies	▪ Development, manufacture and sale of new material handling equipment and battery-powered mobile robots ▪ Development, manufacture and sale of components to electrify mobile industrial machinery (Jungheinrich Powertrain Solutions)
6.5.	Transport using motorbikes, passenger cars and commercial vehicles	▪ Leasing and operating passenger cars
6.6.	Freight transport services by road	▪ Purchase and operating of trucks
7.2.	Renovation of existing buildings	▪ Major facade and roof renovation
7.3.	Installation, maintenance and repair of energy-efficient equipment	▪ Insulation and renovation of outer components ▪ Replacement and maintenance of energy-efficient windows ▪ Installation of LED lighting ▪ Installation and maintenance of heating, ventilation and air conditioning systems
7.4.	Installation, maintenance and repair of charging stations for electric vehicles in buildings (and on parking spaces attached to buildings)	▪ Installation and maintenance of e-charging stations
7.5.	Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	▪ Installation and maintenance of building management technology ▪ Installation of sensor technology
7.6.	Installation, maintenance and repair of renewable energy technologies	▪ Installation of photovoltaic equipment
7.7.	Acquisition and ownership of buildings	▪ Leasing and maintenance of buildings
8.1.	Data processing, hosting and related activities	▪ Data processing via a data centre[2]

[1] In contrast to the combined separate non-financial report in accordance with CSR-RUG, the chapter on the EU Taxonomy Regulation uses the term carbon (CO_2) as carbon equivalents (CO_2e) are not considered in the EU Taxonomy Regulation.

[2] The description of the economic activity 8.1 in Annex 1 of the Climate Delegated Act contains no clear definition of the term data centre. In line with its assessment of relevance, Jungheinrich defines a data centre as an IT room from which more than a third of users in the Jungheinrich Group are provided with IT services.

Taxonomy-eligible economic activities "Transition to a Circular Economy" environmental objective

Number	Name	Description
5.1.	Repair, refurbishment and remanufacturing	▪ Repair and maintenance of products by the Jungheinrich after-sales services ▪ Refurbishment of used material handling equipment at plants
5.4.	Sale of second-hand goods	▪ Sale of used material handling equipment
5.5.	Product-as-a-service and other circular use- and result-oriented service models	▪ Leasing and rental of new and used material handling equipment

In the "Climate Change Mitigation" environmental objective, economic activity 3.6. is particularly relevant for Jungheinrich in terms of value. The description of this activity in the Climate Delegated Act contains no clear definition of the term low carbon technologies and is therefore open to interpretation. Jungheinrich pools machine construction technologies in this economic activity, among other things, that aim to substantially lower direct greenhouse gas emissions (Scope 1 emissions) in other economic sectors:

- Jungheinrich's electric material handling equipment makes a contribution to the reduction of greenhouse gas emissions in logistics, retail and wholesale, among other sectors. This also encompasses mobile robots. Mobile robots include automated guided vehicles and autonomous mobile robots that are battery-powered.
- Jungheinrich provides electric power train technology for the manufacture of zero-emission vehicles, particularly in the agricultural and machine construction industries. The use of electrified trucks results in lower greenhouse gas emissions.

With the introduction of the Environment Delegated Act, Jungheinrich's activities in the field of circular economy became [page 68] taxonomy-eligible for the first time. These relate to the after-sales service, which extends the useful life of the products sold through repair and maintenance. The industrial refurbishment of used material handling equipment and the subsequent sale also lead to a longer service life and an increase in the use of recycled components. The truck rental models ensure that ownership rights to resources and materials remain with Jungheinrich and thus the rest of the material handling equipment's life cycle can be monitored and managed. Due to the new regulatory requirements, Jungheinrich will report the sale of used trucks under economic activity 5.4. and the rental and lease business under 5.5. of environmental objective 4 from the financial year 2023. These activities had previously been reported under economic activity 3.6. in environmental objective 1. From the reporting year, the acquisition and operation of after-sales service vehicles, which are necessary for performing repair services, will be reported under economic activity 5.1. of environmental objective 4. This was previously reported under economic activity 6.5. in environmental objective 1.

Assessment of taxonomy-aligned economic activities

Following the identification of taxonomy-eligible economic activities, it was examined whether they fulfilled the requirements pursuant to Article 3 of the EU Taxonomy Regulation. In accordance with the requirements for the 2023 financial year, the review related to the "Climate Change Mitigation" environmental objective. An economic activity is considered taxonomy-aligned if

1. it complies with the technical screening criteria for a substantial contribution to the "Climate Change Mitigation" environmental objective,
2. it complies with the technical screening criteria for preventing substantial harm to the other environmental objectives (also known as Do No Significant Harm [DNSH] criteria),
3. guarantees the minimum safeguards.

As all of the criteria mentioned in Article 3 must be met pursuant to the EU Taxonomy Regulation, the examination is over as soon as one criterion is not met. The compliance with minimum safeguards was reviewed centrally. The DNSH criteria outlined in Annex A, B and D of the Climate Delegated Act were evaluated at the level of the locations relevant to the economic activity. The review of the substantial contribution, the specific DNSH criteria and the DNSH criteria in Annex C was performed at product level.

Compliance with minimum safeguards

Jungheinrich must ensure that minimum safeguards are adhered to in order to achieve taxonomy alignment. This requires processes to be implemented both within the company and in the value chain that ensure compliance with due diligence obligations that relate to the following issues: human rights, including labour and consumer rights, (anti-) corruption and bribery, taxation as well as fair competition. As part of the analysis of compliance with minimum safeguards, the criteria for each topic were analysed together with the parties responsible in the various areas.

In the ↗ Policy Statement to Respect the Human Rights Jungheinrich acknowledges the minimum safeguard standards set out in Article 18 of the EU Taxonomy Regulation: the Universal Declaration of Human Rights, the UNGP, the OECP Guidelines for Multinational Business and the ILO core labour standards. The processes for complying with human rights due diligence obligations are described in the Declaration of Principle on Respecting Human Rights.

Complying with compliance regulations is important to the company and its committees. Jungheinrich has a CMS that ensures that legal provisions and corporate guidelines are complied with. This system undergoes continual development [page 74]. The development focusses on the prevention and discovery of corruption and compliance with applicable competition as well as tax laws and regulations. Corruption, antitrust, tax and other risks are integrated into the Group risk management system. Jungheinrich trains employees and managers according to target groups on anti-corruption, antitrust and tax law.

The analysis shows that Jungheinrich has implemented appropriate processes for complying with minimum safeguards on human rights, (anti-)corruption and bribery, taxation as well as fair competition, and that there have been no serious violations that suggest deficient procedures. Jungheinrich therefore meets the minimum safeguards requirements pursuant to Article 18 of the EU Taxonomy Regulation.

Compliance with technical screening criteria

Compliance with the technical screening criteria for a substantial contribution to the “Climate Change Mitigation” environmental objective and the avoidance of significant harm to other environmental objectives is based on the Climate Delegated Act.

The first step involves reviewing the alignment of the economic activity related to the development and manufacture of taxonomy-eligible products. In this context, the production of lithium-ion batteries (economic activity 3.4.) and electric material handling equipment (economic activity 3.6.) is relevant for Jungheinrich.

Jungheinrich fulfils the substantial contribution to economic activity 3.4. The lithium-ion batteries manufactured, which partly consist of secondary raw materials, are used in material handling equipment and lead to lower greenhouse gas emissions in intralogistics.

To attain the substantial contribution to climate change mitigation in economic activity 3.6., the Climate Delegated Act requires the following: Low carbon technologies must be proven to substantially reduce life cycle greenhouse gas emissions in other economic sectors. This must be in comparison with best performing alternative technologies available on the market. The reduction is considered substantial by Jungheinrich if greenhouse gas emissions are reduced by at least 5 per cent. Lead-acid batteries are a common means of electrochemical energy storage and are considered a mature technology. Lithium-ion batteries in contrast are gaining in importance and are primarily used in electric vehicles. They have a very high energy density and a longer service life than lead-acid batteries. Jungheinrich therefore views lead-acid batteries as the best performing alternative technology available on the market to lithium-ion batteries. A comparison of both battery systems performed internally using product life cycle assessments showed that the lithium-ion batteries are a low carbon alternative to lead-acid batteries as they emit less carbon during the use phase. All battery-powered material handling equipment fitted with a lithium-ion battery therefore aims to substantially reduce life-cycle greenhouse gas emissions. In order to prove the savings, Jungheinrich prepared product carbon footprints for 19 truck series in accordance with ISO 14067 and had the assessments audited externally [page 67]. The analyses compare the life-cycle greenhouse gas emissions of lithium-ion trucks with lead-acid trucks. The results show that lithium-ion trucks emit 15 per cent less greenhouse gases during their life cycle. The products in the series analysed therefore make a substantial contribution to climate change mitigation.

The next step will be examining the DNSH criteria for economic activities 3.4. and 3.6. To prevent significant harm to environmental objective 2, "Climate Change Adaptation", a climate risk and vulnerability assessment is required for all taxonomy-eligible activities in the Climate Delegated Act. These assessments were performed for all relevant locations to identify which economic activities could be affected by physical climate risks [page 65]. The climate hazards defined in the Climate Delegated Act are taken into account. If a climate hazard is relevant for a particular location, a risk analysis is performed for the actual hazard based on historical data as well as for the future development. These are based on an optimistic and pessimistic IPCC scenario to 2050. An assessment of the regional natural hazards is performed for key suppliers. The analyses are performed with prepared climate risk data based on IPCC reports from an external software and data provider. Adaptation solutions for minimising risks are derived and implemented if necessary based on the findings of the risk analysis. Jungheinrich thus fulfils the DNSH criteria of environmental objective 2 for certain products for economic activities 3.4. and 3.6.

The DNSH criteria for environmental objective 3 define requirements for the sustainable use and protection of water and marine resources. The requirements in Annex B of the Climate Delegated Act must be complied with for economic activities 3.4. and 3.6. Environmental management systems in line with ISO 14001 have been established at the relevant plants, and a Group-wide guideline outlines operating water and effluent management. Environmental impacts on water are regularly evaluated and remedial action is taken if necessary. Jungheinrich also strives to continually reduce water consumption. The analysis shows that Jungheinrich fulfils the DNSH criteria of environmental objective 3 for economic activities 3.4. and 3.6.

The review of DNSH criteria for environmental objective 4 "Transition to a Circular Economy" is performed at the level of economic activities 3.4. and 3.6. Measures to promote a circular economy are required, if applicable. Internally predetermined criteria relating to high durability, recyclability and easy disassembly apply for the development of lithium-ion batteries and electric material handling equipment. The products are also manufactured from secondary raw materials. The other criteria do not apply to the products. In line with internal guidelines, the Group strives to recycle waste to the fullest extent possible in the production process. Critical materials, defined by Jungheinrich in this context as substances of especially high concern pursuant to REACH Regulation, can be traced back over the product life cycle via a program. Jungheinrich implements the applicable measures for promoting a circular economy for economic activities 3.4. and 3.6. and thus fulfils the DNSH criteria for environmental objective 4.

The review of DNSH criteria for environmental objective 5 "Pollution Prevention and Control" pursuant to Annex C of the Climate Delegated Act is performed at the level of economic activities 3.4. and 3.6. The requirements relate to compliance with European chemical regulations and guidelines. Jungheinrich fulfils the legal requirements and takes into account prohibitions, restrictions, and declaration obligations for regulated hazardous substances through established processes for material compliance [page 67]. In the manufacture of lithium-ion batteries, Jungheinrich adheres to the applicable European sustainability rules for bringing batteries onto the market. Group-wide hazardous substance management also applies to hazardous substances that are not prohibited according to the applicable legislation. Jungheinrich documents the use of such substances and follows rules regarding approval for hazardous substances and substitution checks. According to internal assessments, no considerable exposure risk for the user or environment results from the use of the substances mentioned. Overall, Jungheinrich fulfils the requirements to prevent significant harm to the fifth environmental objective for economic activities 3.4. and 3.6.

The criteria for preventing significant harm to environmental objective 6 "Protection and Restoration of Biodiversity and Ecosystems" are laid out in Annex D to the Climate Delegated Act. It remains to be examined whether economic activities 3.4. and 3.6. harbour considerable risk to sensitive biodiverse areas. For this purpose, areas around the plants are identified and potential impacts from the economic activities are defined. The likelihood of a significant impact on biodiversity was then qualitatively assessed, and no material risks were identified. Jungheinrich also performs environmental impact assessments or comparable assessments, if necessary. The analysis shows that Jungheinrich does no significant harm to environmental objective 6 and thus fulfils the corresponding DNSH criteria for economic activities 3.4. and 3.6.

The taxonomy alignment assessment for the other economic activities, not directly associated with the development and manufacture of taxonomy-eligible products, was done separately.

Jungheinrich leased and used company cars in the 2023 financial year (economic activity 6.5.). The company classes this activity as a purchase of a taxonomy-eligible product from a third party. The alignment assessment must therefore be carried out by the third party. The supplier was either not able to provide proof of the taxonomy alignment of this activity or the vehicles are not taxonomy-aligned. This means that economic activity 6.5. is not taxonomy-aligned in the 2023 financial year.

In the reporting year, Jungheinrich opened a solar park on the Group headquarter's car park with 630 photovoltaic modules (economic activity 7.6.) and 52 e-charging points (economic activity 7.4.). In addition, photovoltaic facilities and e-charging points have been installed at further locations. To achieve taxonomy alignment, the DNSH criteria of environmental objective 2 must be met. A climate risk and vulnerability assessment was performed for the Group headquarters and the other locations which resulted in no high climate risks being discovered for either location [page 65]. Thus, significant harm to environmental objective 2 was prevented and the activities were taxonomy-aligned, taking into account the minimum safeguards analysis in the 2023 financial year.

Jungheinrich leases and operates buildings (economic activity 7.7.). The majority of the buildings do not fulfil overall energy efficiency requirements or there is insufficient evidence to check the technical screening criteria. One building occupied by the Swedish sales unit does fulfil the criteria for a substantial contribution to climate change mitigation. In order to prevent significant harm to environmental objective 2, a climate risk and vulnerability assessment was performed. No high climate risks were discovered for the location. The building is thus taxonomy-aligned, taking into account the minimum safeguards analysis in 2023.

Jungheinrich rents space in a computing centre for data processing purposes (economic activity 8.1.). There is currently no evidence that the landlord implements the processes required by the Climate Delegated Act. Accordingly, the technical screening criteria cannot be considered fulfilled, and economic activity 8.1 is reported as not taxonomy-aligned in the 2023 financial year.

Other economic activities were not checked for taxonomy alignment, due to the cost-benefit aspects.

Key performance indicators pursuant to EU Taxonomy Regulation

The key performance indicators (KPI) for the 2023 financial year include turnover, CapEx and OpEx. The definition of the KPI is in line with Annex 1 of the Delegated Act to the Reporting Obligations pursuant to Article 8 of the EU Taxonomy Regulation. The share of turnover generated from products or services associated with environmentally sustainable (taxonomy-aligned) economic activities must be provided for the economic activities of the Climate Delegated Act's objectives. The share of CapEx and OpEx in connection with assets or processes that are linked to environmentally sustainable economic activities must also be reported. The share of turnover, CapEx and OpEx that is taxonomy-eligible is reported among the economic activities of the Environmental Delegated Act's objectives. This is a new requirement in comparison with the previous reporting period and Jungheinrich is reporting it for the first time. The individual turnover, CapEx and OpEx sums are each assigned to a specific environmental objective in order to exclude duplication. Furthermore, double counting of turnover, CapEx and OpEx is prevented between the defined economic activities by applying appropriate demarcation logic when the data is recorded at the level of the units.

Key performance indicators for the 2023 financial year

The share of taxonomy-aligned turnover amounted to 9 per cent. Jungheinrich is reporting taxonomy-aligned turnover for the first time because the technical screening criteria and the minimum safeguards for products in economic activities 3.4. and 3.6. of environmental objective 1 were adhered to in the reporting year. At €483,713 thousand, the majority of the taxonomy-aligned turnover came from electric trucks with lithium-ion batteries (economic activity 3.6.) in the new business of the "Intralogistics" segment. Determining whether turnover from these activities is taxonomy-aligned was for a small number of companies based on incoming orders for trucks with lithium-ion batteries. The share of taxonomy-eligible turnover was 72 per cent (2022: 47 per cent). The increase is due to the application of the environmental objective "Transition to a Circular Economy". Due to Jungheinrich's business model, the repair and refurbishment of products (economic activity 5.1.), the sale of used products (economic activity 5.4.) and the rental and lease business (economic activity 5.5.) are relevant. The denominator of the turnover KPI is based on consolidated net turnover pursuant to IAS 1.82(a). Further details can be found in the consolidated statement of profit or loss [pages 99, 104 and 122].

The share of taxonomy-aligned CapEx amounted to 2 per cent. The first-time reporting of taxonomy-aligned CapEx is due to capital expenditure related to taxonomy-aligned economic activities of the "Climate Change Mitigation" objective. Of the €3,687 thousand of taxonomy-aligned CapEx in connection with the manufacture and development of trucks with lithium-ion batteries (economic activity 3.6.), €1,680 thousand is attributable to property, plant and equipment and €1,960 thousand to capitalised development costs. The remainder is attributable to licences. €5,645 thousand of CapEx was related to the manufacture of lithium-ion batteries (economic activity 3.4.). €757 thousand was attributable to property, plant and equipment and €4,888 thousand to capitalised development costs. The calculation of taxonomy-aligned CapEx for economic activity 3.6. was based on the proportion of the manufacture of material handling equipment with lithium-ion batteries at one plant. For the economic activities 7.4., 7.6. and 7.7. the taxonomy-aligned CapEx of €723 thousand, €1,689 thousand and €270 thousand were each attributable to additions to property, plant and equipment. The share of taxonomy-eligible CapEx amounted to 22 per cent (2022: 13 per cent). The increase can be partially explained by improvements in the data collected for acquired buildings (economic activity 7.7.). The CapEx KPI denominator represents the sum of the additions to intangible assets [page 128] and property, plant and equipment [page 132] as presented in the notes to the consolidated financial statements.

The share of taxonomy-aligned OpEx amounted to 3 per cent. The taxonomy-aligned OpEx, reported for the first time, in the amount of €5,916 thousand, included €1,720 thousand related to research and development costs for taxonomy-aligned products in the economic activities 3.4. and 3.6., and €4,196 thousand to maintenance costs for their manufacture. The calculation of taxonomy-aligned OpEx for economic activity 3.6. was based on the proportion of the manufacture of material handling equipment with lithium-ion batteries at one plant. The share of taxonomy-eligible OpEx amounts to 66 per cent (2022: 49 per cent). This increase is due to the "Transition to a Circular Economy" environmental objective being taken into account and the detailed recording of data related to the maintenance of buildings (economic activity 7.7.). The OpEx KPI denominator consists of direct, non-capitalised expenses related to research and development as presented in the notes to the consolidated financial statements pursuant to IAS 38.126 [page 130] as well as expenses for short-term leases pursuant to IFRS 16 as presented in the notes to the consolidated financial statements [page 134]. Finally, expenses from building renovation measures, maintenance and repairs, and other direct expenses for the ongoing maintenance of property, plant and equipment form part of the denominator.

Since Jungheinrich does not perform any of the activities in connection with natural gas or nuclear power (activities 4.26-4.31) pursuant to the notification form below, the company does not use the other notification forms from the supplemental Delegated Act for activities in certain energy sectors.

Template: Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Financial year 2023	2023			Substantial Contribution Criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	**Turnover (3)**	Proportion of Turnover, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or -eligible (A.2.) turnover, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		€ thousand	%	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
3.4. Manufacture of batteries	CCM 3.4	811	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
3.6. Manufacture of other low carbon technologies	CCM 3.6	483,713	9%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**484,524**	**9%**	**9%**	**0%**	**0%**	**0%**	**0%**	**0%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**0%**		
Of which enabling		484,524	9%	9%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	0%	E	
Of which transitional		0	0%	0%						Y	Y	Y	Y	Y	Y	Y	0%		T
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
3.4. Manufacture of batteries	CCM 3.4, CCA 3.4	–	–	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
3.6. Manufacture of other low carbon technologies	CCM 3.6, CCA 3.6	461,480	8%	EL	EL	N/EL	N/EL	N/EL	N/EL								47%		
5.1. Repair, refurbishment and remanufacturing	CE 5.1	1,240,926	22%	N/EL	N/EL	N/EL	N/EL	EL[1]	N/EL								0%		
5.4. Sale of second-hand goods	CE 5.4	210,413	4%	N/EL	N/EL	N/EL	N/EL	EL[1]	N/EL								0%		
5.5. Product-as-a-service and other circular use- and result-oriented service models	CE 5.5	1,578,462	29%	N/EL	N/EL	N/EL	N/EL	EL[1]	N/EL								0%		

[1] Due to the interim regulations, no alignment assessment was carried out for the environmental objective "Transition to a Circular Economy".

Financial year 2023		2023		Substantial Contribution Criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	**Turnover (3)**	Proportion of Turnover, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptationl (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or -eligible (A.2.) turnover, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**3,491,282**	**63%**	**8%**	**0%**	**0%**	**0%**	**55%**	**0%**								**47%**		
A. Turnover of Taxonomy-eligible activities (A.1.+A.2.)		**3,975,806**	**72%**	**17%**	**0%**	**0%**	**0%**	**55%**	**0%**								**47%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy-non-eligible activities		**1,570,081**	**28%**																
Total		**5,545,887**	**100%**																

Table contains rounding differences.

Legend:
Y: Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective.
N: Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective.
EL: Taxonomy-eligible activity for the relevant objective.
N/EL: Taxonomy-non-eligible activity for the relevant environmental objective.
CCM: Climate Change Mitigation.
CCA: Climate Change Adaptation.
CE: Circular Economy.

Template: Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Financial year 2023	**2023**			**Substantial Contribution Criteria**						**DNSH criteria ("Does Not Significantly Harm")**									
Economic Activities (1)	Code(s) (2)	**CapEx (3)**	Proportion of CapEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or eligible (A.2.) CapEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		€ thousand	%	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
3.4. Manufacture of batteries	CCM 3.4	5,645	1%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
3.6. Manufacture of other low carbon technologies	CCM 3.6	3,687	1%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4	723	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
7.6. Installation, maintenance and repair of renewable energy technologies	CCM 7.6	1,689	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
7.7. Acquisition and ownership of buildings	CCM 7.7	270	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**12,014**	**2%**	**2%**	**0%**	**0%**	**0%**	**0%**	**0%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**0%**		
Of which enabling		11,744	2%	2%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	0%	E	
Of which transitional		0	0%	0%						Y	Y	Y	Y	Y	Y	Y	0%		T
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
3.4. Manufacture of batteries	CCM 3.4, CCA 3.4	–	–	EL	EL	N/EL	N/EL	N/EL	N/EL								1%		
3.6. Manufacture of other low carbon technologies	CCM 3.6, CCA 3.6	57,818	8%	EL	EL	N/EL	N/EL	N/EL	N/EL								4%		
5.1. Repair, refurbishment and remanufacturing	CE 5.1	25,884	4%	N/EL	N/EL	N/EL	N/EL	EL[1]	N/EL								0%		
6.5. Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5, CCA 6.5	21,744	3%	EL	EL	N/EL	N/EL	N/EL	N/EL								5%		
6.6. Freight transport services by road	CCM 6.6, CCA 6.6	201	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		

[1] Due to the interim regulations, no alignment assessment was carried out for the environmental objective "Transition to a Circular Economy".

Financial year 2023		2023		Substantial Contribution Criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	CapEx (3)	Proportion of CapEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or eligible (A.2.) CapEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
7.1. Construction of new buildings	CCM 7.1, CCA 7.1, CE 3.1	–	–	EL	EL	N/EL	N/EL	EL	N/EL								2%		
7.2. Renovation of existing buildings	CCM 7.2, CCA 7.2, CE 3.2	1,395	0%	EL	EL	N/EL	N/EL	EL	N/EL								0%		
7.3. Installation, maintenance and repair of energy efficiency equipment	CCM 7.3, CCA 7.3	1,564	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4, CCA 7.4	1,376	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5, CCA 7.5	1,020	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.6. Installation, maintenance and repair of renewable energy technologies	CCM 7.6, CCA 7.6	1,119	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.7. Acquisition and ownership of buildings	CCM 7.7, CCA 7.7	39,617	5%	EL	EL	N/EL	N/EL	N/EL	N/EL								1%		
8.1. Data processing, hosting and related activities	CCM 8.1, CCA 8.1	183	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**151,920**	**20%**	**16%**	**0%**	**0%**	**0%**	**4%**	**0%**								**13%**		
A. CapEx of Taxonomy-eligible activities (A.1.+A.2.)		**163,934**	**22%**	**18%**	**0%**	**0%**	**0%**	**4%**	**0%**								**13%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		**586,337**	**78%**																
Total		**750,270**	**100%**																

Table contains rounding differences.

Extent of eligibility and alignment per environmental objective

	Proportion of CapEx/Total CapEx	
	Taxonomy-aligned per objective	**Taxonomy-eligible per objective**
CCM	2 per cent	18 per cent
CCA	0 per cent	18 per cent
WTR	0 per cent	0 per cent
CE	–	4 per cent
PPC	0 per cent	0 per cent
BIO	0 per cent	0 per cent

Legend:
Y: Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective.
N: Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective.
EL: Taxonomy-eligible activity for the relevant objective.
N/EL: Taxonomy-non-eligible activity for the relevant environmental objective.

CCM: Climate Change Mitigation.
CCA: Climate Change Adaptation.
WTR: Water.
CE: Circular Economy.
PPC: Pollution Prevention and Control.
BIO: Biodiversity and Ecosystems.

Template: Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Financial year 2023		2023		Substantial Contribution Criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	**OpEx (3)**	Proportion of OpEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) OpEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
		€ thousand	%	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y; N; EL; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
3.4. Manufacture of batteries	CCM 3.4	761	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
3.6. Manufacture of other low carbon technologies	CCM 3.6	5,068	3%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%	E	
7.7. Acquisition and ownership of buildings	CCM 7.7	87	0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**5,916**	**3%**	**3%**	**0%**	**0%**	**0%**	**0%**	**0%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**0%**		
Of which enabling		5,829	3%	3%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	0%	E	
Of which transitional		0	0%	0%						Y	Y	Y	Y	Y	Y	Y	0%		T
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
3.4. Manufacture of batteries	CCM 3.4, CCA 3.4	–	–	EL	EL	N/EL	N/EL	N/EL	N/EL								11%		
3.6. Manufacture of other low carbon technologies	CCM 3.6, CCA 3.6	89,409	48%	EL	EL	N/EL	N/EL	N/EL	N/EL								33%		
5.1. Repair, refurbishment and remanufacturing	CE 5.1	8,288	4%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								0%		
6.5. Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5, CCA 6.5	5,046	3%	EL	EL	N/EL	N/EL	N/EL	N/EL								4%		
7.2. Renovation of existing buildings	CCM 7.2, CCA 7.2, CE 3.2	–	–	EL	EL	N/EL	N/EL	EL[1]	N/EL								0%		
7.3. Installation, maintenance and repair of energy efficiency equipment	CCM 7.3, CCA 7.3	116	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		

[1] Due to the interim regulations, no alignment assessment was carried out for the environmental objective "Transition to a Circular Economy".

Financial year 2023	2023			Substantial Contribution Criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code(s) (2)	**OpEx (3)**	Proportion of OpEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) OpEx, year 2022 (18)	Category enabling activity (19)	Category transitional activity (20)
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4, CCA 7.4	19	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM 7.5, CCA 7.5	100	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.6. Installation, maintenance and repair of renewable energy technologies	CCM 7.6, CCA 7.6	0	0%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
7.7. Acquisition and ownership of buildings	CCM 7.7, CCA 7.7	13,132	7%	EL	EL	N/EL	N/EL	N/EL	N/EL								0%		
8.1. Data processing, hosting and related activities	CCM 8.1, CCA 8.1	2,307	1%	EL	EL	N/EL	N/EL	N/EL	N/EL								1%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**118,418**	**63%**	**59%**	**0%**	**0%**	**0%**	**4%**	**0%**								**49%**		
A. OpEx of Taxonomy-eligible activities (A.1.+A.2.)		**124,334**	**66%**	**62%**	**0%**	**0%**	**0%**	**4%**	**0%**								**49%**		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		**64,293**	**34%**																
Total		**188,626**	**100%**																

Table contains rounding differences.

Extent of eligibility and alignment per environmental objective

	Proportion of OpEx / Total OpEx	
	Taxonomy-aligned per objective	**Taxonomy-eligible per objective**
CCM	3 per cent	62 per cent
CCA	0 per cent	62 per cent
WTR	0 per cent	0 per cent
CE	–	4 per cent
PPC	0 per cent	0 per cent
BIO	0 per cent	0 per cent

Legend:
Y: Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective.
N: Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective.
EL: Taxonomy-eligible activity for the relevant objective.
N/EL: Taxonomy-non-eligible activity for the relevant environmental objective.

CCM: Climate Change Mitigation.
CCA: Climate Change Adaptation.
WTR: Water.
CE: Circular Economy.
PPC: Pollution Prevention and Control.
BIO: Biodiversity and Ecosystems.

Template: Nuclear and fossil gas related activities

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	No
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	No
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

GRI index[1]

General information

GRI indicator	Indicator name	Page	Topic from materiality analysis
The organisation and its reporting practices			
2-1	Organisation profile	104	
2-2	Entities included in the organisation's sustainability reporting	6, 55	
2-3	Reporting period, reporting frequency and point of contact	55	
2-5	External assurance	55, 96	
Activities and employees			
2-6	Activities, value chain and other business relationships	55, 67	
2-7	Salaried employees	70	Good employer
Governance			
2-10	Nomination and selection of the highest governance body	74	Responsible management
2-12	Role of the highest governance body in overseeing the management of impacts	61	Responsible management
2-13	Delegation of responsibility for managing impacts	61	Responsible management
2-14	Role of the highest governance body in sustainability reporting	61	Responsible management
2-19	Remuneration policies	74	Responsible management
2-20	Process for determining remuneration	74	Responsible management
2-21	Annual total compensation ratio	73	Responsible management

GRI indicator	Indicator name	Page	Topic from materiality analysis
Strategy, policies and practices			
2-22	Statement on sustainable development strategy	117	
2-24	Embedding policy commitments	74	Compliance and anti-corruption
2-27	Compliance with laws and regulations	74	Compliance and anti-corruption
2-28	Membership of industry and associations	78	Compliance and anti-corruption
Stakeholder engagement			
2-29	Stakeholder engagement	58	Norms and standards

Disclosures on material topics

GRI indicator	Indicator name	Page	Topic from materiality analysis
Material topics			
3-2	List of material topics	59	
3-3	Management of material topics	58	

[1] Not part of PwC audit.

Topic standards — economy

GRI indicator	Indicator name	Page	Topic from materiality analysis
Market presence			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	72	Good employer
202-2	Proportion of senior executives hired from the local community	72	Good employer
Anti-corruption			
205-1	Locations assessed for risks related to corruption	75	Compliance and anti-corruption
205-2	Communication and training about anti-corruption policies and procedures	75	Compliance and anti-corruption
205-3	Confirmed incidents of corruption and actions taken	75	Compliance and anti-corruption
Tax			
207-1	Approach to tax	75	Compliance and anti-corruption

Topic standards — environment

GRI indicator	Indicator name	Page	Topic from materiality analysis
Materials			
301-2	Recycled input materials used	68	Materials (resource-saving products)
Energy			
302-1	Energy consumption within the organisation	69	Energy (consumption and renewable energies)
302-3	Energy intensity	69	Energy (consumption and renewable energies)
302-5	Reduction in energy requirements of products and services	68	Environmentally friendly products/ customer satisfaction, competitive standing, RaD
Water and effluents			
303-3	Water withdrawal	69	
Emissions			
305-1	Direct (Scope 1) greenhouse gas emissions	64	Energy (consumption and renewable energies)
305-2	Energy indirect (Scope 2) greenhouse gas emissions	64	Energy (consumption and renewable energies)
305-3	Other indirect (Scope 3) greenhouse gas emissions	64	Energy (consumption and renewable energies)
305-4	Greenhouse gas emissions intensity	64	Energy (consumption and renewable energies)
305-5	Reduction of greenhouse gas emissions	64	Energy (consumption and renewable energies)
Waste			
306-4	Waste diverted from disposal	69	Waste and recycling
306-5	Waste directed to disposal	69	Waste and recycling
Supplier environmental assessment			
308-1	New suppliers that were screened using environmental criteria	77	Transparency in the supply chains

Topic standards — social

GRI indicator	Indicator name	Page	Topic from materiality analysis
Employment			
401-1	New employee hires and employee turnover	70	Good employer
Occupational health and safety			
403-1	Occupational health and safety management system	71	Occupational health and safety
403-3	Occupational health services	71	Occupational health and safety
403-4	Worker participation, consultation, and communication on occupational health and safety	71	Occupational health and safety
403-5	Worker training on occupational health and safety	71	Occupational health and safety
403-6	Promotion of worker health	71	Occupational health and safety
403-9	Work-related injuries	72	Occupational health and safety
Training and education			
404-1	Average hours of training per year per employee	72	Training and development
404-2	Programmes for improving employee skills and transition assistance	72	Training and development
Diversity and equal opportunities			
405-1	Diversity in governance bodies and among salaried employees	72	Good employer
405-2	Ratio of basic salary and remuneration of women to men	72	Good employer

GRI indicator	Indicator name	Page	Topic from materiality analysis
Child labour			
408-1	Locations and suppliers at significant risk of child labour incidents	76	Transparency in the supply chains
Forced or compulsory labour			
409-1	Locations and suppliers at significant risk of incidents of forced or compulsory labour	76	Transparency in the supply chains
Supplier social assessment			
414-1	New suppliers that were screened using social criteria	77	Transparency in the supply chains
Public policy			
415-1	Political donations	75	Economic responsibility
Customer health and safety			
416-1	Assessment of the health and safety impacts of product and service categories	78	Product quality and enhancement/ customer health and safety
Socioeconomic compliance			
419-1	Non-compliance with laws and regulations in the social and economic area	74	Compliance
Supply chains			
Own indicator	Material compliance	67	Material compliance

Independent auditor's report

INDEPENDENT PRACTITIONER'S REPORT ON A LIMITED ASSURANCE ENGAGEMENT ON NON-FINANCIAL REPORTING[1]

To Jungheinrich Aktiengesellschaft, Hamburg

We have performed a limited assurance engagement on the combined separate non-financial report of Jungheinrich Aktiengesellschaft, Hamburg, (hereinafter the "Company") for the period from 1 January to 31 December 2023 (hereinafter the "Combined Separate Non-financial Report").

Not subject to our assurance engagement are the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Responsibility of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Combined Separate Non-financial Report in accordance with §§ (Articles) 315c in conjunction with 289c to 289e HGB ("Handelsgesetzbuch": "German Commercial Code") and Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18. June 2020 on establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder, as well as for making their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder, as set out in section EU Taxonomy Regulation of the Combined Separate Non-financial Report.

This responsibility includes the selection and application of appropriate non-financial reporting methods and making assumptions and estimates about individual non-financial disclosures of the Group that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as the executive directors consider necessary to enable the preparation of a Combined Separate Non-financial Report that is free from material misstatement whether due to fraud or error.

The EU Taxonomy Regulation and the Delegated Acts issued thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section EU Taxonomy Regulation of the Combined Separate Non-financial Report. They are responsible for the defensibility of this interpretation. Due to the immanent risk that indeterminate legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

Audit Firm's Independence and Quality Management

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Management 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality management for audit firms (IDW Qualitätsmanagementstandard 1: Anforderungen an das Qualitätsmanagement in der Wirtschaftsprüferpraxis – IDW QMS 1 (09.2022)), which requires the audit firm to design, implement and operate a system of quality management that complies with the applicable legal requirements and professional standards.

Responsibility of the Assurance Practitioner

Our responsibility is to express a conclusion with limited assurance on the Combined Separate Non-financial Report based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and

[1] PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the combined separate non-financial report and issued an independent practitioner's report in German language, which is authoritative. The following text is a translation of the independent practitioner's report.

perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's Combined Separate Non-financial Report, other than the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report, are not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section EU Taxonomy Regulation of the Combined Separate Non-financial Report.

In a limited assurance engagement the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgement of the assurance practitioner.

In the course of our assurance engagement, we have, amongst other things, performed the following assurance procedures and other activities:

- Gain an understanding of the structure of the Group's sustainability organisation and stakeholder engagement
- Inquiries of the executive directors and relevant employees involved in the preparation of the Combined Separate Non-financial Report about the preparation process, about the internal control system relating to this process and about disclosures in the Combined Separate Non-financial Report
- Identification of likely risks of material misstatement in the Combined Separate Non-financial Report
- Analytical procedures on selected disclosures in the Combined Separate Non-financial Report
- Reconciliation of selected disclosures with the corresponding data in the consolidated financial statements and group management report
- Evaluation of the presentation of the Combined Separate Non-financial Report
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the Combined Separate Non-financial Report
- Inquiries on the relevance of climate-risks
- Assessment of CO_2 compensation certificates solely in terms of their existence, but not in terms of their effect

In determining the disclosures in accordance with Article 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

Assurance Opinion

Based on the assurance procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Combined Separate Non-financial Report of the Company for the period from 1 January to 31 December 2023 is not prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts issued thereunder as well as the interpretation by the executive directors disclosed in section EU Taxonomy Regulation of the Combined Separate Non-financial Report.

We do not express an assurance opinion on the external sources of documentation or expert opinions mentioned in the Combined Separate Non-financial Report.

Restriction of Use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. Consequently, it may not be suitable for any other purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company. We do not accept any responsibility to third parties. Our assurance opinion is not modified in this respect.

Cologne, 12 March 2024

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Theres Schäfer — ppa. Meike Beenken
Wirtschaftsprüferin
[German public auditor]

05

Consolidated financial statements

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Consolidated statement of profit or loss

in € thousand	Notes	2023	2022
Revenue	(3)	**5,545,887**	**4,763,294**
Cost of sales	(4)	3,822,355	3,290,043
thereof: impairment losses (net) on trade accounts receivable and contract assets[1]		5,627	4,248
Gross profit on sales		**1,723,532**	**1,473,251**
Selling expenses		975,028	833,549
Research and development costs	(12)	120,673	113,103
General administrative expenses		202,787	160,575
Other operating income	(7)	8,433	17,096
Other operating expenses	(8)	11,810	2,040
Income (expense) from companies accounted for using the equity method	(16)	8,641	4,980
Earnings before interest and income taxes		**430,308**	**386,060**
Interest income	(9)	7,669	2,409
Interest expense	(9)	32,103	13,826
Other financial income (expense)	(10)	–6,746	–27,242
thereof: loss on net monetary position[1]		–3,682	–3,826
Financial income (expense)		**–31,180**	**–38,659**
Earnings before taxes		**399,128**	**347,401**
Income tax expense	(11)	99,853	77,826
Profit or loss		**299,275**	**269,575**
thereof attributable to non-controlling interests		–	407
thereof attributable to the shareholders of Jungheinrich AG		299,275	269,168
Earnings per share in € (diluted/undiluted) based on profit or loss attributable to the shareholders of Jungheinrich AG	(39)		
Ordinary shares		**2.92**	**2.63**
Preferred shares		**2.94**	**2.65**

[1] Disclosures will be made directly in the consolidated statement of profit or loss starting from the financial year 2023 (previous year: in Notes to the consolidated financial statement).

Consolidated statement of comprehensive income

in € thousand	Notes	2023	2022
Profit or loss		**299,275**	**269,575**
Items which may be reclassified to the consolidated statement of profit or loss in the future			
Income (expense) from the fair value measurement of derivative financial instruments		**–11,911**	**14,854**
Unrealised income (expense)	(24)	–14,594	16,101
Realised income (expense)	(24)	–337	2,323
Deferred taxes	(24)	3,020	–3,570
Income (expense) from currency translation		**–25,385**	**1,252**
Unrealised income (expense)		–25,385	1,252
Income (expense) from investments in companies accounted for using the equity method		**–760**	**684**
Unrealised income (expense)	(16)	–760	684
Items which will not be reclassified to the consolidated statement of profit or loss			
Income (expense) from the remeasurement of pensions		**–22,134**	**32,471**
Unrealised income (expense)	(25)	–30,233	46,601
Deferred taxes		8,099	–14,130
Other comprehensive income (expense)		**–60,190**	**49,261**
Comprehensive income (expense)		**239,085**	**318,836**
thereof attributable to non-controlling interests		–	407
thereof attributable to the shareholders of Jungheinrich AG		239,085	318,429

The consolidated statement of comprehensive income is explained in note (24) [page 144].

Consolidated statement of financial position

Assets

in € thousand	Notes	31/12/2023	31/12/2022
Non-current assets			
Intangible assets	(12)	606,410	215,868
Property, plant and equipment	(13)	748,187	702,451
Trucks for short-term rental	(14)	470,216	459,143
Trucks for lease from financial services	(15)	567,903	567,407
Investments in companies accounted for using the equity method	(16)	69,759	69,749
Other financial assets	(17)	998	778
Trade accounts receivable	(19)	9,186	9,697
Receivables from financial services	(20)	1,211,540	1,056,504
Derivative financial assets	(37)	6,931	15,881
Other receivables and other assets	(21)	10,091	17,487
Securities	(22)	10,000	28,930
Deferred tax assets	(11)	120,310	107,621
		3,831,531	**3,251,516**
Current assets			
Inventories	(18)	926,608	993,996
Trade accounts receivable and contract assets	(19)	954,862	898,624
Receivables from financial services	(20)	439,846	406,203
Income tax receivables		10,606	16,074
Derivative financial assets	(37)	6,921	7,093
Other receivables and other assets	(21)	87,864	84,831
Securities	(22)	140,436	169,061
Cash and cash equivalents	(23)	511,183	336,725
		3,078,326	**2,912,607**
		6,909,857	**6,164,123**

Shareholders' equity and liabilities

in € thousand	Notes	31/12/2023	31/12/2022
Shareholders' equity	(24)		
Subscribed capital		102,000	102,000
Capital reserve		78,385	78,385
Retained earnings		2,151,415	1,920,420
Accumulated other comprehensive income (expense)		−109,543	−49,353
Equity attributable to the shareholders of Jungheinrich AG		2,222,257	2,051,452
		2,222,257	**2,051,452**
Non-current liabilities			
Provisions for pensions and similar obligations	(25)	180,428	158,900
Other provisions	(26)	89,993	66,632
Deferred tax liabilities	(11)	57,070	43,895
Financial liabilities	(27)	356,733	420,404
Liabilities from financial services	(28)	1,529,269	1,416,499
Derivative financial liabilities	(37)	2,555	331
Deferred income	(31)	19,297	23,096
Other liabilities	(32)	810	–
		2,236,155	**2,129,757**
Current liabilities			
Income tax liabilities		21,642	18,032
Other provisions	(26)	342,796	291,705
Financial liabilities	(27)	567,008	189,496
Liabilities from financial services	(28)	617,616	575,949
Trade accounts payable	(29)	560,092	556,196
Contract liabilities	(30)	191,368	209,461
Derivative financial liabilities	(37)	5,275	4,043
Deferred income	(31)	17,195	22,965
Other liabilities	(32)	128,453	115,067
		2,451,445	**1,982,914**
		6,909,857	**6,164,123**

Consolidated statement of cash flows

in € thousand	2023	2022[1]
Profit or loss	**299,275**	**269,575**
Income tax expense[1]	99,853	77,826
Income tax expense paid[1]	–103,777	–81,890
Net interest[1,2]	24,434	11,417
Interest received[1,2,3]	4,648	1,848
Interest paid[1,2,3]	–30,778	–14,246
Dividends received from investments in companies accounted for using the equity method[1]	3,343	2,102
Depreciation, amortisation, impairment losses and reversals of impairment losses (excluding trucks for short-term rental and trucks for lease)	165,046	147,604
Depreciation and impairment losses of trucks for short-term rental and trucks for lease	281,678	252,953
Changes in provisions	92,446	–61,321
Other non-cash-effective expenses	5,453	3,826
Changes in trucks for short-term rental and trucks for lease (excluding depreciation)	–304,904	–412,188
Income from the disposal of property, plant and equipment and intangible assets	429	–10,068
Other changes of investments in companies accounted for using the equity method and of other financial assets	–7,880	–5,664
Changes in deferred assets and liabilities	–20,761	29,359
Change		
Inventories	79,068	–256,873
Trade accounts receivable and contract assets	–39,532	–152,109
Receivables from financial services	–182,505	–53,301
Trade accounts payable	–9,567	34,455
Liabilities from financial services	147,278	89,167
Liabilities from financing trucks for short-term rental	–2,054	–70,013
Contract liabilities	–29,326	10,998
Other operating assets	24,432	–6,982
Other operating liabilities	–23,970	57,432
Cash flow from operating activities	**472,329**	**–136,093**

in € thousand	2023	2022[1]
Payments for investments in property, plant and equipment and intangible assets	–134,580	–103,371
Proceeds from the disposal of property, plant and equipment and intangible assets	4,661	8,603
Payments for investments in companies accounted for using the equity method and other financial assets	–4,050	–2,362
Payments for the acquisition of companies and business areas, net of acquired cash and cash equivalents	–325,658	–5,188
Proceeds from the disposal of subsidiaries, net of cash and cash equivalents sold	–	–32
Payments for the purchase of securities	–86,691	–82,529
Proceeds from the sale/maturity of securities	137,069	149,564
Proceeds from investments in term deposits	–	115,000
Payments for investments in term deposits	–23,500	–
Payments for current loans granted to related parties	–47,826	–1,822
Proceeds from repayments of current loans granted to related parties	50,109	1,306
Cash flow from investing activities	**–430,466**	**79,169**
Dividends paid to the shareholders of Jungheinrich AG	–68,280	–68,280
Changes in short-term liabilities due to banks	338,990	42,736
Proceeds from obtaining long-term financial loans	223,775	214,214
Repayments of long-term financial loans	–315,725	–95,551
Repayments of lease liabilities	–61,649	–56,383
Cash flow from financing activities	**117,111**	**36,736**
Net cash changes in cash and cash equivalents	**158,974**	**–20,188**
Changes in cash and cash equivalents due to changes in exchange rates	–7,699	–2,720
Changes in cash and cash equivalents	**151,275**	**–22,908**
Cash and cash equivalents on 01/01	**327,357**	**350,265**
Cash and cash equivalents on 31/12	**478,632**	**327,357**

1 Starting in the 2023 financial year, cash flows from income tax expenses from interest received and paid as well as from dividends received will be disclosed separately in cash flow from operating activities (previous year: table below). As a result, disclosures on income taxes and net interest income for the 2023 financial year have been added. The figures from the previous year have been adjusted accordingly.

2 Interest in the financial services business is classified as sales/cost of sales.

3 The disclosures in the consolidated financial statements as of 31 December 2022 also included interest paid and received as part of the financial services business.

The consolidated statement of cash flows is explained in note (34) [page 159].

Consolidated statement of changes in equity

in € thousand	Subscribed capital	Capital reserve	Retained earnings	Accumulated other comprehensive income (expense)						
				Currency translation	Remeasurement of pensions	Market valuation of derivative financial instruments	At-equity measured interests	Equity attributable to the shareholders of Jungheinrich AG	Non-controlling interests	**Total**
Balance on 01/01/2023	102,000	78,385	1,920,420	−21,882	−42,732	13,866	1,395	2,051,452	–	2,051,452
Dividend for the previous year	–	–	−68,280	–	–	–	–	−68,280	–	−68,280
Profit or loss	–	–	299,275	–	–	–	–	299,275		299,275
Other comprehensive income (expense)	–	–	–	−25,385	−22,134	−11,911	−760	−60,190	–	−60,190
Comprehensive income (expense)	–	–	299,275	−25,385	−22,134	−11,911	−760	239,085	–	239,085
Balance on 31/12/2023	**102,000**	**78,385**	**2,151,415**	**−47,267**	**−64,866**	**1,955**	**635**	**2,222,257**	**–**	**2,222,257**
Balance on 01/01/2022	102,000	78,385	1,719,532	−23,134	−75,203	−988	711	1,801,303	1,306	1,802,609
Dividend for the previous year	–	–	−68,280	–	–	–	–	−68,280	–	−68,280
Profit or loss	–	–	269,168	–	–	–	–	269,168	407	269,575
Other comprehensive income (expense)	–	–	–	1,252	32,471	14,854	684	49,261	–	49,261
Comprehensive income (expense)	–	–	269,168	1,252	32,471	14,854	684	318,429	407	318,836
Miscellaneous	–	–	–	–	–	–	–	–	−1,713	−1,713
Balance on 31/12/2022	**102,000**	**78,385**	**1,920,420**	**−21,882**	**−42,732**	**13,866**	**1,395**	**2,051,452**	**–**	**2,051,452**

The consolidated statement of changes in equity is explained in note (24) [page 144].

Notes to the consolidated financial statements

GENERAL INFORMATION

(1) Purpose of the company

The Jungheinrich corporation (Jungheinrich AG) is headquartered at Friedrich-Ebert-Damm 129 in Hamburg (Germany) and is registered with the commercial register kept at the Hamburg District court under HRB 44885.

Jungheinrich is one of the world's leading solutions providers for the intralogistics sector. With a comprehensive portfolio of material handling equipment, automated systems and services, Jungheinrich is able to offer customers solutions to the challenges posed by Industry 4.0.

The integrated business model encompasses the development, production and sale of new material handling equipment and the planning and realisation of automation projects, the short-term rental of new and used material handling equipment, the refurbishment and sale of used trucks and after-sales services. Jungheinrich also supplies stacker cranes and load handling equipment. In addition, customers receive their entire factory and office equipment from a single source. In addition to electric engines and drive controls, Jungheinrich also manufactures matching lithium-ion batteries and battery chargers. All trucks have an electric motor drive and almost all are available with a lithium-ion battery. Digital products based on the latest generation of the Jungheinrich Internet of Things platform in the cloud, complement the portfolio. Customers benefit from a comprehensive range of financial services. Jungheinrich's aim is to create sustainable value.

Material handling equipment is manufactured at the production plants in Norderstedt, Moosburg, Degernpoint, Landsberg and Lüneburg (all in Germany) as well as at the production plant in Qingpu/Shanghai (China). In addition, the new plant in Chomutov (Czechia) has been manufacturing material handling equipment since 2023.

Stacker cranes and load handling equipment are manufactured in plants in Munich (Germany), Gyöngyös (Hungary) and Kunshan (China) and sold under the MIAS brand all over the world.

Used material handling equipment is refurbished in the used equipment centre in Klipphausen/Dresden (Germany) and the used equipment plant in Ploiești (Romania).

The development of digital products is concentrated at the locations in Graz (Austria), Hamburg (Germany) and Madrid (Spain). Services that focus on software and hardware development are located in Zagreb (Croatia).

Jungheinrich has established a global direct sales and service network with locations in 42 countries to offer the best-possible customer service. The Jungheinrich Group is also represented in approximately 80 other countries through partner companies. The Group's core market is Europe, where 80 per cent of Group revenue is generated. Of the European revenue, 27 per cent is generated in Germany.

The distribution of Jungheinrich material handling equipment in North America is carried out by an exclusive distribution partner.

With the acquisition of Storage Solutions in the reporting year, Jungheinrich is now also covering the US market for warehouse equipment and automation.

(2) Accounting principles

Fundamentals

Jungheinrich AG prepared the consolidated financial statements for the financial year ending on 31 December 2023 in compliance with the International Financial Reporting Standards (IFRS). All standards and interpretations of the IFRS Interpretations Committee endorsed by the EU and effective as at the balance sheet date were applied. Regulations under commercial law pursuant to Section 315e of the German Commercial Code (HGB) were complementarily taken into account.

The preparation of the consolidated financial statements generally draws on the historical acquisition and manufacturing costs. Certain financial instruments measured at fair value as at the balance sheet date are an exception to this rule. The consolidated financial statements have been prepared in euros (€). Unless indicated otherwise, disclosure is in thousands of euros. The statement of profit or loss has been prepared using the cost of sales accounting method.

The consolidated financial statements for the period ended 31 December 2023 were approved for publication by the Board of Management on 12 March 2024.

Consolidation

Subsidiaries, including structured entities over which Jungheinrich AG, Hamburg, can exercise direct or indirect control, are included in the consolidated financial statements. Control can be exercised if the parent company has control over the subsidiary on the basis of voting rights or other rights, participates in the variable returns and can use its control to influence these returns. Structured entities which are controlled are also included in the scope of consolidation. Structured entities are companies in which the voting rights or comparable rights are not definitive for the determination of control. For example, this is the case if the voting rights only pertain to the administrative responsibilities and the material activities are regulated by way of contractual agreements.

Joint ventures and associated companies are reported using the equity method. A joint venture is a joint arrangement according to which Jungheinrich exercises control together with a partner company, and has rights in the net assets of the investment together with that partner. Associated companies are companies where Jungheinrich AG, Hamburg, has a significant direct or indirect influence on their finance and business policies. A significant influence is said to exist if Jungheinrich holds a share of between 20 per cent and 50 per cent of the voting rights.

Subsidiaries, joint ventures and associated companies which are of subordinated importance to the Group and to the presentation of the actual assets, liabilities, financial position and profit or loss due to their dormancy or minimal business activity are accounted for at fair value.

Subsidiaries are included in the consolidated financial statements starting from the point in time at which Jungheinrich AG obtains control over the company until the point in time at which control by Jungheinrich AG ends.

The financial statements of Jungheinrich AG as the parent company and of included subsidiaries that are to be consolidated are prepared using uniform accounting and valuation methods as at the balance sheet date of the parent company.

The same accounting and valuation methods are used to determine the pro rata shareholders' equity of companies accounted for using the equity method.

Business combinations, or in other words, acquisitions of companies and business areas, are accounted for using the acquisition method in compliance with IFRS 3. Accordingly, the consideration transferred at the acquisition date is offset against the net assets measured at their fair values as of the date of acquisition. Transaction costs associated with business combinations are generally recognised in profit or loss. If the consideration transferred includes conditional consideration, the latter is measured at its fair value at the acquisition date. Identifiable assets acquired and liabilities assumed are also measured at their fair values at the acquisition date. If the acquisition costs are higher than the fair value of the identified net asset, the positive balance is capitalised as goodwill. If the fair value of the acquired net asset is higher than the acquisition costs, the negative balance is recognised as negative goodwill. This is recognised immediately in profit or loss in the year of acquisition. If the fair values of the business combination can only be determined on a preliminary basis until their initial reporting date, the business combination is accounted for on the basis of these preliminary figures. In accordance with IFRS 3.45, initial accounting observes the twelve-month measurement period from the acquisition date. All necessary adjustments to the determined fair values are booked against the preliminary goodwill or negative goodwill within this measurement period. Non-controlling interests in shareholders' equity are reported under "Non-controlling interests" in shareholders' equity.

All receivables and liabilities, expenses and income as well as intragroup results within the scope of consolidation are eliminated within the consolidation.

Investments in companies accounted for using the equity method are recognised at their acquisition cost upon initial recognition. Changes in the pro rata shareholders' equity of the investments following acquisition are offset against the investments' carrying amount. The Jungheinrich Group's investments in companies accounted for using the equity method include goodwill arising at the time of their acquisition. Since this goodwill is not stated separately, it does not have to be separately tested for impairment pursuant to IAS 36. Instead, the investment's entire carrying amount is tested for impairment in accordance with IAS 36 as soon as there are indications of the recoverable amount dropping below the investment's carrying amount. If the recoverable amount is lower than the carrying amount of a company accounted for using the equity method, an impairment loss in the amount of the difference is recognised. Reversal of impairment losses in subsequent reporting periods are recognised in profit or loss.

Currency translation

Cash and cash equivalents, receivables and liabilities in foreign currency in the Group companies' annual financial statements are translated at the exchange rate valid at the balance sheet date and any differences resulting from such translation are recognised in profit and loss.

Key exchange rates for the Jungheinrich Group

		Mean exchange rate at the balance sheet date		Annual average exchange rate	
Currency	Baseline 1€	**31/12/2023**	31/12/2022	**2023**	2022
CHF		0.9260	0.9847	0.9717	1.0052
CNY		7.8509	7.3582	7.6591	7.0801
CZK		24.7240	24.1160	24.0007	24.5603
GBP		0.8691	0.8869	0.8699	0.8526
PLN		4.3395	4.6808	4.5421	4.6845
RUB		98.5052	77.9635	92.4333	74.2259
USD		1.1050	1.0666	1.0816	1.0539

The annual financial statements of the foreign subsidiaries included in the consolidated financial statements are translated according to the functional currency concept. In each case, this is the local currency if the subsidiaries are integrated into the currency area of the country in which they are domiciled as commercially independent entities. As regards the companies of the Jungheinrich Group, the functional currency is the local currency.

To prepare the consolidated financial statements, assets and liabilities reported in local currency are converted to euros at the mean exchange rate at the balance sheet date. Changes during the year, the items on the statement of profit or loss, and the components of the other comprehensive income are translated at the annual average exchange rate for the financial year. Shareholders' equity is carried at historic exchange rates. Translation differences are recognised in shareholders' equity under "Accumulated other comprehensive income (expense)" with no effect on profit or loss until the subsidiary is removed from the scope of consolidation. The respective cumulative translation differences are reversed in profit or loss when Group companies are deconsolidated.

Hyperinflation

If the functional currency of a subsidiary included in the consolidated financial statements is the currency of a hyperinflationary economy, the subsidiary will apply the requirements of IAS 29 "Financial Reporting in Hyperinflationary Economies" in preparing the annual financial statements.

The carrying amounts of non-monetary assets and liabilities, equity attributable to shareholders of Jungheinrich AG and all comprehensive income (expense) items will be adjusted to the value applicable on the balance sheet date. Under these circumstances, a general price index is applied that reflects the change in purchasing power.

Non-monetary assets adjusted in accordance with IAS 29 remain subject to review for indications of impairment.

The gain or loss on net monetary position in the year under review is reported under other financial income (expense).

All items in the annual financial statement of an included subsidiary whose functional currency is a hyperinflationary economy currency are converted at the rate applicable as at the balance sheet date.

The impact of inflation on equity is offset against the currency translation effect with no effect on profit or loss and reported as other changes under the item "currency translation" in the consolidated statement of changes in equity.

In the first year for which IAS 29 is applied in the consolidated financial statement, the previous year's figures are not adjusted.

Türkiye was classified as a hyperinflationary economy for the first time in 2022. The annual financial statements of the Turkish sales company, whose functional currency is the Turkish lira, included in the consolidated financial statements as of 31 December 2023, were prepared using the requirements of IAS 29 and is accounted for at cost. The consumer price index published by the Turkish national statistics office was used to adjust the annual financial statements to the value applicable as at the balance sheet date. As of 31 December 2023 the price index stood at 1,859.38 (31 December 2022: 1,128.45). The loss on net monetary position is reported under other financial income (expense) in 2023 and 2022.

Revenue recognition

Revenue is recognised after deduction of bonuses, discounts or rebates when control of disposal over the goods or services has been transferred to the customer. In general, this is the case when the delivery has been made or the service has been rendered, when the selling price is fixed or determinable and when the receipt of payment is reasonably certain.

Revenue from contracts with customers, particularly in relation to the sale of material handling equipment and the performance of after-sales services, is recognised in the Jungheinrich Group primarily on the basis of individual contracts. Revenue is recognised at the amount of the contractually agreed consideration as soon as the customer has obtained control of disposal over the goods or uses the services provided. Revenue from the sale of material handling equipment and the sale of spare parts by the after-sales service is generally recognised at a specific point in time. Revenue from the provision of customer services is generally recognised over a period of time. Significant financing components are not included in the contracts with customers as standard market payment targets are agreed as a general rule. A provision is set up for statutory and contractual warranty obligations.

With regard to automation projects, which are under the control of the ordering party during production and for which the Group has a legal right to payment for the work already performed, including an appropriate margin, Jungheinrich recognises revenue and the cost of sales in accordance with the degree of completion. This means that, for these projects, control is transferred and revenue is recognised over a specific period. The degree of completion results from the relation of the contract-related costs incurred as at the balance sheet date vis-à-vis the estimated total contract-related costs as at the balance sheet date and reflects, according to the management's assessment, the completion progress and the associated transfer of control over the project to the customer to an appropriate extent. If the earnings from a project contract cannot be determined reliably, revenue is only recognised in the amount of the costs incurred that are likely recoverable. The rules for revenue recognition set out above are also applied to the project business of Storage Solutions.

Revenue from financial service transactions is recognised on a straight-line basis over the term of the contracts if the contract is classified as an "operating lease" in the amount of the lease payments. If the contract is deemed to be a "finance lease", revenue is recognised in the amount of the fair value of the leased item or the present value of the lease payments attributable to the lessor at the start of the contract, whichever is lower. The interest income is realised over the terms of the contracts using the effective interest method. If a leasing company or bank acts as an intermediary, the sales proceeds received, less the agreed residual values, from concluded sales contracts which contain repurchase obligations and are classified as an "operating lease", are recognised under deferred income. They are reversed with an effect on revenue on a straight-line basis over time until the repurchase date contractually agreed with the leasing company/bank. If the contracts are deemed to be "finance leases", revenue is recognised in the amount of the fair value of the leased item or the present value of the lease payments attributable to the lessor at the start of the contract, whichever is lower.

Product-related expenses

Expenses for advertising and sales promotion, as well as other sales-related expenses are recognised in profit or loss when they are incurred. Freight and dispatch costs are carried under the cost of sales.

Product-related expenses also include additions to provisions for warranty obligations as well as to provisions for onerous contracts.

Research and development costs

Research costs and development expenses that cannot be capitalised are recognised in profit or loss in the period in which they are incurred.

From the beginning of production, capitalised development expenditure is reduced by straight-line depreciation over the series production's expected duration.

Research costs and non-capitalisable development expenditure, as well as amortisation and impairment of capitalised development expenditure, are stated under research and development costs.

Government grants

Investment grants and subsidies are recognised if there is sufficient certainty that Jungheinrich can satisfy the associated conditions and that the benefits are granted. Government grants related to income are recognised in profit or loss in the period in which the corresponding claim arises. Government grants that compensate the Group for expenses incurred are recognised in the functional costs, in which the expenses being compensated are also reported. Other government grants related to income are recognised as "other operating income".

Government grants related to assets are deducted when determining the carrying amount of the asset and recognised in profit or loss over the useful life of the depreciable asset using a reduced depreciation amount.

Jungheinrich enters into contracts as a lessee for the use of property, plant and equipment, primarily properties and trucks. Government grants for related right-of-use assets recognised in property, plant and equipment are generally recognised as deferred income and distributed over the useful lives of the right-of-use assets. The reversals are recognised in profit or loss as other operating income on a pro rata temporis basis.

Earnings per share

Earnings per share are calculated based on share of profit or loss attributable to the shareholders of Jungheinrich AG, and this in turn is based on the average number of the respective shares outstanding during a financial year. In the 2023 and 2022 financial years, no equity instruments diluted the earnings per share on the basis of the respective shares issued.

Intangible assets and property, plant and equipment

Purchased intangible assets are measured at acquisition costs, and reduced by straight-line depreciation over their useful lives insofar as their useful lives are limited. The useful lives used as a basis for software licences are 3 to 8 years. Intangible assets with limited useful lives acquired as part of business combinations primarily relate to customer relationships, technologies and customer contracts. The economic useful lives determined are between 4 and 15 years for these customer relationships and technologies, and between 15 and 20 years for the customer contracts. Usage rights in land acquired in China and Singapore are limited to 50 and 36 years respectively.

Development expenses for material handling equipment, vehicle components and digital products are capitalised if the manufacturing of the developed products is expected to result in an economic benefit for the Jungheinrich Group and is technically feasible and if the costs can be determined reliably. Capitalised development expenditure comprises all costs directly allocable to the development process, including development-related overheads. From the beginning of production, capitalised development expenditure is amortised using the straight-line method over the series production's expected duration, which is normally between 4 and 7 years.

At initial recognition, goodwill from business combinations is measured at acquisition cost and classified as an intangible asset. Acquisition costs are the positive balance of the consideration transferred and the fair value of the acquired net asset. In subsequent periods, goodwill is accounted for at acquisition cost, less accumulated impairment losses where necessary. Goodwill is tested for impairment at least once a year or whenever there is an indication of a potential reduction in value. If the carrying amount of a cash-generating unit (CGU) exceeds the recoverable amount, an impairment loss in the amount of the difference is recognised immediately in profit or loss. Impairment losses, including impairment losses recognised during the current financial year, will not be reversed in subsequent reporting periods. For the purpose of impairment testing, the recoverable amount of the CGU to which the goodwill is allocated needs to be determined. The CGUs are generally identical to the legal sales companies. The MIAS Group is the designated CGU to which goodwill from the acquisition of the MIAS Group has been assigned. Storage Solutions is the designated CGU to which goodwill from the acquisition of Storage Solutions has been assigned. The recoverable amount is the higher of the fair value less selling costs and the value in use. The impairment test is performed on the basis of the determined value in use of a CGU using the discounted cash flow method. As a rule, the cash flows budgeted for in the bottom-up five-year budget, made plausible by Jungheinrich AG management, are used. The parameters set are derived from historical information and mirrored by external sources of information. Forecasts for long-term revenue and returns form the basis for cash flows beyond the budget period. A pre-tax interest rate in line with the conditions prevailing on the market is used as the discount rate. The total cost of capital is based on the risk-free interest rate and risk premiums for equity and debt specific to the Group units and countries. If the value in use is lower than the carrying amount, the recoverable amount is also calculated on the basis of fair value less selling costs.

Property, plant and equipment are measured at historical acquisition and manufacturing costs, less accumulated depreciation. Government grants are normally deducted from acquisition or manufacturing costs as from the beginning of the 2023 financial year. Deferred government grants related to property, plant and equipment totalling €4,427 thousand as of 31 December 2022 were derecognised from deferred income as of 1 January 2023 and recognised as a reduction in the acquisition and manufacturing costs of the property, plant and equipment to which the grants relate. The manufacturing costs for self-produced equipment contain not only the direct material and manufacturing expenses, but also attributable material and production overheads as well as production-related administrative expenses and depreciation. Maintenance and repair expenses are stated as expenses. All costs for measures that lead to an extension of the useful life or a widening of the future possibilities for use of the assets are capitalised. Depreciable objects are reduced by straight-line depreciation. If objects are sold or scrapped, property, plant and equipment and intangible assets are derecognised; any resulting profits or losses are recognised in profit or loss.

Useful lives of property, plant and equipment

Buildings	10–50 years
Land improvement, improvements in buildings	10–50 years
Plant facilities	8–15 years
Technical equipment and machinery	5–10 years
Factory and office equipment	3–10 years

Intangible assets and property, plant and equipment with indefinite useful lives are not reduced using depreciation or amortisation.

Jungheinrich enters into contracts as a lessee for the use of property, plant and equipment, primarily properties and trucks. The right-of-use assets reported under property, plant and equipment are measured at acquisition cost, less cumulated depreciation and any necessary impairment, taking into account any remeasurements of the lease liability. The acquisition cost of the right-of-use asset is the present value of contractually agreed lease payments plus initial direct costs, less all lease incentives received. If there is an obligation to restore the underlying asset of the lease to its original state, then these costs are considered part of the acquisition cost. Jungheinrich makes use of the option in property lease contracts to consider payments for non-lease components as lease payments, and in so doing to recognise every lease component and all associated non-lease components as a single lease component. For all other leases, lease and non-lease components are accounted for separately.

If ownership of the leased item is transferred to Jungheinrich at the end of the contract's term as a result of the exercise of an option or a contractual agreement, the item is depreciated over its economic useful life. Otherwise, the right-of-use asset is reduced by straight-line depreciation over the lease term.

For leases with a maximum term of twelve months and leases of low-value assets, the rental and lease payments made by Jungheinrich are recognised by Jungheinrich using the straight-line method as an expense over the term of the contract under functional costs. Low-value leases consist of assets whose individual acquisition costs at original value do not exceed €5 thousand.

Trucks for short-term rental

Jungheinrich rents trucks to customers on the basis of short-term agreements. These trucks for short-term rental are capitalised at historical acquisition or manufacturing costs and depreciated over their economic useful lives, which are set at six and nine years respectively according to product group. Depending on the product group, they are depreciated at 30 or 20 per cent of their cost in each of the first two years, after which they are reduced using the straight-line method until the end of their useful lives.

Impairments of intangible assets, property, plant and equipment and trucks for short-term rental

The impairment test for goodwill is explained in the section headed "Intangible assets and property, plant and equipment".

All other intangible assets, property, plant and equipment and trucks for short-term rental are tested for impairment whenever there is an indication of a potential reduction in value. Besides qualitative criteria, particularly macroeconomic indicators, quantitative criteria are also used to furnish indications that a cash-generating unit (CGU) may be impaired. The CGUs are generally identical to the legal sales companies. The assets and contributions to profit of the other Group companies are allocated to the CGUs according to a revenue formula. As its quantitative criterion for assessing the impact of crises on recognised assets, Jungheinrich uses the ratio between the EBIT coverage ratio based on the CGU's current annual forecast and the current total carrying amounts of its fixed assets and net current assets. If the ratio falls below 3 per cent, the relevant CGU's intangible assets, property, plant and equipment, and trucks for short-term rental are tested for impairment.

In such cases, the recoverable amount of the asset is compared with its carrying amount. The recoverable amount is determined for each individual asset unless an asset generates cash flows that are not largely independent of those of other assets or other groups of assets (cash-generating units). The recoverable amount is the higher of fair value of the asset less selling costs and value in use, which is the estimated discounted future cash flow. If the carrying amount exceeds the recoverable amount of the asset, an impairment is performed.

If the reason for a recognised impairment in previous years no longer exists, a write-up to amortised acquisition and manufacturing costs is performed.

Leasing and financial services

Within the framework of their financial services business, Jungheinrich Group companies conclude contracts with customers either directly or with a leasing company or bank acting as an intermediary.

The classification of the leases, and thus the way they are reported in the accounts, depends on the attribution of the economic ownership of the lease object. In the case of "finance lease" contracts, essentially all the risks and rewards incidental to ownership of the leased asset are transferred so that the economic ownership lies with the lessee. At the Jungheinrich Group companies, as the lessor, this leads to identification of such assets as receivables from financial services in the amount of their net investment value. If the contract is deemed to be a "finance lease", revenue is recognised in the amount of the fair value of the leased item or the present value of the lease payments attributable to the lessor at the start of the contract, whichever is lower. Interest income realised in instalments over the term to maturity ensures that a stable return on outstanding net investments is achieved.

If economic ownership is attributed to Jungheinrich as the lessor, the agreement is classified as an "operating lease".The trucks are then capitalised as "trucks for lease from financial services" at cost and then depreciated over their economic useful lives. Underlying assets acquired before 1 January 2021 are depreciated over an economic useful life of six or nine years, depending on product group. Depending on the product group, they are depreciated at 30 or 20 per cent of their cost in each of the first two years, after which they are reduced using the straight-line method until the end of their useful lives. Underlying assets acquired from 1 January 2021 onwards is reduced by straight-line depreciation during the term of the customer contract down to the residual value. Lease income is recognised in profit or loss over the terms of the contracts using the straight-line method. Upon termination of the customer lease contract, the trucks are transferred to inventories at their carrying amounts.

These long-term customer contracts ("finance leases" and "operating leases") are financed by loans with maturities as identical as possible to those of the contracts. They are recognised under liabilities from financing as part of the item "liabilities from financial services". In addition to truck-related loan financing, proceeds from the sale of future lease instalments from intragroup usage right agreements in the Jungheinrich Group are deferred as liabilities from financing and released over the period of the usage right using the effective interest method. In addition, Jungheinrich finances itself via Elbe River Capital S.A., Luxembourg, an affiliated company established exclusively for this purpose. This refinancing company buys all lease instalments from intragroup usage right agreements – and, in Germany and the United Kingdom, from customer contracts, too – that mature in the future, and refinances itself through the issuance of promissory notes.

In addition, the underlying trucks in long-term customer contracts are refinanced using the sale and leaseback method. For sale and leaseback transactions completed prior to the first application of IFRS 16 ("Leases") there was no reassessment regarding the transfer of control to the leasing companies/banks, and the distribution of the profit from the sale from these contracts over the term of the contract is continued in accordance with the transition rules of IFRS 16. For sale and leaseback transactions signed after 1 January 2019, assessments are performed to see if control of the trucks has been transferred to the refinancing partner. As this is usually not the case, the trucks are not considered to have been sold, and are derecognised. They are recognised and measured as either trucks for lease from financial services (operating lease) or receivables from financial services (finance lease) depending on how the customer contract is classified. Refinancing liabilities in the amount of the revenue from the transfer are accounted for as financial liabilities and recognised as liabilities from financial services.

In the case of customer contracts with a leasing company or bank acting as an intermediary, Jungheinrich concludes sales contracts with the leasing companies/banks for the assets provided to the customer. Jungheinrich is frequently required under these contracts to repurchase the trucks from the leasing company/bank for an agreed residual value when the customer contracts expire. As a result, these contracts satisfy the definition of a lease contract and are classified as an "operating lease" or "finance lease" in accordance with the classification criteria which are used to classify lease contracts concluded directly with customers. If economic ownership is held by the Jungheinrich Group companies, the trucks sold to leasing companies/banks continue to be recognised in Jungheinrich's statement of financial position in accordance with IFRS. When they are capitalised as "trucks for lease from financial services", sales proceeds less the agreed residual value are recorded as "deferred revenue from financial services" under deferred income. Trucks for lease are depreciated on a straight-line basis over the term of the underlying leases between the leasing companies/banks and the end customer. The sales proceeds recognised as part of deferred income are reversed with an effect on revenue on a straight-line basis over the term of the contract until payment of the agreed residual value is due. The repurchase obligations are reported in the amount of the contractually agreed residual values under the item "liabilities from financial services".

Financial instruments

In accordance with IFRS 9, financial instruments are defined as contracts that at the same time lead to financial assets in one company and financial liabilities or equity instruments in the other.

In accordance with IFRS 9, financial assets must be assigned to one of the following three measurement categories:

- At amortised cost
- At fair value through other comprehensive income (expense)
- At fair value through profit or loss

The financial assets are classified based on the Jungheinrich Group's business model for managing financial assets and on the characteristics of the contractually agreed cash flows.

Financial liabilities must be assigned to one of the following three measurement categories:

- At amortised cost
- At fair value through profit or loss
- Other financial liabilities

Financial instruments carried at amortised cost are primary non-derivative financial instruments such as trade accounts receivable and payable, contract assets, other receivables and financial assets, other financial liabilities, receivables and liabilities from financial services, as well as financial liabilities.

Non-derivative financial instruments are recognised at the settlement date, i.e. the time at which the asset is delivered to or by Jungheinrich.

Trade accounts receivable and contract assets

Trade accounts receivable and contract assets are held by the Jungheinrich Group primarily for the purpose of realising their nominal value. The contractual conditions result in cash flows at agreed times which exclusively constitute repayments and, if applicable, interest payments on the outstanding receivable amount. As a rule, the Jungheinrich Group's trade accounts receivable and contract assets have contractually agreed short-term payment terms. They are categorised as "at amortised cost" and measured at amortised cost using the effective interest method, whereby the amortised cost corresponds to the nominal value less loss allowances.

Further information on receivables from financial services can be found in the notes on the treatment of leases.

Non-consolidated investments in affiliated companies and joint ventures

Non-consolidated investments in affiliated companies and joint ventures are accounted for at fair value through profit or loss. Non-consolidated investments in affiliated companies and joint ventures are reported under "Other financial assets" in the consolidated statement of financial position.

Other investments

Investments in companies that are neither affiliated companies, associated companies nor joint ventures are recognised under other non-current financial assets. These investments are accounted for at fair value through profit or loss and reported under "Other financial assets" in the consolidated statement of financial position.

Securities

Securities which are held for the purpose of holding them to maturity and realising their contractual cash flows are categorised as “at amortised cost” and measured at amortised cost using the effective interest method. These securities are initially recognised at fair value plus transaction costs. Differences between the original amount and the amount repayable at maturity are distributed over their terms and recognised in financial income (expense). With these securities, the amortised cost corresponds to the nominal value less (plus) any discounts (premiums) and less loss allowances for expected credit losses.

Securities which are held for the purpose of selling or holding in order to realise contractual cash flows but which cannot be assigned to the category “fair value through other comprehensive income (expense)” are categorised as “at fair value through profit or loss”. These securities are initially recognised at fair value plus transaction costs that are directly attributable to the purchase of the financial instrument. The fair value corresponds to the market prices quoted on active markets. Gains and losses from these securities resulting from measurement at fair value are recognised directly in profit or loss.

Jungheinrich does not have any securities categorised as “at fair value through other comprehensive income (expense)”.

Other financial assets

Other financial assets are categorised as “at amortised cost” and carried at amortised cost using the effective interest method, in other words at the nominal value less loss allowances for expected credit losses.

Cash and cash equivalents

Cash and cash equivalents are available at short notice and have an original maturity of up to three months. They also include short-term deposits with an original contractual term of up to twelve months. Cash and cash equivalents are carried at amortised cost; in other words, at the nominal amount less valuation allowances for expected credit losses.

Liabilities

Liabilities are measured at amortised cost using the effective interest method. The interest cost is recognised in accordance with the effective interest rate.

Lease liabilities are recognised at the beginning of the lease at present value of the outstanding lease payments using the maturity- and country-specific incremental borrowing rate and finally measured using the effective interest method at amortised cost. The lease liability’s carrying amount increases by accrued interest and decreases by lease payments made. Changes to the carrying amount from remeasurement of the lease liability due to reassessments or adjustments to the lease are also taken into account.

Impairment of financial instruments

For financial instruments in the category “at amortised cost”, impairment losses are calculated for expected credit losses and recognised immediately in profit or loss as loss allowances.

In accordance with IFRS 9, loss allowances for expected credit losses must be recognised at the time of initial recognition of financial assets.

Jungheinrich uses the simplified approach (two-level model) to measure loss allowances recognised for trade accounts receivable and contract assets. Due to the predominantly short-term maturity of these financial assets, the expected credit losses resulting from potential defaults relates to the remaining term of the trade accounts receivable and contract assets (level 2). A transfer from level 1 to level 2, as envisaged in the general impairment model (three-level model), is thus not relevant for these financial instruments.

The Jungheinrich Group has established standardised risk categories for ranges of credit rating indices. To measure the loss allowances in the consolidated financial statements, the upper limit of the range has been specified for each risk group as the Group probability of default for a twelve-month term to maturity. Trade accounts receivable and contract assets existing as at the balance sheet date are assigned to these risk categories in accordance with the individual customer rating. The loss allowances for expected credit losses are determined by applying the Group probability of default to the portfolio of receivables of the individual risk groups, while taking account of the average payment targets agreed by the respective Group companies. In the case of portfolios of receivables for which there is loan insurance, only the contractually agreed deductible is subject to a credit risk. The individual customer ratings contain forward-looking information.

Trade accounts receivable and contract assets are transferred to Level 3 as soon as there are objective indications of impairment affecting these financial instruments. These indications include a clear deterioration in the customer rating, registered insolvencies and a clear increase in the debtor's overdue payments. Individual event-based loss allowances are recognised for these doubtful trade accounts receivable and contract assets with an impaired credit rating.

Insofar as the objective indications of impairment no longer apply and the trade accounts receivable and contract assets no longer have an impaired credit rating, the impairment losses are reversed. The financial instruments are included again in the measurement of expected credit loss allowances at Level 2.

If it can no longer be assumed, based on an appropriate evaluation, that trade accounts receivable or assets are recoverable in whole or in part, they are derecognised in line with local regulations.

Jungheinrich uses the three-level model to calculate potential future impairment losses for all other financial instruments in the category "at amortised cost". At the time of initial recognition, these financial assets are assigned to level 1, and loss allowances equal to the expected twelve-month credit losses are recognised. The probabilities of default for a twelve-month period are based on CDS prices containing forward-looking information and the expected loss given default ratio. Parameters for loss given default ratios (LGD) reflect an assumed recoverability rate of 40 to 45 per cent. In this case, the estimated loss is calculated based on the current market price of the financial instruments and the remaining term to maturity. If the credit risk rate increases significantly in subsequent periods, these financial instruments would have to be transferred to level 2, and loss allowances equal to the expected credit loss for the remaining term to maturity would have to be recognised. Were contractual payments to become more than 30 days overdue, this would not by itself signal a significant increase in the credit risk, but it would indicate that a significant increase in the credit risk might have occurred. Jungheinrich's risk management system treats a downgrading of the counterparty's external rating below investment grade as a criterion for a significant increase in the credit risk. However, in line with Jungheinrich's risk management strategy, all other financial instruments are immediately liquidated if there is a significant increase in the creditworthiness risk.

IFRS 9 requires that loss allowances be recognised for expected credit losses. These loss allowances are calculated based on estimated probabilities of default. The credit losses that actually occur in the future may deviate from the amounts recognised in the consolidated financial statements.

Derivative financial instruments

At Jungheinrich, derivative financial instruments are mainly used for hedging purposes.

Jungheinrich has opted to continue to apply the provisions of IAS 39 when accounting for hedges, as permitted by IFRS 9.

Derivative financial instruments are recognised at the trade date, i.e. the time the obligation to buy or sell the asset was entered into.

IAS 39 requires all derivative financial instruments to be accounted for at fair value as assets or liabilities. Depending on whether the derivative is a fair value hedge or a cash flow hedge, gains and losses arising from changes in the fair value of the derivative are recognised in profit or loss or are otherwise recognised in shareholders' equity (accumulated other comprehensive income (expense)), with no effect on profit or loss. In the case of a fair value hedge, the results from changes in the fair value of derivative financial instruments are recognised in profit or loss. The changes in the fair value of derivatives that are to be classified as cash flow hedges are initially recognised with no effect on profit or loss under shareholders' equity in the amount of the hedge-effective part. These amounts are transferred to the statement of profit or loss at the same time as the effect on the result of the underlying transaction. The hedge-ineffective part is recognised directly in financial income (expense).

Derivative financial instruments that are not designated as hedging instruments are categorised as “at fair value through profit or loss”. Gains and losses from these derivative financial instruments resulting from measurement at fair value are recognised directly in profit or loss.

Financial instruments measured at fair value are classified and assigned to measurement categories according to the significance of the factors considered in their measurement. Financial instruments are assigned to levels depending on the significance their input factors have on their overall measurement. Assignments are based on the lowest level of substantial or main relevance for the measurement. The fair value hierarchy is based on the input factors used:

Level 1 – (unchanged) market prices quoted on active markets for identical assets or liabilities,

Level 2 – input data other than listed market prices, which can be observed either directly (as a price) or indirectly (derived from prices) for the asset or liability,

Level 3 – referenced input factors used for the measurement of the asset or liability that are not based on observable market data.

Jungheinrich records reclassifications between these different measurement levels at the end of the reporting period in which the change occurred.

Inventories

Inventories are measured at the lower of acquisition or manufacturing cost and net realisable value. Manufacturing costs include not only the direct material and manufacturing expenses, but also the attributable material and production overhead costs as well as production-related administrative expenses and depreciation. The average cost method is applied to calculate the acquisition and manufacturing costs of inventories of the same type.

Utilisation risks resulting from storage time are taken into account by way of value reductions on the basis of historical usage. Once the reason for the write-downs ceases to exist, a reversal of the write-down is carried out.

Income tax expense

Deferred tax assets and liabilities are recognised in accordance with the balance-sheet-orientated method for all temporary differences between Group and tax-based valuation. This procedure is generally applicable for all assets and liabilities with the exception of goodwill from the consolidation of investments. In addition, deferred tax assets are stated on the statement of financial position to carry forward unused tax losses and unused tax credits if it is probable that they can be utilised. Deferred taxes are valued at the current rates of taxation. If it is expected that the differences will be offset in years with different rates of taxation, then the latter rates valid at that time are applied. If there are any changes in the tax rates, these changes are taken into account in the year in which the relevant changes in tax rates are approved. Actual income tax expense is recorded on the statement of financial position as of the time it was incurred. It is calculated taking into account the respective local tax legislation and current case law. The complexity of these regulations and the resulting potential for them to be interpreted in different ways means that there is uncertainty as to how individual transactions are to be treated for tax purposes. Uncertain tax positions are assessed regularly at the end of the year. These uncertain tax items are measured in accordance with IFRIC 23 by using the most likely amount. Material judgements are made in the measurement of intragroup service flows and the impairment analysis of deferred tax assets.

A loss allowance is recognised for deferred tax assets, the recovery of which is improbable.

Accumulated other comprehensive income (expense)

Stated in this item are changes in the shareholders’ equity with no effect on profit or loss insofar as these are not based on capital transactions with shareholders. These include the currency translation adjustment, including the impact of inflation on equity that arises as a result of applying the provisions of IAS 29, as well as differences resulting from the remeasurement of defined benefit pension plans. This item also includes the unrealised gains from derivative financial instruments with a hedging relationship. Changes in the year under review are presented in the statement of comprehensive income.

Provisions

Provisions for pensions and similar obligations are measured on the basis of actuarial calculations in accordance with IAS 19 by applying the projected unit credit method for defined benefit obligations from pensions. This method takes into account pensions and vested future benefits known as at the balance sheet date, expected increases in salaries and pensions as well as demographic calculation principles. Remeasurements relating to actuarial gains and losses and the return on plan assets at Jungheinrich (excluding amounts included in the net interest on the net defined benefit liability) are recognised in other comprehensive income (expense) as soon as they occur and are thus disclosed directly on the statement of financial position. Remeasurements recognised in other comprehensive income (expense) are a component of accumulated other comprehensive income (expense) and are not transferred to the statement of profit or loss in subsequent periods. The cost component "service cost" is recognised in profit or loss in the personnel costs of the corresponding functional areas. Net interest on the net liability from defined benefit pension plans is recognised in profit or loss in financial income (expense). Pension obligations and similar obligations of some foreign companies are financed by pension funds. These pension funds are qualifying plan assets pursuant to IAS 19.

The defined benefit obligation stated on the consolidated statement of financial position represents the current funding gap of the Jungheinrich Group's defined benefit pension plans.

Termination benefits are recognised if the employee's employment contract is terminated before reaching the normal pension age or if an employee volunteers to terminate the employment contract in exchange for severance benefits. The Group recognises such benefits only if Jungheinrich is obliged to terminate the employment contract and provide the benefits due to a detailed formal plan, which cannot be revised, or if there is an individual agreement. Termination benefits are accounted for in accordance with IAS 19.

Furthermore, provisions have been accrued to cover employee benefits due pursuant to local statutory regulations in the event of their departure, as well as to cover other employee benefits due over the short or long term. These obligations are accounted for in accordance with IAS 19.

The measurement of the long-term incentive (LTI) as a share-based performance-related component of the Board of Management's remuneration with a long-term incentive effect is carried out at fair value using a Monte Carlo simulation. The obligations are recorded as personnel provisions under other provisions.

Other provisions are accrued in accordance with IAS 37 if a past event results in a present obligation to third parties, it is probable that resources will be used to meet this obligation and the anticipated amount of the required provision can be reliably estimated. Other provisions are accounted for based on the best possible estimate of costs required to meet the present obligation as at the balance sheet date. If the amount of the necessary provision can only be determined within a certain bandwidth, the most probable value is stated. If all amounts are of equal probability, the mean value is stated.

Provisions for restructuring measures are accrued pursuant to IAS 37 if a detailed, formal plan has been established and all the parties involved have been informed of said plan. The measures are implemented without undue delay.

Non-current provisions are discounted and recognised at the present value of the expected expense. Provisions are not offset against claims under rights of recourse.

Classification of accounts

Current and non-current assets, as well as current and non-current liabilities, are recognised on the statement of financial position as separate classification groups. Assets and liabilities are classified as being current if their realisation or repayment is expected within twelve months from the balance sheet date. Accordingly, assets and liabilities are classified as being non-current if they have a remaining term to maturity of more than one year. Pension provisions are recognised in line with their nature under non-current liabilities as benefits due to employees in the long term. Deferred tax assets and liabilities are classified as non-current assets and non-current liabilities.

Individual items in the statement of profit or loss and in the statement of financial position are summarised. They are shown separately in the notes.

Estimates

In the consolidated financial statements, it is necessary to a certain degree to make estimates and assumptions that have an impact on the level and recognition of assets and liabilities stated on the statement of financial position as at the balance sheet date and of income and expenses during the reporting period. Estimates and assumptions must be made primarily to determine the economic useful lives of property, plant and equipment, trucks for short-term rental and leased equipment uniformly throughout the Group, to conduct impairment tests on assets and to account for and measure provisions, including those for pensions, guarantee and disposal obligations or legal disputes. Further estimates and assumptions about the expected residual values at the end of the term of long-term customer leases must be made to measure the underlying assets. Assumptions and estimates are also necessary when determining the intrinsic value of deferred tax assets, especially on loss carryforwards, and when recognising tax items that are still uncertain. Estimates and assumptions are made on the basis of the latest knowledge available and historical experience as well as additional factors such as future expectations.

The amounts which actually materialise may deviate from the estimates. When the actual course of events deviates from the expectations, the premises and, if necessary, the carrying amounts of the affected assets and liabilities, are adjusted accordingly.

To identify any impairment of goodwill, it is necessary to calculate the recoverable value of the cash-generating unit (CGU) to which the goodwill has been allocated. Calculating the recoverable amount involves estimating future cash flows from the CGU, a sustainable growth rate and an appropriate discount rate for the calculation of the net present value. Any change in these and other influential factors may lead to impairment losses. Goodwill is tested for impairment once a year and also if there is any indication for impairment.

All other intangible assets, property, plant and equipment and trucks for short-term rental are tested for impairment whenever there is an indication for impairment. Besides qualitative criteria, particularly macroeconomic indicators, quantitative criteria are also used to furnish indications that an impairment may occur in individual cash-generating units (CGU).

Jungheinrich reclassified the CGUs with effect from 1 January 2023. Previously, each legal company generally constituted a CGU. Due to changes in the long-term earnings management, particularly in the production plants, the legal companies no longer fulfil the definition of a CGU pursuant to IAS 36. The legal sales companies are usually deemed to be the new CGUs. The assets and contributions to profit of the other Group companies are allocated to the new CGUs according to a revenue formula.

At the time the consolidated financial statements as of 31 December 2023 were prepared, Jungheinrich assumed that Jungheinrich companies in Russia and Ukraine would continue to operate.

As a result, for the Russian CGU the carrying amounts of the intangible assets, property, plant and equipment, and trucks for short-term rental were tested for impairment as at the balance sheet date. The probability of various scenarios was weighted to estimate the expected cash flows. There was no need to record an impairment for the Russian CGU as of 31 December 2023.

For the Ukrainian CGU, impairment losses on intangible assets, property, plant and equipment and trucks for short-term rental were recognised in the previous year. Furthermore, the test of the property, plant and equipment and trucks for short-term rental capitalised in 2023 revealed no need for impairment or reversal of impairment.

Estimates of future costs for legal disputes, warranty and disposal obligations are subject to a number of uncertainties.

It is often impossible to predict the outcome of individual lawsuits with certainty. It cannot be ruled out that, due to the final ruling on some of the outstanding lawsuits, Jungheinrich may be faced with costs that exceed the provisions accrued for this purpose and whose timing and extent cannot be predicted with certainty.

Warranty and disposal obligations are subject to uncertainties surrounding the enactment of new laws and regulations, the number of affected trucks and the nature of measures to be initiated. It cannot be ruled out that the expenses actually incurred for these measures may exceed the provisions accrued for them to an unpredictable extent. Further information can be found in note (26) [page 149].

Although expenses resulting from a necessary adjustment in provisions in the reporting period can have a significant impact on Jungheinrich's results, it is expected that any potentially ensuing obligations will not have a material effect on the Group's economic situation, particularly in light of the provisions already accrued for this purpose.

All significant risks known at the time the consolidated financial statements were prepared and affecting the assets and liabilities stated on the statement of financial position as of 31 December 2023 have been taken into consideration in preparing the statements.

IFRS published, adopted by the EU, and applied for the first time in the 2023 financial year

As of 1 January 2023, Jungheinrich was required to apply for the first time the amendments to IAS 12 "Income Taxes" published by the IASB in May 2023 and adopted by the EU in November 2023 with regard to the Pillar 2 model rules for the reform of international business taxation. The amendments contain a temporary mandatory exemption from the obligation to recognise deferred taxes resulting from the implementation of the Pillar 2 rules. In this context additional disclosures have been introduced, which Jungheinrich reports under note (11) [page 126].

Jungheinrich was required to apply the amendments to IAS 1 "Presentation of Financial Statements", published by the IASB in February 2021 and adopted by the EU in March 2022, for the first time from 1 January 2023. These amendments clarify that an entity must disclose all "material" accounting policy information. Previously, the standard referred to "significant" accounting policies. The amendments also define what is meant by "material accounting policy information" and how this is identified. The application of this amended standard had no material impact on the Jungheinrich consolidated financial statements as of 31 December 2023.

Jungheinrich was required to apply the amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors", published by the IASB in February 2021 and adopted by the EU in March 2022, for the first time from 1 January 2023. These amendments clarify how to distinguish between changes in accounting policies and changes in accounting estimates. The application of this amended standard had no material impact on the Jungheinrich consolidated financial statements as of 31 December 2023.

Jungheinrich was required to apply the IFRS 17 "Insurance Contracts", published by the IASB in June 2020 and adopted by the EU in November 2021, for the first time as of 1 January 2023. This standard determines the accounting and disclosure of insurance contracts. Through another mandatory amendment published by the IASB in December 2021 and adopted by the EU in September 2022, a transition option relating to the comparative period was added. The application of this amended standard had no impact on the Jungheinrich consolidated financial statements as of 31 December 2023.

Jungheinrich was required to apply for the first time, the amendments to IAS 12 "Income Taxes" published by the IASB in May 2021 and adopted by the EU in August 2022 for the first time as of 1 January 2023. These amendments require companies to recognise deferred tax assets and tax liabilities for transactions that give rise to equal taxable and deductible temporary differences on initial recognition. The application of this amended standard had no material impact on the Jungheinrich consolidated financial statement as of December 2023.

Published IFRS adopted by the EU and not yet applied

In September 2022, the IASB issued amendments to IFRS 16 "Leases" regarding the measurement of the lease liability from sale and leaseback transactions. These amendments stipulate that the seller/lessee must determine "lease payments" and "revised lease payments" in the subsequent measurement of the lease liability in a manner that prevents the recognition of a gain or loss in relation to the retained right-of-use asset. No material impacts are currently expected on the consolidated financial statements. The amendments published by the IASB were adopted by the EU in November 2023 and become effective for the first time for financial years beginning on or after 1 January 2024.

The IASB first published amendments to IAS 1 "Presentation of Financial Statements" in January 2020 regarding the classification of liabilities as current or non-current. These amendments clarify that the classification of liabilities as current or non-current is based on the rights available to the entity at the balance sheet date. No material impacts are currently expected on the consolidated financial statements. The amendments published by the IASB were adopted by the EU in December 2023 and become effective for the first time for financial years beginning on or after 1 January 2024.

Published IFRS that are yet to be adopted by the EU and have not yet been applied

The other standards that have been published but not yet adopted by the EU, and not yet applied by Jungheinrich are not expected to have a material impact on the Jungheinrich Group's assets, liabilities, financial position and profit or loss. Jungheinrich does not currently plan to apply these standards, when these have been endorsed by the EU, until they become mandatory in later financial years.

Scope of consolidation

In addition to the parent company, Jungheinrich AG, Hamburg, the consolidated financial statements included 89 (previous year: 82) foreign and 28 (previous year: 28) domestic (German-based) companies. The scope of consolidation comprised 101 (previous year: 93) fully consolidated subsidiaries, including one structured entity, which were directly or indirectly controlled by Jungheinrich AG. Fifteen joint ventures (previous year: 15) and one associated company (previous year: two) were accounted for using the equity method.

Universal-FORMICA-Fonds, Frankfurt/Main, in which Jungheinrich AG holds 100 per cent of the shares, was included in the scope of consolidation as a structured entity. On the basis of contractual agreements, Jungheinrich is able to steer the activities of the special fund and thus influence the amount of return. The purpose of investments in the fund is to take advantage of opportunities to earn returns on the capital market while limiting risk. The special fund is managed to maintain value in order to limit risks.

All of the shareholdings of Jungheinrich AG, Hamburg, are disclosed in note (44) [page 174].

Changes in the scope of consolidation

Development of the scope of consolidation

	Jungheinrich AG	Subsidiaries		Joint ventures		Associated companies	
	Germany	Germany	Outside Germany	Germany	Outside Germany	Germany	**Total**
Balance on 01/01/2023	1	21	72	5	10	2	111
Additions	–	1	8	–	–	–	9
Disposals	–	–	1	–	–	1	2
Balance on 31/12/2023	**1**	**22**	**79**	**5**	**10**	**1**	**118**
Balance on 01/01/2022	1	22	70	4	8	1	106
Additions	–	–	2	1	2	1	6
Disposals	–	1	–	–	–	–	1
Balance on 31/12/2022	**1**	**21**	**72**	**5**	**10**	**2**	**111**

Significant acquisitions

In order to expand direct sales for racking systems and warehouse automation in North America, Jungheinrich gained control of the Storage Solutions Group (Storage Solutions) in return for a purchase price of €325.4 million on 15 March 2023 and has since held 100 per cent of the voting rights and capital shares of SSI Acquisition LLC, Westfield/Indiana (USA) and its subsidiaries. This has enlarged the scope of consolidation by seven companies, based in the USA:

- SSI Acquisition LLC, Westfield/Indiana
- SSI Holdings Inc., Westfield/Indiana
- Storage Solutions Inc., Westfield/Indiana
- Warehouse Solutions Inc., Westfield/Indiana
- Logistics Handling Solutions LLC, Westfield/Indiana
- SSI-SNC Solutions, LLC, Rancho Cucamonga/California
- Electronic Mechanical Integration Technologies Inc., Nashville/Tennessee

Storage Solutions, one of the USA's leading providers of racking and warehouse automation solutions, has been allocated to the "Intralogistics" segment. The purchase price was provided in the form of cash and cash equivalents.

The table below shows the allocation of the purchase price to the net assets acquired.

Purchase price allocation at the date of acquisition

in € million	Fair values
Assets	
Intangible assets	64.8
Property, plant and equipment	10.0
Inventories	18.1
Trade accounts receivable and contract assets	20.0
Other receivables and other assets	5.5
Cash and cash equivalents	17.9
	136.3
Liabilities	
Other provisions	7.2
Financial liabilities	38.5
Trade accounts payable	13.9
Contract liabilities	15.8
Income tax liabilities	2.9
Other liabilities	3.2
Deferred tax liabilities	16.5
	98.0
Net assets acquired	**38.3**
Consideration transferred	325.4
Differential amount	**287.1**

Intangible assets in the amount of €64.8 million and goodwill totalling €287.1 million were identified as part of the purchase price allocation. The identified recognisable intangible assets primarily related to acquired customer relationships, and had a fair value of €57.4 million with an assumed useful life of 8 years. The goodwill was mainly based on the fact that the consideration transferred included amounts for the well-trained workforce acquired and the anticipated exploitation of synergies and future potential in the field of warehouse automation in the USA. Storage Solutions will form the strategic base for this future, fast-growing market in the US. With access to important logistics hubs, there is also an opportunity for Jungheinrich to support existing European customers in the US. These anticipated benefits were not recognised separately from goodwill as they do not fulfil the criteria for the recognition of intangible assets. A portion of the goodwill amounting to €56.7 million is expected to be deductible for income tax purposes. Goodwill of €287.1 million was allocated to Storage Solutions.

The receivables acquired were solely comprised of receivables which are expected to be recoverable. The fair values determined take into account the credit risk for expected credit losses, which was rated very low.

Jungheinrich measured the acquired lease liabilities at the present value of the remaining lease payments at the time of acquisition. The right-of-use assets were measured at the same amount as the lease liabilities.

Since the date of acquisition, Storage Solutions has contributed revenue of €219.4 million to the revenue reported in the consolidated statement of profit or loss. Its share of consolidated earnings after taxes for the same period was €13.7 million, including the effects of the purchase price allocation.

If the acquisition date of the business combination had been 1 January 2023, Group revenue and consolidated earnings after taxes for 2023 would have been approximately €5,592 million and approximately €299.9 million, respectively. When determining these figures, Jungheinrich assumed that the determined fair value adjustments made as of the date of acquisition would also have been valid in the event of an acquisition on 1 January 2023.

With a payment of €30.8 million, Jungheinrich repaid Storage Solutions' bank liabilities at the time of the acquisition.

In connection with the acquisition, an agreement was made that former shareholders who were also employees of Storage Solutions would receive further, variable payments in the coming years. The amount of these payments depends on the fulfilment of key figures laid out in the purchase agreement for the 2023, 2024 and 2025 financial years (earn-out payments). The employees included in this scheme only have a right to payment if they are still employed by Storage Solutions at the end of the respective financial year. Jungheinrich expects contingent payments of €26 million, which would be due in part for payment in 2024, 2025 and 2026.

The repayment of bank liabilities and the agreed, expected future performance-related payments in 2024 to 2026 are not part of the consideration transferred in accordance with IFRS 3.

In 2022 and 2023, the total costs associated with the business combination totalled approximately €10 million. These included acquisition-related costs of approximately €8 million, incurred in the reporting year and recognised in profit or loss in other operating expenses.

Jungheinrich has wholly acquired the Munich-based robotics specialist Magazino GmbH in order to expand and strengthen its automation expertise. Jungheinrich acquired the remaining 74.5 per cent of shares in Magazino GmbH, Munich (Germany) on 23 August 2023 for a purchase price of €20.0 million and since that date has held 100 per cent of the voting rights and capital shares in the company, which was previously classified as an associate. The company, previously recognised using the equity method, was included in the scope of consolidation as a fully consolidated company for the first time at the time of acquisition. As of 23 August 2023, the carrying amount calculated using the equity method was €8.4 million. The 25.5 per cent shares held in Magazino GmbH prior to 23 August 2023 were remeasured at the fair value applicable on that date. A loss of €2.2 million resulting from the market valuation was recognised through profit or loss in other financial income (expense) for 2023.

Magazino GmbH, based in Munich, is a technology company active in the field of autonomous mobile robots and has one of Europe's largest development teams in mobile robotics. The company has a high-performance technology platform that allows the operation of logistics robots even in a mixed human-machine environment. Jungheinrich has thus added highly innovative hardware and software solutions in the rapidly growing autonomous mobile robots market to its existing portfolio of automation systems. Magazino GmbH, Munich, is allocated to the "Intralogistics" segment.

The purchase price for the remaining shares was provided in the form of cash and cash equivalents in the reporting year.

The consideration transferred in the amount of €26.2 million for 100 per cent of the shares in Magazino GmbH, Munich (Germany), included €20.0 million for the purchase price for the acquisition of the 74.5 per cent of the shares and €6.2 million for the fair value of the previously held 25.5 per cent of the shares in the acquired company.

The table below shows the allocation to the net assets acquired of the consideration transferred.

Purchase price allocation at the date of acquisition

in € million	Fair values
Assets	
Intangible assets	25.1
Property, plant and equipment	0.5
Inventories	3.0
Trade accounts receivable and contract assets	1.6
Other receivables and other assets	0.2
Cash and cash equivalents	1.5
	31.9
Liabilities	
Other provisions	0.7
Financial liabilities	8.3
Trade accounts payable	0.2
Contract liabilities	0.2
Other liabilities	4.2
Deferred tax liabilities	7.5
	21.1
Net assets acquired	**10.8**
Consideration transferred	26.2
Differential amount	**15.4**

Intangible assets in the amount of €25.1 million and goodwill totalling €15.4 million were identified as part of the purchase price allocation. The recognisable intangible assets identified as part of the purchase price allocation primarily related to acquired technologies with a fair value of €22.8 million and an assumed useful life of ten years. The goodwill was mainly based on the fact that the consideration transferred included amounts reflecting the expectation of being able to harness potential synergy effects as well as a very well qualified workforce. These benefits were not recognised separately from goodwill as they do not meet the criteria for the recognition of intangible assets. No part of the goodwill is expected to be deductible for income tax purposes. Goodwill of €15.4 million that was recorded when Magazino GmbH, Munich, was combined with the business was allocated to the sales companies in Germany, France, the United Kingdom, Italy, Sweden, Poland and Spain.

The receivables acquired were solely comprised of receivables which are expected to be recoverable. The fair values determined take into account the credit risk for expected credit losses, which was rated very low.

Since the date of acquisition, Magazino GmbH, Munich, has contributed revenue of €0.6 million to the revenue reported in the consolidated statement of profit or loss. Its share of consolidated earnings after taxes for the same period was €–4.5 million, including the effects of the purchase price allocation.

If the acquisition date of the business combination had been 1 January 2023, Group revenue and consolidated earnings after taxes for 2023 would have been approximately €5,548 million and approximately €293.9 million, respectively.

In connection with the acquisition of the company, it was agreed that the sellers of the shares and the employees of Magazino GmbH, Munich, at the time of acquisition would receive further variable payments in subsequent years, provided that the conditions set out in the purchase agreement were met (referred to as long-term incentive payments). The beneficiaries are only entitled to payment upon fulfilment of the performance-related key figures if they are employed by Magazino GmbH, Munich, at the contractually agreed time. Jungheinrich expects contingent payments totalling €5.0 million, which would be due for payment in 2024, 2025 and 2026. These payments are not part of the consideration transferred in accordance with IFRS 3.

The acquisition-related costs of €0.5 million were recorded in profit or loss under general administrative expenses in 2023.

Other changes in the scope of consolidation

Jungheinrich Financial Services B.V., Alphen a.d. Rijn (Netherlands) took over all the assets and liabilities of the absorbed Jungheinrich Finance B.V., Alphen a.d. Rijn (Netherlands) by way of a merger by absorption as of 1 January 2023.

Jungheinrich Digital Solutions s.l., Madrid (Spain) was included in the scope of consolidation for the first time as of 1 January 2023. Jungheinrich established this company as an internal service provider for the development of digital products in 2018 and has since held all of the shares in the company. The net assets of €0.4 million included in the scope of consolidation for the first time at the beginning of the financial year primarily consisted of financial assets and liabilities. The first-time consolidation resulted in a negative difference of €0.4 million, which was the result of the accumulated earnings from invoices for services provided to Jungheinrich Group companies in previous years. The difference was recognised in profit or loss under other operating income for the year 2023.

NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(3) Revenue

Jungheinrich generates revenue from contracts with customers by providing goods and services, both at a specific point in time and over time. The Group also generates revenue from short-term rental and lease agreements, in respect of which Jungheinrich is the lessor.

Composition of revenue

	2023			2022		
in € thousand	Intralogistics	Financial Services	**Jungheinrich Group**	Intralogistics	Financial Services	Jungheinrich Group
New business	2,061,653	–	2,061,653	1,861,114	–	1,861,114
Used equipment	302,851	–	302,851	279,033	–	279,033
After-sales services	597,888	–	597,888	529,658	–	529,658
Revenue recognition at a point in time	**2,962,392**	**–**	**2,962,392**	**2,669,805**	**–**	**2,669,805**
After-sales services	656,694	191,741	848,435	593,844	181,226	775,070
Other	337,618	–	337,618	122,739	–	122,739
Revenue recognition over time	**994,312**	**191,741**	**1,186,053**	**716,583**	**181,226**	**897,809**
Revenue from contracts with customers	**3,956,704**	**191,741**	**4,148,445**	**3,386,388**	**181,226**	**3,567,614**
Revenue from short-term rental and lease agreements	**441,596**	**955,846**	**1,397,442**	**413,256**	**782,424**	**1,195,680**
Revenue	**4,398,300**	**1,147,587**	**5,545,887**	**3,799,644**	**963,650**	**4,763,294**

Revenue from contracts with customers is broken down by region and reportable segment in the following table.

Revenue from contracts with customers by region and segment

	2023			2022		
in € thousand	Intralogistics	Financial Services	**Jungheinrich Group**	Intralogistics	Financial Services	Jungheinrich Group
Germany	921,554	47,747	969,301	860,612	45,831	906,443
Italy	271,651	50,892	322,543	255,560	48,577	304,137
France	245,670	28,375	274,045	203,058	25,780	228,838
United Kingdom	183,562	27,934	211,496	147,271	26,513	173,784
Rest of Europe	1,432,202	33,113	1,465,315	1,325,434	30,349	1,355,783
Other countries	902,065	3,680	905,745	594,453	4,176	598,629
Revenue from contracts with customers	**3,956,704**	**191,741**	**4,148,445**	**3,386,388**	**181,226**	**3,567,614**

Other revenue generated by the "Intralogistics" segment includes revenue for long-term project contracts with reference to the stage of completion of the activity.

Revenue generated by the "Financial Services" segment includes €182,587 thousand (previous year: €177,173 thousand) in lease income from "operating lease" customer contracts and €102,564 thousand (previous year: €84,552 thousand) in interest income from "finance lease" customer contracts.

Of the revenue from contracts with customers realised in the reporting period, contract liabilities comprised revenue in the amount of €165,950 thousand (previous year: €160,733 thousand) as of 1 January 2023.

In addition, contract liabilities as of 1 January 2023 included €15,502 thousand (previous year: €13,731 thousand) for performance obligations satisfied by Jungheinrich in the previous year and revenue deductions contractually agreed with customers but not yet refunded. In relation to this, contract liabilities of €11,011 thousand (previous year: €9,551 thousand) were paid in the reporting year, and an amount of €2,266 thousand (previous year: €1,208 thousand) was reversed with an effect on revenue.

In the area of after-sales services, Jungheinrich concludes with customers both long-term service contracts with fixed contractual terms and short-term service contracts with the option to extend at standard market prices. With regard to long-term service contracts, the total value of performance obligations not satisfied was €1,191,644 thousand as of 31 December 2023 (previous year: €1,052,383 thousand). Jungheinrich will recognise revenue of the same amount over the remaining contractual terms when the agreed services are provided.

Future revenue from performance obligations existing as at the balance sheet date

			31/12/2023			31/12/2022
in € thousand	After-sales services	Other	**Total**	After-sales services	Other	Total
Revenue recognition within one year	414,326	118,731	533,057	330,439	105,020	435,459
Revenue recognition between one and five years	699,497	64,224	763,721	641,165	60,455	701,620
Revenue recognition in more than five years	77,821	–	77,821	80,779	–	80,779
Total	**1,191,644**	**182,955**	**1,374,599**	**1,052,383**	**165,475**	**1,217,858**

The other revenue recognition disclosed in the table relates to performance obligations for long-term project contracts, the revenue of which is recognised over time, and for which the obligations existed as at the balance sheet date and had not yet been satisfied.

All of the Jungheinrich Group's other not satisfied performance obligations existing as at the balance sheet date related to periods of no more than one year. As is permitted under IFRS 15, the transaction price assigned to these not satisfied performance obligations is not disclosed.

(4) Cost of sales

The cost of sales includes the cost of materials, consisting of expenses for raw materials and supplies as well as for purchased goods and services totalling €2,743,126 thousand (previous year: €2,503,465 thousand).

The cost of materials in 2023 included income of €3,625 thousand from electricity price relief as part of Germany's 'energy price brake' measures.

The cost of materials in the reporting year includes €582 thousand in currency gains (previous year: losses of €9,111 thousand) primarily resulting from purchases by non-German sales companies in the Group currency and the associated currency hedges.

The cost of sales includes €70,457 thousand (previous year: €44,470 thousand) in interest expenses associated with the matching-term refinancing of long-term customer contracts in the “Financial Services” segment.

(5) Personnel expenses

The following personnel expenses are included in the functional costs within the consolidated statement of profit or loss.

Personnel expenses in the consolidated statement of profit or loss

in € thousand	**2023**	2022
Salaries	1,232,276	1,064,734
Social security contributions	233,708	213,511
Cost of pensions and other benefits	20,183	23,463
Total	**1,486,167**	**1,301,708**

Average number of employees during the year

in FTEs[1]	**2023**	2022
Industrial employees	9,196	8,868
Salaried employees	10,869	10,099
Trainees and apprentices	467	465
Total	**20,532**	**19,432**

[1] FTE = full-time equivalents.

Personnel expenses in 2023 related to expenses for performance-based payments totalling €21,496 thousand (previous year: €5,589 thousand), which were agreed in connection with business combinations. These earn-out payments are accumulated under personnel provisions until the individual tranches are due.

In addition to personnel expenses, functional costs also included the cost of temporary workers, which amounted to €35,603 thousand (previous year: €37,519 thousand).

(6) Depreciation, amortisation, impairment losses and reversals of impairment losses

The depreciation, amortisation, impairment losses and write-ups of non-current non-financial assets are shown in the development of intangible assets, property, plant and equipment, trucks for short-term rental and trucks for lease. Impairment losses on goodwill are recognised under other operating expenses, while other depreciation, amortisation, impairment losses and write-ups are included in functional costs.

(7) Other operating income

Other operating income in the year under review includes €766 thousand (previous year: €969 thousand) in government grants. In addition to reversals of deferred investment grants and investment subsidies in the amount of €708 thousand (previous year: €744 thousand) performance-related government grants in the amount of €58 thousand were recognised in profit or loss in 2023 (previous year: €225 thousand).

Other operating income in the year under review also includes income from the disposal of property, plant and equipment and intangible assets in the amount of €1,734 thousand (previous year: €6,792 thousand). Other operating income of the financial year 2023 includes a negative goodwill amounting to €422 thousand, resulting from the initial consolidation of Jungheinrich Digital Solutions s.l., Madrid (Spain). Please see the notes for more details on changes to the scope of consolidation.

Other operating income in 2022 included €4,664 thousand in income from the transition of the consolidation of shares in JT Energy Systems GmbH, Freiberg (Germany), from subsidiary to joint venture, and €369 thousand in negative goodwill from the acquisition of the sales company in New Zealand.

(8) Other operating expenses

Other operating expenses in the reporting year include €2,163 thousand (previous year: €1,388 thousand) in losses from the disposal of property, plant and equipment and intangible assets.

Other operating expenses in 2023 included costs associated with the business combination of Storage Solutions totalling €8,398 thousand.

(9) Net interest

Composition of net interest

in € thousand	**2023**	2022
Interest and similar income on securities[1]	75	116
Other interest and similar income	7,594	2,293
Interest income	**7,669**	**2,409**
Interest expense from leases	6,099	3,674
Other interest and similar expense	26,004	10,152
Interest expense	**32,103**	**13,826**
Net interest	**–24,434**	**–11,417**

[1] Assigned to the measurement category "at amortised cost".

The increase in the other interest and similar expenses item in the reporting year was mainly related to the borrowing of additional funds to finance the Storage Solutions purchase price as well as the general increase in interest rates on the money and capital markets.

The same applies to the other interest and similar income generated in 2023, which rose as a result of the year-on-year increase in interest rates for investments in cash and securities. The average investment volume also rose in comparison with the previous year.

Interest expenses in connection with the refinancing of long-term customer contracts with identical maturities in the "Financial Services" segment and the financing of trucks for short-term rental are reported under cost of sales.

(10) Other financial income (expense)

Composition of other financial income (expense)

in € thousand	**2023**	2022
Income (expense) from special fund and securities[1]	6,735	–13,930
Income (expense) from derivatives	–518	–7,791
Gain or loss on net monetary position	–3,682	–3,826
Net interest on defined benefit pension plans	–5,884	–2,208
Result from the measurement of equity shares at fair value through profit or loss	–2,190	–
Sundry financial income (expense)	–1,207	513
Other financial income (expense)	**–6,746**	**–27,242**

[1] Assigned to the measurement category "at fair value through profit or loss".

Details of the income (expense) from the special fund and from securities allocated to the measurement category "at fair value through profit or loss" can be found in the following table:

Breakdown of income (expense) from the special fund and from securities allocated to the measurement category "at fair value through profit or loss"

in € thousand	**2023**	2022
Currency gains	6,913	4,901
Currency losses	3,605	19,143
Interest and similar income	4,221	893
Interest expense	–	83
Currency income (expense)	–293	33
Other comprehensive income (expense)	–501	–531
Income (expense) from special fund and securities[1]	**6,735**	**–13,930**

[1] Assigned to the measurement category "at fair value through profit or loss".

The price gains and losses presented also included unrealised gains and losses resulting from the measurement at fair value.

The income (expense) from derivatives included price gains in the amount of €7,981 thousand (previous year: €5,155 thousand) and price losses in the amount of €8,499 thousand (previous year: €12,946 thousand). Income from derivatives includes all income from derivative financial instruments that do not relate to supplies and services, are not held in the special fund and were not designated as hedges as at the balance sheet date. These primarily include derivative financial instruments used to hedge foreign exchange rates when concluding intragroup financial transactions. Income from derivatives also includes changes in currency exchange rates pertaining to financing.

The loss on net monetary positions of €–3,682 thousand (previous year: €–3,826 thousand) was in connection with the annual financial statements of the Turkish sales company included in the consolidated financial statements, which were prepared in line with the provisions of IAS 29. For further details, please refer to the note on hyperinflation.

In August 2023, Jungheinrich acquired the remaining shares in Magazino GmbH, Munich. The other financial income (expense) for the year under review included €–2,190 thousand from the measurement of the shares previously held in Magazino GmbH, Munich (Germany) at fair value at the time of acquisition. Please see the notes for more details on changes to the scope of consolidation.

Other financial income (expense) included earnings of €94 thousand (previous year: €11 thousand) from changes in loss allowances recognised in profit or loss for expected credit losses on securities, cash and cash equivalents and other financial assets, and €884 thousand (previous year: €1,048 thousand) in income from accrued interest and changes to discount rates on non-current provisions for personnel.

(11) Income taxes

Composition of tax expense

in € thousand	**2023**	2022
Current taxes		
Germany	42,303	13,164
Outside Germany	68,805	55,569
Deferred taxes		
Germany	2,374	10,248
Outside Germany	–13,629	–1,155
Tax expense	**99,853**	**77,826**

The current tax expense in Germany was higher than in the previous year due to higher earnings. Taxes in the previous year resulted in an expense of €3.7 million (previous year: tax income of €0.6 million).

The current tax expense outside Germany was higher than in the previous year due to higher earnings, higher tax rates and higher permanent effects. Taxes in the previous year resulted in income of €0.8 million (previous year: tax income of €0.5 million).

€2.4 million (previous year: tax expense of €10.2 million) of deferred tax expense pertaining to Germany was mainly attributable to higher deferred tax liabilities for intangible assets. The deferred tax income pertaining to business outside Germany, amounting to €13.6 million (previous year: tax income of €1.1 million), was primarily caused by the reversal of deferred tax assets in connection with US loss carryforwards from the acquisition of Storage Solutions and the reduction of deferred tax liabilities on temporary differences. The Jungheinrich Group's deferred tax income in 2023 of €11.3 million (previous year: tax expense of €9.1 million) was attributable to tax income of €6.4 million (previous year: tax income of €0.3 million) from changes in loss carryforwards and tax income of €4.9 million (previous year: tax expense of €9.4 million) arising from changes in temporary differences.

The domestic (German) corporate income tax rate for the 2023 financial year was 30.6 per cent (previous year: 30.5 per cent). It continues to comprise the corporate income tax burden of 15.0 per cent along with the solidarity surcharge of 5.5 per cent of the corporate income tax burden and a trade tax rate of 14.7 per cent (previous year: 14.6 per cent).

The applied local income tax rates for foreign companies varied between 9.0 per cent (previous year: 9.0 per cent) and 35.0 per cent (previous year: 34.0 per cent).

As of 31 December 2023, the Group had approximately €70 million in corporate tax loss carryforwards (previous year: €73 million). Of this amount, €26 million (previous year: €46 million) related to the US loss carryforward. The loss carryforwards accrued in or before 2014 can be utilised subject to a specific time limit; those accrued later have no such limit on when they can be used.

As of 31 December 2023, the Group had €70.3 million in utilisable corporate tax loss carryforwards (previous year: €26.2 million). The increase is largely due to the fact that the US loss carryforwards have now been classified as utilisable following the acquisition of Storage Solutions, whereas in previous years they were generally reported as non-utilisable. Loss carryforwards also increased as a result of the full consolidation of Magazino GmbH, Munich (Germany). Valuation allowances of €6.3 million (previous year: €4.0 million) were recognised for deferred tax assets in connection with corporate income tax loss carryforwards. Of this amount, €3.5 million is attributable to loss carryforwards of German companies (previous year: €1.0 million) and €2.4 million (previous year: €2.4 million) is related to the loss carryforward in Australia. As of 31 December 2023, trade tax loss carryforwards also amounted to €29.0 million (previous year: €12.1 million). Valuation allowances of €3.2 million (previous year: €0.8 million) was recognised for deferred tax assets in connection with these loss carryforwards.

Income tax receivables and liabilities are recognised in the amount of an expected reimbursement from or payment to tax authorities based on the estimated tax rates valid as at the balance sheet date.

Several years have not yet been conclusively assessed with regard to the Group's taxation. Jungheinrich believes that it has provided sufficiently for these outstanding tax assessment years.

Pillar 2

The Group falls within the scope of the OECD Pillar 2 model rules. The Pillar 2 legislation has been adopted in Germany. As the new tax law only came into force in Germany from 1 January 2024, there was no impact on the actual tax expense for the 2023 financial year.

The Group applied the temporary, mandatory exemption rule with regard to the recognition of deferred taxes, which was the subject of the amendments to IAS 12 published in May 2023.

The Group has assessed the potential risk for the Group with regard to income taxes in accordance with Pillar 2.

The potential risk of income taxes under Pillar 2 was assessed on the basis of country-by-country reporting (CbCR) and the Group's IFRS separate financial statements. Based on this assessment, the effective tax rates in most of the countries in which the Group operates are above 15 per cent. However, there are a limited number of countries where the effective tax rate under Pillar 2 is close to 15 per cent. The Group does not anticipate any material income tax charge under Pillar 2 in these countries.

When stating deferred tax assets on the statement of financial position, the extent to which future effective tax relief might result from existing tax loss carryforwards and the differences in accounting and valuation must be assessed. In this context, all factors that could have a positive or negative influence have been taken into account. The current assessment in this regard may alter depending on changes to the earnings position in future years and may therefore result in a higher or lower impairment loss.

Composition of deferred tax assets and liabilities

	Deferred tax assets		Deferred tax liabilities	
in € thousand	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022
Property, plant and equipment and intangible assets	357,058	337,723	142,310	118,346
Inventories	19,897	13,981	12,294	9,591
Receivables and other assets	43,749	33,809	573,241	512,427
Tax loss carryforwards	18,183	7,140	–	–
Provisions for pensions and similar obligations	21,867	15,920	726	1,837
Other provisions	38,816	20,879	12,602	9,648
Liabilities	520,187	463,740	192,095	149,755
Deferred income	4,413	4,223	–	–
Valuation allowances	–12,596	–7,111	–	–
Other	29,638	23,774	44,704	48,748
Deferred taxes prior to offsetting	**1,041,212**	**914,078**	**977,972**	**850,352**
of which relating to non-current assets and liabilities	843,202	776,098	831,075	677,425
Offsetting	**–920,902**	**–806,457**	**–920,902**	**–806,457**
Balance sheet recognition	**120,310**	**107,621**	**57,070**	**43,895**

€25,478 thousand (previous year: €14,360 thousand) of the net amount of the deferred taxes of €63,240 thousand (previous year: €63,726 thousand) was recognised directly in shareholders' equity. The latter primarily related to comprehensive income with no effect on profit or loss from the remeasurement of defined benefit pension plans.

No deferred tax liabilities were recognised for temporary differences amounting to €28.4 million (previous year: €23.1 million) between net assets and the tax carrying amount of subsidiaries. This is because Jungheinrich is able to manage the timing of the reversal of temporary differences, and no turnaround is expected with regard to the temporary differences in the near future.

The following table shows the reconciliation of the expected amount with the disclosed tax expense. The expected tax expense reported represents the amount that results from applying the total tax rate of 30.6 per cent (previous year: 30.5 per cent) applicable to the parent company to consolidated earnings before income taxes. The figure for "Change in taxes from the previous year" arose as a result of deviations in assessments and company audits and an adjustment of deferred taxes. The change in valuation allowances is mainly attributable to the fact that loss carryforwards could be made utilisable following the acquisitions of Storage Solutions and Magazino GmbH, Munich (Germany) in 2023.

Reconciliation of the expected tax expense to the disclosed tax expense

in € thousand	**2023**	2022
Expected tax expense	122,133	105,957
Change in the tax rate	147	–1,975
Tax differentials outside Germany	–12,099	–18,713
Change in valuation allowances	–14,632	–576
Change in taxes from the previous year	–2,223	–5,666
Non-deductible operating expenses and tax-free gains	5,722	–1,773
Miscellaneous	805	572
Actual tax expense	**99,853**	**77,826**

The Group tax rate in 2023 amounted to 25.0 per cent (previous year: 22.4 per cent).

NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(12) Intangible assets

Development of intangible assets during the reporting year

in € thousand	Acquired intangible assets	Internally generated intangible assets	Goodwill	**Total**
Acquisition and manufacturing costs Balance on 01/01/2023	179,310	182,979	101,757	464,046
Changes in currency exchange rates	–4,131	–642	–12,344	–17,117
Additions due to business combinations	87,880	3,032	302,498	393,410
Additions	5,544	44,632	–	50,176
Disposals	1,449	20,517	–	21,966
Transfers	1,105	–	–	1,105
Balance on 31/12/2023	**268,259**	**209,484**	**391,911**	**869,654**
Amortisation and impairment losses Balance on 01/01/2023	119,288	109,958	18,932	248,178
Changes in currency exchange rates	–1,091	–437	249	–1,279
Additions due to business combinations	255	776	–	1,031
Amortisation in the financial year	22,332	10,904	–	33,236
Impairment losses in the financial year	1,332	4,163	–	5,495
Reversal of impairment losses in the financial year	–	1,554	–	1,554
Accumulated amortisation and impairment losses on disposals	1,387	20,476	–	21,863
Balance on 31/12/2023	**140,729**	**103,334**	**19,181**	**263,244**
Carrying amount on 31/12/2023	**127,530**	**106,150**	**372,730**	**606,410**

Development of intangible assets during the previous year

in € thousand	Acquired intangible assets	Internally generated intangible assets	Goodwill	Total
Acquisition and manufacturing costs Balance on 01/01/2022	170,694	161,042	102,265	434,001
Changes in currency exchange rates	1,357	–261	–508	588
Additions due to business combinations	2,460	–	–	2,460
Additions	6,071	30,422	–	36,493
Disposals	2,157	8,224	–	10,381
Transfers	885	–	–	885
Balance on 31/12/2022	**179,310**	**182,979**	**101,757**	**464,046**
Amortisation and impairment losses Balance on 01/01/2022	110,925	102,628	18,736	232,289
Changes in currency exchange rates	923	–240	196	879
Amortisation in the financial year	11,837	12,313	–	24,150
Impairment losses in the financial year	–	3,347	–	3,347
Reversal of impairment losses in the financial year	2,737	–	–	2,737
Accumulated amortisation and impairment losses on disposals	1,660	8,090	–	9,750
Balance on 31/12/2022	**119,288**	**109,958**	**18,932**	**248,178**
Carrying amount on 31/12/2022	**60,022**	**73,021**	**82,825**	**215,868**

The additions in the item “Acquired intangible assets” were mainly related to software and software licences in the reporting year.

The additions from business combinations in 2023, totalling €392,379 thousand, related to the acquisition of the shares in Storage Solutions (USA) for €351,942 thousand and to the acquisition of the shares in Magazino GmbH, Munich (Germany) for €40,437 thousand. Please see the notes for more details on changes to the scope of consolidation.

An event-driven impairment test as of 31 December 2023 of the intangible assets, property, plant and equipment, and trucks for short-term rental acquired revealed impairment losses on acquired intangible assets in the total amount of €379 thousand at the sales company in Ecuador resulting from a reduction in the future expected cash flows of the CGU. The estimate of the value in use for the Ecuador CGU, of €6,325 thousand, was calculated using a pre-tax discount rate of 23.8 per cent (previous year: 25.4 per cent). The impairment losses were recognised in selling expenses for 2023.

Jungheinrich Systemlösungen Deutschland AG & Co. KG (formerly: ISI Automation GmbH & Co. KG), Extertal (Germany) terminated the existing customer service contracts with effect from 31 December 2023. The residual carrying amounts for the customer contracts acquired as part of the business combination totalling €953 thousand were derecognised through profit or loss in the year under review. The impairment losses were recognised in cost of sales for 2023.

Internally generated intangible assets include the Jungheinrich Group’s capitalised development expenditure. In the reporting year, €44,632 thousand in incurred development expenditure (previous year: €30,422 thousand) met the capitalisation criteria under IFRS.

Research and development costs in the consolidated statement of profit or loss

in € thousand	2023	2022
Research costs and uncapitalised development expenditure	107,160	97,443
Amortisation of capitalised development expenditure	10,904	12,313
Impairment loss of capitalised development expenditure	4,163	3,347
Reversal of impairment loss of capitalised development expenditure	1,554	–
Research and development costs	**120,673**	**113,103**

Jungheinrich decided in the year under review to discontinue the development of a technology. Development expenditure of €3,240 thousand already capitalised for this development project was recognised as an impairment in profit or loss under the 2023 research and development costs.

An event-driven impairment test as of 31 December 2023 of the intangible assets, property, plant and equipment, and trucks for short-term rental acquired revealed impairment losses in the total amount of €923 thousand at six sales companies, primarily due to an increase in pre-tax discount rates in the sales region as of 31 December 2023, which were fully allocated to the capitalised development expenditure allocated to these CGUs. All impairment losses were recognised in the research and development costs for 2023.

A need for an impairment reversal totalling €1,554 thousand as of 31 December 2023 was identified in seventeen sales companies. The reversals related to capitalised development services allocated to these sales companies from the plant in Qingpu/Shanghai (China) and resulted from the expansion of the plant's sales regions. The reversals were fully assigned to the capitalised development expenditure carrying amounts for products already in series production, and were reported as reversals of impairment losses in the amount of €1,554 thousand in profit or loss under the 2023 research and development costs.

The table below shows the allocation of goodwill to CGUs.

Allocation of goodwill to the cash-generating units (CGUs)

in € thousand	31/12/2022	Additions due to business combinations	Reallocation	Changes in currency exchange rates	31/12/2023
Storage Solutions	–	287,148	–	–13,019	274,129
MIAS Group	24,109	–	–	–	24,109
Sales company in:					
Germany	27,702	7,767	487	–	35,956
France	6,664	1,868	117	–	8,649
United Kingdom	5,009	1,474	93	86	6,662
Italy	5,194	1,456	91	–	6,741
Sweden	3,536	1,110	70	80	4,796
Poland	3,061	838	53	255	4,207
Spain	2,984	837	53	–	3,874
Serbia	1,831	–	–	5	1,836
Austria	1,771	–	–	–	1,771
Jungheinrich Systemlösungen GmbH, Graz (Austria)	102	–	–102	–	–
Jungheinrich Systemlösungen Deutschland AG & Co. KG (formerly: ISI Automation GmbH & Co. KG), Extertal (Germany)	862	–	–862	–	–
Goodwill	**82,825**	**302,498**	**0**	**–12,593**	**372,730**

The goodwill acquired as part of the business combination with Storage Solutions in 2023 was allocated to Storage Solutions. Please see the notes for more details on changes to the scope of consolidation.

The goodwill acquired as part of the business combination with Magazino in 2023 was allocated to the sales companies in Germany, France, the United Kingdom, Italy, Sweden, Poland and Spain. Please see the notes for more details on changes to the scope of consolidation.

As at the previous year's balance sheet date, goodwill totalling €862 thousand and €102 thousand was allocated to the CGUs Jungheinrich Systemlösungen Deutschland AG & Co. KG, Extertal (Germany) and Jungheinrich Systemlösungen GmbH, Graz (Austria). Jungheinrich reclassified the CGUs with effect from 1 January 2023. This goodwill was reallocated to seven sales companies as a result at the same time. The review of this goodwill as of 31 December 2022 did not result in any impairment losses.

In the fourth quarter of 2023, Jungheinrich performed annual impairment tests on the goodwill assigned to CGUs. The review of goodwill did not result in any impairment losses.

The main assumptions on which the calculation of the value in use of a CGU was based were free cash flows, the discount rate and the long-term growth rate.

Financial assumptions for the purposes of calculating the value in use of the CGUs to which significant amounts of goodwill have been assigned

	Pre-tax discount rate in %		Sustainable growth rate in %	
CGU	**30/09/2023**	30/09/2022	**30/09/2023**	30/09/2022
Storage Solutions	11.9	n/a	1.1	n/a
MIAS Group	13.0	11.1	1.3	1.1
Sales company in:				
Germany	12.6	11.4	1.2	1.4
France	13.0	12.0	1.2	1.2
Italy	16.0	15.3	1.0	1.1
United Kingdom	13.2	11.7	1.1	1.4
Spain	14.7	14.4	1.1	1.5
Poland	14.2	13.0	1.8	1.8
Sweden	11.5	10.1	1.2	1.2
Serbia	16.6	16.5	1.5	1.7
Austria	12.9	12.2	1.3	1.6

A 1.0 per cent increase in the applied discount rates in each case, a 1.0 per cent decrease in the growth rates, or a 3.0 per cent reduction in the free cash flow conversion (free cash flow ÷ EBITDA) would not have resulted in an impairment loss.

(13) Property, plant and equipment

Development of property, plant and equipment during the reporting year

in € thousand	Land and buildings including buildings on third-party land	Technical equipment and machinery	Factory and office equipment	Construction in progress	**Total**
Acquisition and manufacturing costs Balance 01/01/2023	804,675	234,968	485,329	19,968	1,544,940
Changes in currency exchange rates	–5,405	–1,554	–3,448	–171	–10,578
Additions due to business combinations	8,794	857	3,521	–	13,172
Additions	60,140	23,259	83,662	12,384	179,445
Disposals	17,853	7,811	36,401	2,214	64,279
Transfers	1,919	3,935	3,899	–10,858	–1,105
Balance on 31/12/2023	**852,270**	**253,654**	**536,562**	**19,109**	**1,661,595**
Depreciation and impairment losses Balance on 01/01/2023	333,534	179,155	329,800	–	842,489
Changes in currency exchange rates	–1,507	–731	–2,001	–	–4,239
Additions due to business combinations	258	591	1,472	–	2,321
Depreciation in the financial year	52,438	16,451	58,982	–	127,871
Accumulated depreciation on disposals	12,473	7,491	35,070	–	55,034
Balance on 31/12/2023	**372,250**	**187,975**	**353,183**	**0**	**913,408**
Carrying amount on 31/12/2023	**480,020**	**65,679**	**183,379**	**19,109**	**748,187**

The additions to carrying amounts from business combinations in 2023, totalling €10,851 thousand, related to Storage Solutions (USA) for €10,015 thousand, to Magazino GmbH, Munich (Germany) for €471 thousand, and to Jungheinrich Digital Solutions s.l., Madrid (Spain), which was included in the scope of consolidation for the first time, for €365 thousand. Please see the notes for more details on changes to the scope of consolidation.

Development of property, plant and equipment during the previous year

in € thousand	Land and buildings including buildings on third-party land	Technical equipment and machinery	Factory and office equipment	Construction in progress	Total
Acquisition and manufacturing costs Balance on 01/01/2022	785,852	229,746	454,194	18,451	1,488,243
Changes in currency exchange rates	−835	−119	−517	37	−1,434
Additions due to business combinations	368	80	180	–	628
Additions	40,184	10,826	60,087	17,121	128,218
Disposals	26,335	12,233	30,960	308	69,836
Transfers	5,441	6,668	2,345	−15,333	−879
Balance on 31/12/2022	**804,675**	**234,968**	**485,329**	**19,968**	**1,544,940**
Depreciation and impairment losses Balance on 01/01/2022	297,585	169,229	301,426	–	768,240
Changes in currency exchange rates	129	−104	−296	–	−271
Depreciation in the financial year	49,523	16,049	56,841	–	122,413
Impairment losses in the financial year	–	–	431	–	431
Accumulated depreciation on disposals	13,702	6,075	28,550	–	48,327
Transfers	−1	56	−52	–	3
Balance on 31/12/2022	**333,534**	**179,155**	**329,800**	**–**	**842,489**
Carrying amount on 31/12/2022	**471,141**	**55,813**	**155,529**	**19,968**	**702,451**

Developments in the right-of-use assets recognised under property, plant and equipment can be seen in the following table.

Development in right-of-use assets of property, plant and equipment

				2023				2022
in € thousand	Land and buildings including buildings on third-party land	Technical equipment and machinery	Factory and office equipment	**Total**	Land and buildings including buildings on third-party land	Technical equipment and machinery	Factory and office equipment	Total
Acquisition and manufacturing costs Balance on 01/01	214,055	161	125,009	339,225	198,339	209	107,759	306,307
Changes in currency exchange rates	–5,851	–	–908	–6,759	–1,268	–	–314	–1,582
Additions due to business combinations	7,709	–		7,709	368	–	–	368
Additions	48,199	–	46,842	95,041	27,976	–	33,731	61,707
Disposals	9,885	–	19,322	29,207	11,360	48	16,167	27,575
Transfers	–5,905	–	–	–5,905	–	–	–	–
Balance on 31/12	**248,322**	**161**	**151,621**	**400,104**	**214,055**	**161**	**125,009**	**339,225**
Depreciation Balance on 01/01	86,387	44	64,657	151,088	69,144	14	54,774	123,932
Changes in currency exchange rates	–1,850	–	–430	–2,280	–287	–	–178	–465
Depreciation in the financial year	30,402	31	28,933	59,366	27,759	31	25,863	53,653
Accumulated depreciation on disposals	7,680	–	19,243	26,923	10,229	1	15,802	26,032
Transfers	–3,931	–	–	–3,931	–	–	–	–
Balance on 31/12	**103,328**	**75**	**73,917**	**177,320**	**86,387**	**44**	**64,657**	**151,088**
Carrying amount on 31/12	**144,994**	**86**	**77,704**	**222,784**	**127,668**	**117**	**60,352**	**188,137**

The transfers in 2023 related to a property lease agreement of the Belgian sales company. Jungheinrich exercised a contractually agreed purchase option at the end of the lease term and acquired the property.

The right-of-use assets in the item “operating and office equipment” primarily related to lease contracts for trucks.

Lessee lease expenses in the consolidated statement of profit or loss

in € thousand	**2023**	2022
Depreciation on right-of-use assets	59,366	53,653
Expenses for short-term leases	1,363	749
Expenses for low-value leases	866	1,576
Earnings before interest and income taxes	**61,595**	**55,978**
Interest expense from leases	6,100	3,674
Earnings before taxes	**67,695**	**59,652**

As at the balance sheet date, land and buildings were put up as collateral to back €56,465 thousand (previous year: €63,946) in liabilities due to banks.

(14) Trucks for short-term rental

Development of trucks for short-term rental

in € thousand	**2023**	2022
Acquisition and manufacturing costs Balance on 01/01	890,497	733,855
Changes in currency exchange rates	−21,518	5,483
Additions due to business combinations	–	193
Additions	201,969	251,801
Disposals	137,908	100,829
Transfers	–	−6
Balance on 31/12	**933,040**	**890,497**
Depreciation and impairment losses Balance on 01/01	431,354	370,938
Changes in currency exchange rates	−9,907	1,707
Depreciation in the financial year	139,247	121,241
Impairment losses in the financial year	–	276
Accumulated depreciation on disposals	97,870	62,805
Transfers	–	−3
Balance on 31/12	**462,824**	**431,354**
Carrying amount on 31/12	**470,216**	**459,143**

The additions to carrying amounts from business combinations in 2022, totalling €193 thousand, related exclusively to the acquisition of the shares in Jungheinrich New Zealand Limited, Auckland (New Zealand).

Impairment in the previous year was associated with trucks for short-term rental belonging to the sales company in Ukraine.

(15) Trucks for lease from financial services

Development of trucks for lease from financial services

in € thousand	**2023**	2022
Acquisition and manufacturing costs Balance on 01/01	979,861	917,903
Changes in currency exchange rates	−2,049	−2,518
Additions due to business combinations	–	1,598
Additions	214,596	263,290
Disposals	198,616	200,412
Balance on 31/12	**993,792**	**979,861**
Depreciation Balance on 01/01	412,454	417,455
Changes in currency exchange rates	−2,003	−961
Additions due to business combinations	–	706
Depreciation in the financial year	142,431	131,435
Accumulated depreciation on disposals	126,993	136,181
Balance on 31/12	**425,889**	**412,454**
Carrying amount on 31/12	**567,903**	**567,407**

The additions to carrying amounts from business combinations in 2022, totalling €892 thousand, related exclusively to the acquisition of the shares in Jungheinrich New Zealand Limited, Auckland (New Zealand).

The breakdown of the carrying amount of trucks for lease from financial services by contract type is presented in the following table:

Composition of trucks for lease from financial services

in € thousand	**31/12/2023**	31/12/2022
"Operating lease" contracts with customers	451,087	456,262
Contracts concluded with a leasing company acting as an intermediary	32,655	31,533
Truck fleets for contracts with selected major customers	84,161	79,612
Trucks for lease from financial services	**567,903**	**567,407**

Within the framework of financial services offered by Jungheinrich Group companies acting as lessors, trucks for which a lease classified as an "operating lease" in accordance with IFRS has been concluded with the end customer are capitalised as trucks for lease.

The "operating leases" existing on the balance sheet date included €10,738 thousand (previous year: €13,374 thousand) for a truck fleet that is made available to customers in Australia so that they can make flexible use of these trucks at short notice.

In relation to the remaining non-cancellable "operating leases" valid as at the balance sheet date, the future lease payments to be paid to Jungheinrich are presented in the following table, broken down by maturity.

Maturities of the outstanding lease payments from "operating lease" customer contracts

in € thousand	**31/12/2023**	31/12/2022
Due in the following year	155,735	156,590
Due in the second year	113,806	113,699
Due in the third year	77,978	74,904
Due in the fourth year	46,574	44,065
Due in the fifth year	18,619	18,111
Due in more than five years	2,139	3,316
Total outstanding lease payments	**414,851**	**410,685**

Customer contracts with a leasing company/bank acting as an intermediary are also capitalised under the item "Trucks for lease from financial services" for sales contracts with agreed repurchase obligations concluded between Jungheinrich and leasing companies/banks if these contracts are classified as "operating leases".

The item "Trucks for lease from financial services" also includes truck fleets whose capacities selected large customers are able to use flexibly.

Trucks for lease with carrying amounts of €321,285 thousand (previous year: €314,931 thousand) were pledged as collateral for liabilities from financial services as at the balance sheet date.

(16) Investments in companies accounted for using the equity method

Development of investments in companies accounted for using the equity method

in € thousand	**2023**	2022
Balance on 01/01	69,749	45,696
Additions	3,832	20,491
Pro rata earnings	8,641	4,980
Pro rata other comprehensive income (expense)	–760	684
Dividend payments	3,343	2,102
Disposals	8,360	–
Balance on 31/12	**69,759**	**69,749**

Investments in companies accounted for using the equity method related to joint ventures totalling €62,913 thousand (previous year: €53,957 thousand) and associated companies totalling €6,846 thousand (previous year: €15,792 thousand).

Additions in the year under review included a pro rata increase in share capital of Rocrich AGV Solutions LLC (formerly: MCJ Supply Chain Solutions LLC), Houston/ Texas (USA) amounting to €2,832 thousand, and a pro rata increase in share capital of TREX.PARTS GmbH & Co. KG, Sittensen (Germany) in the amount of €1,000 thousand, made by Jungheinrich.

Jungheinrich received a dividend in the amount of €3,213 thousand (previous year: €2,045 thousand) from the joint venture JULI Motorenwerk s.r.o., Moravany (Czechia). The measurement of cash flow hedges at fair value resulted in pro rata other comprehensive expense amounting to €760 thousand (previous year: other comprehensive income of €684 thousand) for this joint venture in 2023.

Jungheinrich received a dividend of €78 thousand (previous year: €57 thousand) from the joint venture Jungheinrich Heli Industrial Truck Rental (Changzou) Co., Ltd, Changzou (China) and a dividend of €52 thousand (previous year: €– thousand) from the joint venture Jungheinrich Heli Industrial Truck Rental (Tianjin) Co., Ltd., Tianjin (China) in the reporting year.

The disposals in 2023 related to the carrying amount calculated using the equity method of Magazino GmbH, Munich (Germany) amounting to €8,360 thousand as of 23 August 2023. Pro rata earnings of €–1,481 thousand were recognised for this company in the year under review up to the date of disposal. Please see the notes for more details on changes to the scope of consolidation.

Material investments in companies accounted for using the equity method

		Share of capital in %	
Company	Main business	**31/12/2023**	31/12/2022
JULI Motorenwerk s.r.o., Moravany (Czechia)	Development, production and distribution of electric motors	50	50
Schwerter Profile GmbH, Schwerte (Germany)	Development, production and distribution of steel profiles	50	50
Jungheinrich Heli Industrial Truck Rental (China) Co., Ltd., Shanghai (China)	Short-term rental of material handling equipment on the Chinese market	50	50
Cebalog GmbH, Pyrbaum (Germany)	Manufacture and distribution of industrial batteries	40	40
JT Energy Systems GmbH, Freiberg (Germany)	Development, production, refurbishment and distribution of lithium-ion batteries	40	40

Information on the other companies accounted for using the equity method can be found in note (44) [page 174].

The following table contains summarised financial information on the individual material companies accounted for using the equity method, whereby the disclosures do not represent Jungheinrich AG's share, but the entire entity.

Summarised financial information of the material companies accounted for using the equity method

	JULI Motorenwerk s.r.o., Moravany (Czechia)[1]		Schwerter Profile GmbH, Schwerte (Germany)		Jungheinrich Heli Industrial Truck Rental (China) Co., Ltd., Shanghai (China)[1]		Cebalog GmbH, Pyrbaum (Germany)		JT Energy Systems GmbH, Freiberg (Germany)	
in € thousand	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022[2]
Revenue	227,168	205,554	99,409	114,303	50,703	50,890	104,252	106,209	166,597	84,836
Depreciation, amortisation and write-downs	2,112	2,540	1,725	1,879	28,029	26,122	178	176	2,915	1,793
Interest income	73	65	843	–	2	4	17	3	21	1
Interest expense	698	166	866	1,051	2,965	2,916	892	481	2,487	628
Income tax expense	2,650	1,666	–	495	415	659	817	1,307	2,999	561
Profit or loss	11,505	6,251	854	743	2,327	2,583	2,238	3,410	6,988	1,370
of which from continuing operations	11,505	6,251	854	743	2,327	2,583	2,238	3,410	6,988	1,370
Other comprehensive income (expense)	–1,520	1,368	–	–	–	–	–	–	–	–
Comprehensive income (expense)	**9,985**	**7,619**	**854**	**743**	**2,327**	**2,583**	**2,238**	**3,410**	**6,988**	**1,370**
in € thousand	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022
Non-current assets	21,919	22,374	3,063	5,885	127,569	124,532	680	648	18,247	18,441
Current assets	51,174	50,193	29,507	35,448	21,689	22,453	26,712	29,332	46,087	42,704
of which cash and cash equivalents	9,696	2,753	2,123	6,043	398	677	239	–	379	–
Non-current liabilities	2,691	3,131	13,500	21,379	43,884	34,972	–	16	28,543	24,111
thereof non-current financial liabilities	–	–	13,500	18,500	43,692	34,818	–	–	28,543	24,111
Current liabilities	30,905	32,146	10,502	12,510	59,879	65,596	16,705	21,514	19,443	27,674
thereof current financial liabilities	11,500	16,612	–	–	39,981	45,529	8	3,613	1,696	7,220
Shareholders' equity	39,497	37,290	8,568	7,444	45,495	46,417	10,687	8,450	16,348	9,360

[1] Including subsidiaries.

[2] The information for 2022 only includes the pro rata earnings for the period May—December 2022, as the company was consolidated as a subsidiary up to and including April 2022.

Reconciliation of the summarised financial information with the carrying amount of the material companies accounted for using the equity method in the consolidated financial statements

	JULI Motorenwerk s.r.o., Moravany (Czechia)[1]		Schwerter Profile GmbH, Schwerte (Germany)		Jungheinrich Heli Industrial Truck Rental (China) Co., Ltd., Shanghai (China)[1]		Cebalog GmbH, Pyrbaum (Germany)		JT Energy Systems GmbH, Freiberg (Germany)	
in € thousand	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022
Shareholders' equity	39,497	37,290	8,568	7,444	45,495	46,417	10,687	8,450	16,348	9,360
Pro rata shareholders' equity	19,749	18,645	4,284	3,722	22,748	23,209	4,275	3,380	6,539	3,744
Consolidation	–	–	–	–	–	–	2,571	2,571	5,460	5,460
Miscellaneous	–1,955	–2,632	1	1	808	–627	–	–	–	–
Carrying amount calculated using the equity method	**17,794**	**16,013**	**4,285**	**3,723**	**23,556**	**22,582**	**6,846**	**5,951**	**11,999**	**9,204**

[1] Including subsidiaries.

The following table contains aggregated financial information on the individual immaterial companies accounted for using the equity method, whereby the disclosures represent the Jungheinrich Group's share in each case.

Aggregated financial information on immaterial companies accounted for using the equity method

	Other joint ventures		Other associated companies	
in € thousand	**2023**	2022	**2023**[1]	2022
Profit or loss	–988	–1,446	–1,481	–494
Comprehensive income (expense)	–988	–1,446	–1,481	–494
At-equity carrying amount as of 31/12	**5,279**	**2,435**	**n/a**	**9,841**

[1] The disclosures on profit or loss and comprehensive income only related to the pro rata earnings for the period January–August 2023, as the company was consolidated as a subsidiary from 23 August 2023.

The Group did not recognise in 2022 pro rata gains of a total of €25 thousand in respect of its investments in joint ventures. This figure related to cumulative losses not recognised in the carrying amount calculated using the equity method as of 31 December 2021.

The impairment test performed on investments in companies accounted for using the equity method as at the balance sheet date in 2023 did not result in any impairment losses.

(17) Other financial assets

Composition of other financial assets

in € thousand	**31/12/2023**	31/12/2022
Investments in non-consolidated affiliated companies	700	703
Investments in joint ventures not accounted for using the equity method	25	25
Other investments	273	50
Other financial assets	**998**	**778**

(18) Inventories

Composition of inventories

in € thousand	**31/12/2023**	31/12/2022
Raw materials and supplies	267,701	300,593
Work in progress	79,225	86,204
Finished goods	256,783	286,617
Goods	180,336	183,180
Spare parts	109,976	100,140
Prepayments	32,587	37,262
Inventories	**926,608**	**993,996**

€68,052 thousand (previous year: €66,155 thousand) of the inventories are carried at their net realisable value. Valuation allowances recognised for inventories as at the balance sheet date amounted to €74,458 thousand (previous year: €73,525 thousand).

(19) Trade accounts receivable and contract assets

Composition of trade accounts receivable and contract assets

in € thousand	**31/12/2023**	31/12/2022	01/01/2022
Trade accounts receivable (gross carrying amount)	937,460	882,473	749,078
Valuation allowances	−23,203	−20,429	−19,642
Trade accounts receivable	914,257	862,044	729,436
Contract assets	49,791	46,277	35,175
Trade accounts receivable and contract assets	**964,048**	**908,321**	**1,494,047**

Trade accounts receivable included receivables from joint ventures of €5,114 thousand (previous year: €6,674 thousand), receivables from associated companies of €18 thousand (previous year: €4 thousand) and receivables from other investments of €160 thousand (previous year: €-thousand). Details on the composition of trade accounts receivable from related companies can be found in note (42) [page 170].

The contract assets essentially comprise contract balances from long-term project contracts, the revenue of which is recognised over time. As of 31 December 2023, impairment losses in the amount of €826 thousand were recognised for expected credit losses on contract assets (previous year: €710 thousand).

Details on the development of loss allowances for expected credit losses on trade accounts receivable and contract assets can be found in note (33) [page 154].

The following tables contain information on the credit risk and expected credit losses for trade accounts receivable.

Trade accounts receivable: Composition, credit risk and calculated expected credit losses as of 31 December 2023

in € thousand	Credit rating not impaired		Credit rating impaired		**Total as of 31/12/2023**	
Risk categories	Trade accounts receivable (gross carrying amount)	Level 2 valuation allowances	Trade accounts receivable (gross carrying amount)	Level 3 valuation allowances	**Trade accounts receivable (gross carrying amount)**	**Valuation allowances**
Very good credit rating	436,572	81	–	–	436,572	81
Good credit rating	357,593	934	–	–	357,593	934
Average credit rating	55,110	351	–	–	55,110	351
Weak credit rating	23,036	358	65,149	21,479	88,185	21,837
	872,311	**1,724**	**65,149**	**21,479**	**937,460**	**23,203**

Trade accounts receivable: Composition, credit risk and calculated expected credit losses as of 31 December 2022

in € thousand	Credit rating not impaired		Credit rating impaired		Total as of 31/12/2022	
Risk categories	Trade accounts receivable (gross carrying amount)	Level 2 valuation allowances	Trade accounts receivable (gross carrying amount)	Level 3 valuation allowances	Trade accounts receivable (gross carrying amount)	Valuation allowances
Very good credit rating	428,888	87	–	–	428,888	87
Good credit rating	300,419	709	–	–	300,419	709
Average credit rating	65,111	344	–	–	65,111	344
Weak credit rating	20,469	328	67,586	18,961	88,055	19,289
	814,887	**1,468**	**67,586**	**18,961**	**882,473**	**20,429**

As at the balance sheet date, trade accounts receivable of €10,469 thousand (previous year: €12,457 thousand) were hedged by credit insurance policies for 90 per cent and/or 100 per cent.

(20) Receivables from financial services

Within the framework of the financial services business in which Jungheinrich Group companies act as lessors, the net investment values of customer leases classified as “finance leases” in accordance with IFRS are capitalised as receivables from financial services from the beginning of the lease onwards. If the agreed residual value in the long-term customer contract is above the truck’s expected market value at the end of the contract term, this risk is reflected by immediately reducing receivables from financial services recognised in profit or loss. Furthermore, the receivables from financial services reported as at the balance sheet date only include lease payments due in the future, and the carrying amounts are 100 per cent secured by the fair values of the trucks underlying the leases. This is why loss allowances for expected credit losses are not taken into account.

Loss allowances for expected credit losses are determined for the amounts transferred to trade accounts receivable when the lease payments fall due, and they are recognised in note (19) [page 140].

In relation to the “finance lease” customer contracts valid as at the balance sheet date, the future lease payments to be paid to Jungheinrich are presented in the following table, broken down by maturity.

Receivables from financial services: Maturity analysis and reconciliation of total outstanding lease payments with their net investment value

in € thousand	**31/12/2023**	31/12/2022
Due in the following year	513,163	457,324
Due in the second year	415,079	368,697
Due in the third year	326,281	281,189
Due in the fourth year	237,015	195,433
Due in the fifth year	143,997	110,375
Due in more than five years	109,175	72,647
Total outstanding lease payments	**1,744,710**	**1,485,665**
Plus unguaranteed residual value	189,683	172,259
Less unrealised interest income	283,007	195,217
Receivables from financial services	**1,651,386**	**1,462,707**

In the reporting year, Jungheinrich realised income of around €148 million (previous year: around €100 million) from the difference between additions to “finance lease” customer contracts and the carrying amounts of the underlying assets.

Receivables from financial services with carrying amounts of €824,967 thousand (previous year: €741,486) were pledged as collateral for liabilities from financial services as at the balance sheet date.

(21) Other receivables and other assets

Composition of other receivables and other assets

in € thousand	**31/12/2023**	31/12/2022
Receivables from other taxes	41,467	41,632
Assets from the measurement of funded pension plans	2,614	6,784
Prepaid expenses	19,858	16,309
Other financial assets	14,367	18,000
Miscellaneous other assets	19,649	19,593
Other receivables and other assets	**97,955**	**102,318**

Prepaid expenses primarily consisted of deferred prepayments for software usage fees and insurance premiums.

Other financial assets included receivables from joint ventures of €12,931 thousand (previous year: €15,364 thousand). Details on the composition of the other financial assets from related companies and further information about them can be found in note (42) [page 170].

In 2022 and 2021, Jungheinrich helped its suppliers to purchase electronic components with a view to avoiding supply shortages in this area and to safeguard its own ability to deliver to end customers. With this in mind, Jungheinrich absorbed the additional expenses incurred by the suppliers when purchasing electronic parts as a result of price increases. The suppliers use these electronic parts to make electronic components. As regards parts still in supplier inventories as of 31 December 2022, claims vis-à-vis suppliers of €2,091 thousand were recorded in miscellaneous other assets as of 31 December 2022. Jungheinrich ordered electronic components from suppliers in line with its incoming orders, which reduced receivables in 2023 by €1,187 thousand. The remaining claims vis-à-vis suppliers amounting to €904 thousand were derecognised through profit or loss in the year under review, as Jungheinrich will no longer have any significant consumption of these electronic components in future due to a redesign of the control units.

The credit risk for all other financial assets was rated as very low. As at the balance sheet date, loss allowances totalling €4 thousand were recognised for expected credit losses (previous year: €15 thousand). Details on the development of loss allowances can be found in note (33) [page 154].

No other receivables and other assets were either past due or impaired. As at the balance sheet date, there was no indication that the debtors could not meet their payment obligations.

(22) Securities

Composition of securities

in € thousand	**31/12/2023**	31/12/2022
Commercial papers, bonds and debenture bonds	87,897	131,736
Investment funds	26,936	20,000
Promissory notes	20,000	8,641
Covered bonds	15,614	27,992
Shares	–	9,751
Valuation allowances	–11	–129
Securities	**150,436**	**197,991**

The total portfolio of securities included €28,999 thousand (previous year: €53,055 thousand) in financial instruments assigned to the measurement category "at amortised cost" as of 31 December 2023. These securities were held by Jungheinrich for the purpose of holding them to maturity and realising their contractual cash flows. Jungheinrich's securities as of 31 December 2023 will mature in the years 2024 and 2025. All of Jungheinrich's securities as of 31 December 2022 that were due to mature in 2023 were redeemed when they matured, as contractually agreed. The credit risk for securities measured at amortised cost was rated as low, with the result that the loss allowances were calculated based on the expected twelve-month credit losses. As at the balance sheet date, loss allowances in the amount of €11 thousand were recognised for expected credit losses in relation to these securities (previous year: €129 thousand). Details on the development of loss allowances can be found in note (33).

As at the balance sheet date, the total portfolio of securities also included €121,448 thousand (previous year: €145,065 thousand) in financial instruments assigned to the measurement category "at fair value through profit or loss". €94,512 thousand (previous year: €119,151 thousand) of the carrying amount of these financial instruments is attributable to securities held in the special fund.

(23) Cash and cash equivalents

Cash and cash equivalents are available at short notice and have an original maturity of up to three months. They also include fixed-term deposits with an original contractual term of up to twelve months. As at the balance sheet date, cash and cash equivalents included bank balances of €35,386 thousand (previous year: €6,814 thousand) held in the special fund, of which €23,500 thousand (previous year: €-thousand) related to term deposits with an original term of over three months and without the option of termination at no cost at short notice. €9,051 thousand (previous year: €9,368 thousand) in bank balances were pledged to banks as of 31 December 2023. As at the balance sheet date, loss allowances in the amount of €48 thousand were recognised for expected credit losses (previous year: €13 thousand). Details on the development of loss allowances can be found in note (33) [page 154].

(24) Shareholders' equity

Subscribed capital

The subscribed capital of Jungheinrich AG, Hamburg (Germany) was fully paid up as at the balance sheet date and amounted to €102,000 thousand (previous year: €102,000 thousand). As in the previous year, it was divided among 54,000,000 ordinary shares and 48,000,000 preferred shares, each accounting for an imputed €1.00 share of the subscribed capital. All of the shares had been issued as at the balance sheet date.

Holders of no-par-value preferred shares will receive a preferential share of the profit of €0.04 per preferred share from the distributable profit that is distributed. On payment of a €0.04 share of the profit per ordinary share, the distributable profit remaining for distribution will be distributed among ordinary and preferred shareholders in line with the pro rata share of subscribed capital attributable to their shares, although unlike ordinary shareholders, preferred shareholders are entitled to an additional dividend of €0.02 per preferred share.

Capital reserve

The capital reserve includes premiums from the issuance of shares and additional income from the sale of own shares in previous years.

Retained earnings

Retained earnings include undistributed earnings generated by Jungheinrich AG and consolidated subsidiaries in previous years, as well as profit or loss attributable to shareholders of Jungheinrich AG for the reporting period.

In the reporting year, a dividend for the 2022 financial year of €0.66 per ordinary share and €0.68 per preferred share was paid to the shareholders of Jungheinrich AG.

Dividend proposal

Jungheinrich AG pays its dividend from the distributable profit stated in the annual financial statements of Jungheinrich AG, which are prepared in accordance with the German Commercial Code. The Board of Management of Jungheinrich AG proposes to use the €124,425 thousand distributable profit for the 2023 financial year to make a total dividend payment of €75,420 thousand, corresponding to a dividend of €0.73 per ordinary share and €0.75 per preferred share, as well as to transfer €49,005 thousand to other retained earnings.

Accumulated other comprehensive income (expense)

Changes in equity not recognised through profit or loss are reported in this item, provided they are not based on capital transactions with shareholders. The development of other changes in equity in the reportijng year and the previous year are recognised as other comprehensive income in the consolidated statement of comprehensive income. Other comprehensive income after taxes was exclusivly attributable to the shareholders of Jungheinrich AG.

Other changes in equity in the amount of €−64,866 thousand (previous year: €−42,732 thousand) were attributable to the accumulated profit or loss recognised in other comprehensive income from the remeasurement of defined benefit pension plans. Details on the composition of the unrealised income of the reporting year can be found in note (25) [page 145]. As at the balance sheet date, other changes in equity included €−47,267 thousand (previous year: €−21,882 thousand) from the currency translation adjustment, including the impact of inflation on equity that arises as a result of applying the provisions of IAS 29.

In addition, other comprehensive income of €1,955 thousand (previous year: €13,866 thousand) related to the accumulated profit or loss recognised in other comprehensive income arising from the measurement at fair value of derivative financial instruments designated as hedging instruments as at the balance sheet date. The following table shows the development of this other comprehensive income, broken down by risk type.

Other comprehensive income (expense) from the market valuation of derivative financial instruments with a hedging relationship: development by risk type

in € thousand	Currency hedging contracts	Interest hedging contracts	Financial instruments with a hedging relationship
Balance on 01/01/2023	1,745	12,121	13,866
Unrealised income (expense) in the financial year	−4,403	−10,191	−14,594
Realised income (expense) in the financial year	−456	119	−337
Deferred taxes in the financial year	1,047	1,973	3,020
Balance on 31/12/2023	**−2,067**	**4,022**	**1,955**
Balance on 01/01/2022	−1,673	685	−988
Unrealised income (expense) in the financial year	1,502	14,599	16,101
Realised income (expense) in the financial year	2,874	−551	2,323
Deferred taxes in the financial year	−958	−2,612	−3,570
Balance on 31/12/2022	**1,745**	**12,121**	**13,866**

The realised income in 2023 and 2022 exclusively related to amounts that were reclassified to the consolidated statement of profit or loss at the time the hedging relationships were terminated.

Managing capital

Jungheinrich is not subject to any minimum capital requirements pursuant to its articles of association.

The Group manages the way in which its capital is used commercially via the return on capital employed (ROCE).

The financial key figure ROCE represents the rate of return based on the EBIT generated in the Intralogistics segment in relation to the capital employed that can be attributed to this segment. Please see the notes for the definition and calculation of ROCE in the combined management report for the 2023 financial year.

ROCE in the year under review was 15.9 per cent (previous year: 16.3 per cent).

EBIT return on capital employed (ROCE) for the “Intralogistics” segment

in € thousand	**2023**	2022
Average capital employed 31/12	2,563,471	2,084,951
EBIT	407,063	340,113
ROCE in %	15.9	16.3

Jungheinrich determines the key figure when preparing its quarterly financial statements. The statements are reported to the Board of Management once a quarter in order to enable it to take action as necessary.

Non-controlling interests

As of 31 December 2023 and 31 December 2022, there were no non-controlling interests in equity.

(25) Provisions for pensions and similar obligations

Pension plans

Jungheinrich Group company pension schemes are either defined contribution or defined benefit plans. In defined contribution plans, Jungheinrich does not assume any obligation in addition to the contributions made to state-owned or private pension insurers. In the reporting year, expenses of €14,648 thousand for defined contribution plans (previous year: €16,432 thousand) were recognised in functional costs.

In Germany, major obligations have been assumed for defined benefit pension commitments regulated in individual and collective agreements for members of the Board of Management, managing directors and employees of Jungheinrich AG and its German subsidiaries. When pension benefits are committed to within the framework of collective agreements, the amount of the pension claim depends on the individual’s number of eligible years of service when pension payments are scheduled to start, as well as on the monthly average salary of the beneficiary. German pension plans are funded by provisions. The company pension plans of Jungheinrich AG and of Jungheinrich Moosburg AG & Co. KG have been closed to managing directors and employees since 1 July 1987 and 14 April 1994 respectively.

In the United Kingdom, major obligations have been assumed to fulfil defined benefit pension commitments regulated in collective agreements and due to employees of Jungheinrich UK Ltd. and former employees of the Boss Manufacturing Ltd. production plant, which was closed in 2004. The pension plans of these companies were merged in 2003. The level of the benefit commitment depends on the average compensation received by the beneficiaries during their years of service. The pension plan is funded by an outsourced fund and has been closed to new employees of the two companies since 1 October 2002 and 18 January 2003 respectively. The pension plan was closed to current employees with effect from 31 July 2020. As a result, since 1 August 2020 employees have not been able to accrue any additional benefit claims by completing more years of service. The benefit claims accrued up until the plan was closed will continue to be adjusted in line with changes in the basis for calculating them.

In other countries outside of Germany, several companies have pension plans for managing directors and employees. The principle pension claims outside Germany are covered by insurance contracts.

Balance sheet development of the net defined benefit liability from defined benefit pension plans in 2023

in € thousand	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liabilities
Balance on 01/01	**373,132**	**221,016**	**152,116**
Changes in currency exchange rates	**5,875**	**5,649**	**226**
Changes with an effect on profit or loss	**20,021**	**9,333**	**10,688**
Current service cost	4,215	n/a	4,215
Past service cost	–38	n/a	–38
Settlement gains	210	n/a	210
Net interest	15,634	9,750	5,884
Plan administration costs	n/a	–417	–417
Changes with no effect on profit or loss	**28,339**	**–1,894**	**30,233**
Remeasurement of defined benefit obligations as a result of			
changes in financial assumptions	21,382	n/a	21,382
changes in demographic assumptions	–3,035	n/a	–3,035
experience adjustments	9,992	n/a	9,992
Remeasurement of plan assets	n/a	–1,894	–1,894
Cash-effective changes	**–18,820**	**–3,371**	**–15,449**
Employee contributions	1,767	1,767	–
Employer contributions	n/a	4,854	4,854
Pension payments made using company assets	–10,595	n/a	–10,595
Pension payments made using plan assets	–9,992	–9,992	–
Other changes	**–818**	**–818**	**–**
Balance on 31/12	**407,729**	**229,915**	**177,814**
of which not funded pension plans	171,774	–	171,774
Germany	152,163	–	152,163
Other countries	19,611	–	19,611
of which funded pension plans	235,955	229,915	6,040
United Kingdom	165,493	168,051	–2,558
Other countries: Provisions on pensions and similar obligations	63,023	54,369	8,654
Other countries: Other receivables and other assets	7,439	7,495	–56

Balance sheet development of the net defined benefit liability from defined benefit pension plans in 2022

in € thousand	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liabilities
Balance on 01/01	**538,710**	**334,815**	**203,895**
Changes in currency exchange rates	**–8,369**	**–9,362**	**993**
Changes with an effect on profit or loss	**12,599**	**4,768**	**7,831**
Current service cost	5,647	n/a	5,647
Past service cost	–581	n/a	–581
Settlement gains	12	n/a	12
Net interest	7,521	5,313	2,208
Plan administration costs	n/a	–545	–545
Changes with no effect on profit or loss	**–148,618**	**–102,017**	**–46,601**
Remeasurement of defined benefit obligations as a result of			
changes in financial assumptions	–167,395	n/a	–167,395
changes in demographic assumptions	–720	n/a	–720
experience adjustments	19,497	n/a	19,497
Remeasurement of plan assets	n/a	–102,017	–102,017
Cash-effective changes	**–20,559**	**–6,557**	**–14,002**
Employee contributions	1,464	1,464	–
Employer contributions	n/a	4,084	4,084
Pension payments made using company assets	–9,918	n/a	–9,918
Pension payments made using plan assets	–12,105	–12,105	–
Other changes	**–631**	**–631**	**–**
Balance on 31/12	**373,132**	**221,016**	**152,116**
of which not funded pension plans	154,656	–	154,656
Germany	136,979	–	136,979
Other countries	17,677	–	17,677
of which funded pension plans	218,476	221,016	–2,540
United Kingdom	159,650	166,434	–6,784
Other countries	58,826	54,582	4,244

Of the net defined benefit liability from defined benefit pension plans, €180,428 thousand (previous year: €158,900 thousand) is recorded under the item "provisions for pensions and similar obligations" and €2,614 thousand (previous year: €6,784 thousand) is stated under "other receivables and other assets".

Current service costs, past service costs and settlement gains were recognised in the personnel costs of the corresponding functional areas. The net interest and the plan administration costs were included in financial income (expense).

Significant financial assumptions (weighted average) for determining the present value of defined benefit obligations

	Germany		United Kingdom		Other countries	
in %	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022
Discount rate	3.5	4.2	4.8	5.0	2.3	3.0
Expected rate of pension increase	2.0	2.0	2.9	3.0	0.2	0.1

The demographic assumptions for Germany in the 2023 and 2022 financial years were based on Prof. Klaus Heubeck's 2018G mortality tables. In addition to the long-term pension trend of 2.0 per cent, adjustments of 5.3 per cent and 3.0 per cent were assumed for Germany for 2024 and 2025, in order to adequately account for the accumulated inflation for the upcoming adjustment dates.

In the reporting year, the valuation of pension plans in the United Kingdom was based on the SAPS S3PxA CMI 2022 mortality table (1.25 per cent) (previous year: SAPS S3PxA CMI 2021 (1.25 per cent)). The application of the new mortality table in the United Kingdom resulted in a reduction in the present value of defined benefit obligations of €3,799 thousand (previous year: €185 thousand) as at the balance sheet date. The life expectancies used to measure plans in other countries were based on local mortality tables.

Jungheinrich primarily derives the interest rate risk, the pension increase risk and the longevity risk from the pension plans. The sensitivity analyses presented below were performed on the basis of reasonable potential changes in the assumptions as at the balance sheet date, while the other assumptions remained unchanged.

Sensitivity analysis of the significant financial assumptions: impact on the present value of defined benefit obligations

in € thousand	**31/12/2023**	31/12/2022
Discount rate 0.5% higher	–21,631	–19,753
Discount rate 0.5% lower	23,876	22,034
Expected rate of pension increase 0.5% higher	15,621	11,477
Expected rate of pension increase 0.5% lower	–12,607	–10,287

A one-year increase in life expectancy would cause the present value of the defined benefit obligations in Germany and the United Kingdom to rise by approximately 4.6 per cent (previous year: 4.2 per cent) and 2.8 per cent (previous year: 2.8 per cent), respectively.

The actual change in the present value of defined benefit obligations cannot be derived from the aforementioned sensitivity analysis. It is not expected that the deviations will occur in isolation from one another as some of the assumptions are related to each other.

Furthermore, Jungheinrich is not exposed to any material risks arising from pension obligations.

The weighted average duration of defined benefit obligations on the balance sheet date was around 10 years in Germany (previous year: 10 years), around 14 years in the United Kingdom (previous year: 13 years) and around 13 years in other countries (previous year: 9 years).

Jungheinrich expects to make approximately €10.1 million (previous year: €9.7 million) in pension payments using company assets in the 2024 financial year.

Plan assets

In the year under review, the actual return on plan assets amounted to €7,439 thousand (previous year: €−97,249 thousand). As in the previous year, there were no effects from a limitation to the asset ceiling.

Plan assets largely comprised the outsourced fund set up to cover pension obligations in the UK. The assets and income from the pension fund are intended exclusively for the payment of benefits and administrative expenses for the pension plan. Jungheinrich works with an external asset manager to invest in the plan assets. Our long-term investment strategy complies with, among other things, minimum capital cover requirements and the goal of maximising income from the plan assets while keeping volatility at a reasonable level in order to minimise the long-term costs of defined benefit pension plans. Plan asset investments are made while ensuring that cash and cash equivalents are sufficient to cover benefits that fall due.

Composition of the fair value of the plan assets in the United Kingdom

in € thousand	31/12/2023	31/12/2022
Cash and cash equivalents	**1,420**	**1,494**
Equity instruments	**32,028**	**34,903**
Stock index funds in the United Kingdom	19,113	20,614
Stock index funds in Europe (excluding the United Kingdom)	12,915	14,289
Debt instruments	**132,503**	**130,037**
United Kingdom government bonds	116,673	111,592
Corporate bonds	15,830	18,445
Miscellaneous	**2,100**	**–**
Fair value on 31/12	**168,051**	**166,434**

The fair values of the aforementioned equity and debt instruments were determined on the basis of prices quoted on active markets.

The fair value of plan assets in the other countries totalled €61,864 thousand (previous year: €54,582 thousand) and cannot be broken down into asset classes as these plan assets are qualifying insurance policies.

As in the previous year, the outsourced pension funds did not include any own financial instruments or property used by Group companies as at the balance sheet date.

Jungheinrich expects to make cash-effective employer contributions totalling approximately €4.7 million for the 2024 financial year (previous year: €4.2 million) in order to comply with minimum statutory and contractual requirements.

(26) Other provisions

Development of other provisions

in € thousand	Balance as of 01/01/2023	Changes in currency exchange rates	Additions from business combinations	Additions	Utilisations	Releases	Balance as of 31/12/2023
Provisions for personnel	185,561	–1,774	7,529	198,193	141,061	5,221	243,227
Provisions for warranty obligations	63,500	–401	4	97,805	89,566	3,024	68,318
Provisions for onerous contracts	54,969	–258	–	21,897	22,683	2,034	51,891
Other provisions	54,307	–875	365	31,735	11,707	4,472	69,353
Other provisions	**358,337**	**–3,308**	**7,898**	**349,630**	**265,017**	**14,751**	**432,789**

Provisions for personnel as of 31 December 2023 primarily related to provisions for obligations arising from phased retirement agreements, anniversary obligations, performance-related remuneration and holiday entitlements.

As at the balance sheet date, obligations arising from phased retirement agreements amounted to €28,339 thousand (previous year: €25,937 thousand), which were netted against €15,656 thousand in financial assets (previous year: €12,956 thousand). Cash and cash equivalents and securities were transferred to an external trust in order to finance these obligations. These trust assets are being exclusively held to secure long-term benefits due to employees within the scope of phased retirement agreements and qualify as plan assets in accordance with IAS 19. The cash and cash equivalents and securities are not freely available due to the hedging role they play for these agreements. Furthermore, €1,523 thousand in provisions were accrued to cover the claims of candidates potentially qualifying for future phased retirement work arrangements commensurate to their probability of occurrence (previous year: €3,300 thousand).

As at the balance sheet date, there were also obligations related to performance-based payments totalling €21,858 thousand (previous year: €7,389 thousand), which were agreed in connection with business combinations. These earn-out payments are accumulated under personnel provisions until the individual tranches are due.

Additions to provisions for personnel included a total of €884 thousand in interest accretions and changes in discount rates (previous year: €–1,048 thousand), which were recognised in the other financial income (expense) for the year under review. €42,237 thousand (previous year: €32,271 thousand) of the provisions for personnel had a remaining maturity of more than one year. The increase in the non-current item was primarily due to additions to performance-based payment obligations in connection with business combinations.

The Group recognises provisions for warranty obligations based on past experience when products are sold or when new warranty measures are initiated. These provisions relate to the assessment of the extent to which warranty obligations must be met in the future, and to the cost involved. Provisions for warranty obligations contain the expected expense of statutory and contractual warranty claims as well as the expected expense of voluntary concessions and recall actions. Additions to warranty obligations cover the product-related warranty expenses for the 2023 financial year for material handling equipment sold in the year under review.

The provisions for onerous contracts primarily related to impending losses from contracts with customers. Impending losses from cancellations of contracts and other contractual risks were also recognised.

As at the balance sheet date, €6,923 thousand (previous year: €4,647 thousand) of the provisions for onerous contracts had a remaining term to maturity of more than one year.

Other provisions contained provisions for disposal obligations, legal disputes, environmental risks and other obligations. €40,832 thousand (previous year: €29,714 thousand) of the other provisions had a remaining term to maturity of more than one year as at the balance sheet date. The increase in non-current other provisions related primarily to further additions to provisions for disposal obligations.

(27) Financial liabilities

Composition and maturity of financial liabilities

in € thousand	Liabilities due to banks	Promissory notes/ commercial papers	Liabilities from financing trucks for short-term rental	Lease liabilities	Notes payable	**Financial liabilities**
31/12/2023						
Total future cash flows	**530,652**	**177,500**	**9,489**	**250,630**	**2,538**	**970,809**
Due within one year	474,437	35,745	5,032	62,186	2,538	579,938
Due in one to five years	37,807	141,755	4,395	134,739	–	318,696
Due in more than five years	18,408	–	62	53,705	–	72,175
Present value of future cash flows	**525,767**	**160,000**	**9,054**	**226,382**	**2,538**	**923,741**
Due within one year	473,220	30,000	4,893	56,357	2,538	567,008
Due in one to five years	35,241	130,000	4,102	122,591	–	291,934
Due in more than five years	17,306	–	59	47,434	–	64,799
Future interest expense	**4,885**	**17,500**	**435**	**24,248**	**–**	**47,068**
31/12/2022						
Total future cash flows	**203,666**	**226,033**	**12,582**	**204,159**	**6,328**	**652,768**
Due within one year	84,785	50,571	5,983	52,847	6,328	200,514
Due in one to five years	89,996	138,991	6,510	110,434	–	345,931
Due in more than five years	28,885	36,471	89	40,878	–	106,323
Present value of future cash flows	**195,978**	**205,299**	**11,650**	**190,645**	**6,328**	**609,900**
Due within one year	82,871	45,299	5,532	49,466	6,328	189,496
Due in one to five years	86,139	125,000	6,032	103,462	–	320,633
Due in more than five years	26,968	35,000	86	37,717	–	99,771
Future interest expense	**7,688**	**20,734**	**932**	**13,514**	**–**	**42,868**

Financial liabilities that can be repaid any time are disclosed as being “due within one year”.

Details of liabilities due to banks

Currency	Interest rate conditions	Remaining term of the fixed interest rate as of 31/12/2023	Nominal volumes as of 31/12/2023 in € thousand	Range of effective interest rates 2023	**Carrying amounts as of 31/12/2023 in € thousand**	Nominal volumes as of 31/12/2022 in € thousand	Range of effective interest rates 2022	Carrying amounts as of 31/12/2022 in € thousand
EUR	variable	< 1 year	342,546	EURIBOR + margin	342,546	32,876	EURIBOR + margin	32,876
INR	variable	< 1 year	9,251	LIBOR + margin	9,251	6,159	LIBOR + margin	6,159
BRL	variable	< 1 year	30,230	LIBOR + margin	30,230	14,178	LIBOR + margin	14,178
ZAR	variable	< 1 year	1,570	LIBOR + margin	1,570	7,923	LIBOR + margin	7,923
Other	variable	< 1 year	27,969	LIBOR + margin	27,969	11,839	LIBOR + margin	11,839
EUR	fixed	< 1–11 years	90,517	0.8%–5.2%	73,551	91,925	0.8%–5.2%	77,608
EUR	variable	> 10 years	50,000	EURIBOR + margin	31,667	50,000	EURIBOR + margin	35,000
SGD	variable	> 10 years	9,211	SIBOR + margin	4,709	9,399	SIBOR + margin	5,541
Other	fixed	< 1–3 years	4,273	1.1%–17.4%	4,274	3,010	1.1%–17.8%	4,854
Liabilities due to banks			**565,568**		**525,767**	**227,309**		**195,978**

Purchase price financing totalling €300,000 thousand in connection with the acquisition of Storage Solutions was raised in the reporting year. This financing was made available at short notice via two bilateral credit line agreements. Pro rata funding was provided with the issue of a promissory note loan in the amount of €150,000 thousand in February 2024.

Composition of the promissory notes as of 31 December 2023

	Maturity in year	Nominal interest rate	Nominal amount in € thousand
Jungheinrich AG 2017 (I)	2024	Fixed interest	30,000
Jungheinrich AG 2017 (II)	2027	Fixed interest	30,000
Jungheinrich AG 2022 (I)	2025	Fixed interest	15,000
Jungheinrich AG 2022 (II)	2025	EURIBOR + margin	10,000
Jungheinrich AG 2022 (III)	2026	Fixed interest	20,000
Jungheinrich AG 2022 (IV)	2026	EURIBOR + margin	20,000
Jungheinrich AG 2022 (V)	2028	Fixed interest	20,000
Jungheinrich AG 2022 (VI)	2028	EURIBOR + margin	15,000

The nominal amounts of the individual loan tranches correspond to the carrying amounts.

In 2022, the Jungheinrich Group issued a commercial paper programme with a programme volume of €300,000 thousand to supplement short-term, non-bank-dependent funding. As of 31 December 2023, there were no drawings under the commercial paper programme (previous year: €45,299 thousand).

Lease liabilities as of 31 December 2023 primarily related to the long-term leases of properties and vehicles. The right-of-use assets from these leases are reported under property, plant and equipment.

(28) Liabilities from financial services

Liabilities from financial services as of 31 December 2023 included liabilities from financing in the amount of €2,132,236 thousand (previous year: €1,977,430 thousand). They result from the financing of long-term customer contracts with identical securities. Depending on whether commercial ownership is attributed to Jungheinrich Group companies, these contracts are capitalised either as trucks for lease from financial services ("operating leases") or as receivables from financial services ("finance leases").

Liabilities from financing amounted to €266,074 thousand (previous year: €267,181 thousand) in liabilities from the issuance of promissory notes via the consolidated securitisation vehicle in Luxembourg.

Liabilities from financial services:
Reconciliation of total future cash flows with their present value

in € thousand	**31/12/2023**	31/12/2022
Total future cash flows	**2,343,194**	**2,108,783**
Due within one year	689,709	619,766
Due in one to five years	1,527,935	1,394,015
Due in more than five years	125,550	95,002
Present value of future cash flows	**2,132,236**	**1,977,430**
Due within one year	612,452	569,956
Due in one to five years	1,400,762	1,315,586
Due in more than five years	119,022	91,888
Future interest expense	**210,958**	**131,353**

Furthermore, repurchase obligations equal to the contractually agreed residual values which related to lease contracts with a leasing company acting as intermediary were recognised under liabilities from financial services in the amount of €14,649 thousand (previous year: €15,018 thousand).

(29) Trade accounts payable

Trade accounts payable as of 31 December 2023 included accounts payable in respect of associated companies amounting to €25,573 thousand (previous year: €25,329 thousand), and accounts payable in respect of joint ventures amounting to €24,178 thousand (previous year: €21,876 thousand). Details of the composition of trade accounts payable from related companies can be found in note (42) [page 170].

(30) Contract liabilities

Composition of contract liabilities

in € thousand	**31/12/2023**	31/12/2022	01/01/2022
Payments received on account of orders	144,651	166,577	167,880
Obligations from revenue deductions	16,293	15,502	13,731
Other contract liabilities	30,424	27,382	16,817
Contract liabilities	**191,368**	**209,461**	**198,428**

Other contract assets comprised contract balances from long-term project contracts, the revenue of which is recognised over time.

(31) Deferred income

Composition of deferred income

in € thousand	Deferred revenue from financial services	Deferred profit from financial services	Other deferrals	**Deferred income**
31/12/2023	**27,490**	**4,348**	**4,653**	**36,491**
Thereof maturities of up to one year	9,656	3,141	4,398	17,195
Thereof maturities of more than one year	17,834	1,207	255	19,296
31/12/2022	**26,297**	**12,001**	**7,763**	**46,061**
Thereof maturities of up to one year	9,759	8,341	4,865	22,965
Thereof maturities of more than one year	16,538	3,660	2,898	23,096

Deferred revenue from financial services related to lease agreements with a leasing company or bank acting as intermediary. In such cases, due to the contractually agreed repurchase obligations, Jungheinrich Group companies had commercial ownership despite the sale of the trucks to the leasing company/bank. The resultant IFRS obligation to capitalise this ownership led to the deferral of the sales proceeds that have already been received from the leasing company. This deferred income is reversed using the straight-line method with an effect on revenue until the agreed residual value is paid.

Deferred profit from financial services related to sale and leaseback transactions for refinancing trucks for lease that were concluded before the initial application of IFRS 16 "Leases". Deferred profit is reversed over the remaining terms of the leases.

Other deferrals as of 31 December 2023 included €707 thousand (previous year: €5,363 thousand) in government grants. Deferred government grants for acquired property, plant and equipment totalling €4,427 thousand as of 31 December 2022 were derecognised from other deferrals at the beginning of the 2023 financial year and recognised as a reduction in the acquisition and manufacturing costs of the property, plant and equipment on which the grants are based.

(32) Other liabilities

Composition of other liabilities

in € thousand	**31/12/2023**	31/12/2022
Liabilities from other taxes	90,824	81,458
Social security liabilities	16,277	12,585
Other financial liabilities	1,583	1,052
Miscellaneous other liabilities	20,579	19,972
Other liabilities	**129,263**	**115,067**

Other financial liabilities included accounts payable to joint ventures amounting to €124 thousand (previous year: €123 thousand).

(33) Additional disclosures on financial instruments

Carrying amounts and fair values of financial instruments by measurement category

		31/12/2023		31/12/2022	
in € thousand	Measurement category in accordance with IFRS 9	**Carrying amount**	**Fair value**	Carrying amount	Fair value
Assets					
Cash and cash equivalents	At amortised cost	511,183	511,183	336,725	336,725
Trade accounts receivable and contract assets	At amortised cost	964,048	964,048	908,321	908,321
Receivables from financial services	n/a	1,651,386	1,622,865	1,462,707	1,411,114
Securities	At amortised cost	28,988	28,853	52,926	53,055
Securities	At fair value through profit or loss	121,448	121,448	145,065	145,065
Other financial assets	At fair value through profit or loss	998	998	778	778
Derivative financial assets					
Derivatives without a hedging relationship	At fair value through profit or loss	6,123	6,123	3,621	3,621
Derivatives with a hedging relationship	n/a	7,729	7,729	19,353	19,353
Other financial assets	At amortised cost	14,367	14,367	18,000	18,000
Shareholders' equity and liabilities					
Trade accounts payable	At amortised cost	560,092	560,092	556,196	556,196
Liabilities due to banks	At amortised cost	525,767	524,934	195,978	192,477
Promissory notes/commercial papers	At amortised cost	160,000	158,074	205,299	199,745
Liabilities from financing trucks for short-term rental	At amortised cost	9,054	9,054	11,650	11,650
Lease liabilities	n/a	226,382	n/a	190,645	n/a
Notes payable	At amortised cost	2,538	2,538	6,328	6,328
Liabilities from financial services	At amortised cost	2,146,885	2,129,015	1,992,448	1,924,394
Derivative financial liabilities					
Derivatives without a hedging relationship	At fair value through profit or loss	2,838	2,838	2,821	2,821
Derivatives with a hedging relationship	n/a	4,992	4,992	1,553	1,553
Other financial liabilities	At amortised cost	1,583	1,583	1,052	1,052
Of which aggregated by measurement category:					
Assets:	At amortised cost	1,518,586	1,518,451	1,315,972	1,316,101
	At fair value through profit or loss	128,569	128,569	149,464	149,464
Shareholders' equity and liabilities:	At amortised cost	3,405,919	3,385,290	2,968,951	2,891,842
	At fair value through profit or loss	2,838	2,838	2,821	2,821

The carrying amounts of the financial instruments measured at fair value in the consolidated financial statements as at the balance sheet date have been categorised in the table below by their fair value hierarchy level pursuant to IFRS 13 and based on the information and input factors used to determine them.

Hierarchy levels for financial instruments measured at fair value

	31/12/2023				31/12/2022			
in € thousand	Level 1	Level 2	Level 3	**Total**	Level 1	Level 2	Level 3	Total
Assets								
Securities[1]	121,448	–	–	121,448	145,065	–	–	145,065
Other financial assets	–	–	998	998	–	–	778	778
Derivatives without a hedging relationship	559	5,564	–	6,123	885	2,736	–	3,621
Derivatives with a hedging relationship	–	7,729	–	7,729	–	19,353	–	19,353
Shareholders' equity and liabilities								
Derivatives without a hedging relationship	16	2,822	–	2,838	42	2,779	–	2,821
Derivatives with a hedging relationship	–	4,992	–	4,992	–	1,553	–	1,553

[1] Assigned to the measurement category "at fair value through profit or loss".

The fair value of Level 1 financial instruments was determined on the basis of stock market quotations as at the balance sheet date.

The fair value of Level 2 financial instruments was determined in line with generally acknowledged valuation models based on discounted cash flow analyses and using observable current market prices for similar instruments. The fair value of currency forwards is determined using the mean spot rate as at the balance sheet date, adjusted up or down to reflect the remaining term of the futures contract. The fair value of interest rate derivatives is determined on the basis of the market interest rates and interest rate curves on the balance sheet date, taking their maturities into account. Jungheinrich has taken counterparty risks into consideration when measuring fair value.

The fair value of Level 3 financial instruments related to other financial assets. The shares did not have a quoted market price. The fair value for these shares was calculated based on amortised cost as at the balance sheet date.

No transfers between Levels 1 and 2 took place in the reporting period.

Further information on measurement levels is provided in the chapter on accounting principles.

Current interest rates at which comparable loans with identical maturities as at the balance sheet date could have been taken out were used to determine the fair values of liabilities due to banks, promissory notes and commercial papers, as well as of receivables and liabilities from financial services.

The fair values of interest-bearing securities with maturities categorised as "at amortised cost" corresponded to the fair values available as at the balance sheet date.

Cash and cash equivalents and trade accounts receivable primarily have short terms of maturity. Their carrying amounts as at the balance sheet date therefore roughly corresponded to their fair values.

For non-current other financial assets with variable interest rates, it was assumed for reasons of simplicity that their fair values correspond to their carrying amounts since the interest rates contractually agreed and realisable on the market were virtually at the same level. For the current other financial assets, their carrying amounts as at the balance sheet date approximated their fair values.

Other financial assets comprise investments in non-consolidated affiliated companies, joint ventures and other investments and were measured at fair value in the consolidated financial statements. The shares did not have a quoted market price. The fair value for these shares was calculated based on amortised cost as at the balance sheet date.

Development of the fair value of Level 3 financial instruments

in € thousand	**2023**	2022
Balance on 01/01	778	10,925
Additions	218	70
Additions due to business combinations	5	–
Disposals	3	10,217
Balance on 31/12	**998**	**778**

It was assumed that the fair values of trade accounts payable and other financial liabilities corresponded to the carrying amounts of these financial instruments owing to their short remaining terms to maturity.

As regards liabilities from financing trucks for short-term rental with variable interest rates, it was assumed for reasons of simplicity that their fair values corresponded to their carrying amounts since the interest rates agreed and realisable on the market were almost identical.

The carrying amounts of current, interest-bearing financial liabilities corresponded almost exactly to their fair values.

Hierarchy levels for financial instruments which are not measured at fair value and for which the carrying amounts are not reasonable approximations of fair values

	31/12/2023			31/12/2022		
in € thousand	Level 1	Level 2	**Total**	Level 1	Level 2	Total
Assets						
Receivables from financial services	–	1,622,865	1,622,865	–	1,411,114	1,411,114
Securities[1]	28,853	–	28,853	53,055	–	53,055
Liabilities						
Liabilities due to banks	–	524,934	524,934	–	192,477	192,477
Promissory notes/ commercial papers	–	158,074	158,074	–	199,745	199,745
Liabilities from financial services	–	2,129,015	2,129,015	–	1,924,394	1,924,394

[1] Assigned to the measurement category "at amortised cost".

The net results of financial instruments recognised in the statement of profit or loss are presented by measurement category in the following table.

Net results of financial instruments

	From interest and dividends	From subsequent measurement		Net result	
in € thousand		At fair value	Valuation allowances	**2023**	2022
Financial assets measured at amortised cost	7,669	–	–5,532	2,137	–1,828
At fair value through profit or loss	4,221	–13	–	4,208	–16,253
Financial liabilities measured at amortised cost	–97,712	–	–	–97,712	–55,559

Interest and dividends from financial instruments attributable to the measurement category "at amortised cost" were reported in financial income under interest income and interest expenses as well as in cost of sales.

The net income (expense) from securities attributable to the measurement category "at fair value through profit or loss", which includes interest and dividends as well as the net income (expense) from subsequent measurement at fair value, was recognised in other financial income (expense).

Net results from the subsequent measurement of derivative financial instruments at fair value not designated as hedging instruments are included in the cost of sales and in other financial income (expense).

Loss allowances for financial instruments categorised as "at amortised cost" are reported in the cost of sales in the case of trade accounts receivable and contract assets and in other financial income (expense) in the case of securities, cash and cash equivalents and other financial assets.

The development of loss allowances for financial instruments in 2023 and 2022 is presented in the following table.

Development of loss allowances for financial instruments

in € thousand	Trade accounts receivable and contract assets Level 2	Trade accounts receivable and contract assets Level 3	Securities Level 1	Cash and cash equivalents Level 1	Other financial assets Level 1	**Total**
Balance on 01/01/2023	**2,178**	**18,961**	**129**	**13**	**15**	**21,296**
Changes in currency exchange rates	–26	–110	–	–	–	–136
Additions due to business combinations	19	–	–	–	–	19
Utilisations	–	2,620	–	–	–	2,620
Releases	1,598	392	118	13	11	2,132
Additions	1,977	5,640	–	48	–	7,665
Balance on 31/12/2023	**2,550**	**21,479**	**11**	**48**	**4**	**24,092**
Balance on 01/01/2022	**1,571**	**18,243**	**127**	**40**	**1**	**19,982**
Changes in currency exchange rates	6	–268	–	–	–	–262
Utilisations	–	2,661	–	–	–	2,661
Releases	1,562	1,690	59	40	–	3,351
Additions	2,163	5,337	61	13	14	7,588
Balance on 31/12/2022	**2,178**	**18,961**	**129**	**13**	**15**	**21,296**

ADDITIONAL INFORMATION

(34) Consolidated statement of cash flows

Cash flows have been presented in the statement of cash flows independently of the structure of the statement of financial position and are broken down into cash flow from operating activities, investing activities and financing activities. Cash flows from investing and financing activities were directly attributed to corresponding cash flows. Cash flow from operating activities was derived indirectly.

Cash flow from operating activities was derived from profit or loss, which was adjusted to exclude non-cash income and expenses, mainly consisting of depreciation, amortisation and impairment losses, along with monetary profit or loss resulting from the application of IAS 29. Changes in working capital are also taken into account. Cash flow from operating activities also included changes in the carrying amounts of trucks for short-term rental and trucks for lease as well as liabilities and deferred revenue and profit stemming from the financing of these assets. Changes to carrying amounts for right-of-use assets on property, plant and equipment, and non-cash changes and the interest portion of lease payments for the corresponding lease liabilities are also reported under cash flow from operating activities.

Cash flow from investing activities included disposals and additions on property, plant and equipment without right-of-use assets capitalised and intangible assets and in particular additions in capitalised development expenditure. In addition, the cash flow from investing activities includes: purchases and sales of securities; inflows and outflows from time deposits with an original term of more than three months and without a short-term, cost-free termination option; inflows and outflows for loans granted to related parties; purchase price payments for business combinations, and payments for investments in companies accounted for using the equity method and other financial assets, as well as inflows from the sale of other financial assets. Cash flow from investing activities of €–325.7 million in 2023 was affected by the purchase price for the acquisition of Storage Solutions and Magazino GmbH, Munich (Germany), less acquired cash and cash equivalents.

Cash flow from financing activities included capital-related transactions, dividend payments, cash flow from obtaining and repaying long-term financial loans including promissory notes and commercial papers, and changes in short-term liabilities due to banks. In addition, the repayment portion of the lease payments were reported under cash flow from financing activities in accordance with the provisions of IFRS 16 "Leases". Cash flow from financing activities of €300.0 million in 2023 related to the purchase price financing for the acquisition of Storage Solutions, which was reported under changes in short-term liabilities to banks.

The changes to the balance sheet items shown in the consolidated statement of cash flows cannot be traced directly back to the consolidated statement of financial position, because non-cash effects resulting from currency translations and changes to the scope of consolidation are calculated out.

Cash and cash equivalents at the end of the year correspond to the amount disclosed for cash and cash equivalents on the statement of financial position, less the cash and cash equivalents not freely available to Jungheinrich. The way the balance sheet item for cash and cash equivalents reconciles in respect of the figures for cash and cash equivalents according to the consolidated statement of cash flows can be seen in the table below.

Derivation of cash and cash equivalents according to the consolidated statement of cash flows:

in € thousand	**31/12/2023**	31/12/2022
Cash and cash equivalents according to the consolidated statement of financial position	511,183	336,725
Bank balances (pledged)	–9,051	–9,368
Term deposits[1]	–23,500	–
Cash and cash equivalents according to the consolidated statement of cash flows	**478,632**	**327,357**

[1] Original term of more than 3 months, and with no option to terminate free of charge at short notice.

As before, cash and cash equivalents consisted almost exclusively of bank balances as at the balance sheet date.

Development of financial liabilities from financing activities

in € thousand	Balance as of 01/01	Cash-effective changes	Non-cash-effective changes: Changes to the scope of consolidation	Non-cash-effective changes: Changes in currency exchange rates	Non-cash-effective changes: Other	Balance as of 31/12
2023						
Liabilities due to banks	**195,978**	**292,339**	**39,145**	**–1,695**	**–**	**525,767**
Current bank liabilities	72,975	338,990	72	–471	–	411,566
Non-current loans	123,003	–46,651	39,073	–1,224	–	114,201
Promissory notes/commercial papers	**205,299**	**–45,299**	**–**	**–**	**–**	**160,000**
Lease liabilities	**190,645**	**–61,649**	**7,709**	**–6,359**	**96,036**	**226,382**
Total financial liabilities from financing activities	**591,922**	**185,391**	**46,854**	**–8,054**	**96,036**	**912,149**
2022						
Liabilities due to banks	**185,380**	**29,100**	**–19,599**	**1,097**	**–**	**195,978**
Current bank liabilities	42,969	42,736	–13,278	548	–	72,975
Non-current loans	142,411	–13,636	–6,321	549	–	123,003
Promissory notes/commercial papers	**73,000**	**132,299**	**–**	**–**	**–**	**205,299**
Lease liabilities	**185,764**	**–56,383**	**354**	**–1,121**	**62,031**	**190,645**
Total financial liabilities from financing activities	**444,144**	**105,016**	**–19,245**	**–24**	**62,031**	**591,922**

(35) Contingent liabilities

No Group companies are involved in ongoing legal or arbitration proceedings that could have a considerable impact on the Group's economic situation, are likely to become involved in such litigation, or had done so within the last two years.

The respective Group companies have accrued provisions sufficient to cover financial burdens potentially resulting from other legal or arbitration proceedings.

As at the balance sheet date, Jungheinrich had issued letters of comfort for joint ventures and associated companies to secure €10,920 thousand in credit lines (previous year: €19,988 thousand). Against the backdrop of the companies' appropriate funding, it was assumed that the underlying obligations would be met; no withdrawals were anticipated.

(36) Other financial obligations

Purchase commitments for capital expenditure exclusively on property, plant and equipment totalled €6,755 thousand as at the balance sheet date (previous year: €22,882 thousand).

Group companies have entered into leases and service agreements for vehicles at their various locations. As at the balance sheet date, payment obligations for the non-lease components of these contracts amounted to €22,957 thousand (previous year: €20,659 thousand).

In addition, the Jungheinrich Group incurred payment obligations totalling €108,636 thousand (previous year: €76,460 thousand) for long-term software use and maintenance contracts and leases for low-value assets as at the balance sheet date, as well as other service contracts.

(37) Risk management and financial instruments

Risk management principles

The Jungheinrich Group's risk management system is designed to enable the company to identify developments in financial price risks – resulting primarily from interest rate and currency risks – early on and react to them via systematic courses of action both rapidly and effectively. Furthermore, it ensures that the Group only concludes financial transactions for which it possesses the necessary expertise and technical preconditions.

Financial markets present the opportunity to transfer risks to other market participants who have a comparative advantage or a higher capacity for accepting risks. The Jungheinrich Group makes use of these opportunities solely to hedge risks arising from underlying operating transactions and to invest or raise liquidity. Group guidelines do not allow the conclusion of financial transactions that are speculative in nature. As a rule, the Jungheinrich Group's financial transactions may only be concluded with banks or leasing companies as contractual partners.

The Board of Management as a whole bears responsibility for the initiation of organisational measures required to limit financial price risks. Jungheinrich has established a risk controlling and risk management system that enables it to identify, measure, monitor and control its risk positions. Risk management encompasses the development and determination of methods to measure risk and performance, monitor established risk limits and set up the associated reporting system.

Jungheinrich controls financial risks arising from its core business centrally as part of the Group strategy. Risks stemming from the Jungheinrich Group's financial services operations are subject to a separate risk management system.

Risks specific to the financial services business are determined by residual value risks, refinancing risks and counterparty credit risks.

A material element of risk management in the financial service business is a contract database based on SAP-ERP and the Global Lease Center (GLC), which is used by smaller sales companies, that allows uniform recording, risk analysis and risk evaluation of financial service agreements throughout the Group.

The contractually agreed residual values are calculated on the basis of a conservative uniform Group standard for maximum permissible residual values. The residual values of all individual contracts are subjected to a quarterly evaluation using the central financial services contracts database on the basis of their current fair value. If the originally calculated residual value is higher than the actual fair value at the end of the respective contract's term, the risk is taken into consideration depending on the classification of the long-term customer contract through a reduction of the carrying amounts "Trucks for lease from financial services" or "Receivables from financial services" with effect on profit or loss.

Financial service agreements are wherever possible refinanced in accordance with the principle of matching maturities and interest rates for customer and refinancing contracts.

Reference is made to the commentary on credit risks as regards general creditworthiness and contingent loss risks in connection with customers.

Break clauses agreed on in customer contracts are limited by central parameters and linked to risk-minimising performance targets. The earnings risk potentially resulting from break clauses is covered by accruing suitable provisions.

Market price risks

Market price risks are risks arising from changes in an item's realisable income or value, with the item being defined as an item on the assets or liabilities side of the statement of financial position. These risks result from changes in interest rates, foreign exchange rates, share prices and other items and factors affecting the formation of prices. These parameters are used to determine the interest rate risk, the currency risk and the share price risk exposure of the Jungheinrich Group. There were no noteworthy risk concentrations in the year under review, as was the case in the previous year.

Interest rate risks

Interest rate risks result from the Group's financing and cash investment activity. Fixed and variable-interest items are regarded separately in order to determine this risk. Net positions are formed from interest-bearing instruments on the assets and liabilities sides and hedges are concluded to cover these net positions, if necessary. Interest rate swaps were used to hedge interest rates in the reporting period.

The interest rate risk from investments is composed of the shares accounted for at fair value through profit or loss, pension futures and pension funds amounting to €132,946 thousand (previous year: €112,791 thousand), which are largely held in a special fund. If going interest rates as at the balance sheet date had been 100 basis points higher (lower), this would have led to a change in the fair value in the amount of €486 thousand (previous year: €1,027 thousand).

The Jungheinrich Group's interest rate risks include cash flow risks arising from variable-interest financial instruments for which no interest rate hedges have been concluded. These financial instruments were analysed as follows based on the assumption that the amount of liabilities outstanding at the end of the reporting period was outstanding for the full year.

As at the balance sheet date, the net exposure of variable-interest financial instruments was at €492,942 thousand (previous year: €158,516 thousand). If going interest rates had been 100 basis points higher on 31 December 2023, income would have been €4,929 thousand (previous year: €1,589 thousand) lower. If going interest rates had been 100 basis points lower, income would have been €4,929 thousand (previous year: €1,589 thousand) higher.

For interest rate swaps designated as a hedging instrument as at the balance sheet date, such an increase (decrease) in the market interest level would have resulted in a change in fair value of €+5,685 thousand (€–5,886 thousand) recognised in other comprehensive income with no effect on profit or loss.

Currency risks

When calculating this risk position, the Jungheinrich Group considers foreign currency inflows and outflows, primarily from revenue and purchases based on fixed and flexible contracts. This risk position reflects the net currency exposure resulting from balancing counteracting cash flows in individual currencies while taking hedges already concluded for the period in question into account. Jungheinrich used currency forwards and currency swaps to manage risks during the reporting period. In accordance with the Jungheinrich Group's risk management principles, a maximum of 75 per cent of the volumes to be hedged are designated as underlying transactions. These, in turn, can be fully hedged.

The Jungheinrich Group applies the value-at-risk approach to quantify its risk position. The value-at-risk indicates the maximum loss that may not be exceeded before the end of a predetermined holding period with a certain probability (confidence level). Parameters and market volatility, which are used to quantify risk, are calculated based on the standard deviation of logarithmic changes in the last 180 trading days and converted to a one-day holding period with a one-sided confidence level of 95 per cent.

To manage risk, a maximum loss limit for the entire Group is determined based on the company's planning. Furthermore, corresponding lower limits are determined at the individual Group company level. These limits are compared to the current value-at-risk for all open positions as part of monthly reporting.

By applying the value-at-risk method as of 31 December 2023, the maximum risk did not exceed €1,414 thousand (previous year: €2,345 thousand) based on a holding period of one day and a confidence level of 95 per cent. In the reporting period, the value-at-risk was between a minimum of €1,414 thousand (previous year: €1,342 thousand) and a maximum of €2,492 thousand (previous year: €2,370 thousand). The average for the year was €2,058 thousand (previous year: €2,012 thousand).

Additionally, hedging of foreign currency risks takes place in the Jungheinrich Group with matching amounts and identical maturities from intragroup financing via currency swaps.

Share price risks

Jungheinrich has invested €125,000 thousand (previous year: €125,000 thousand) in cash and cash equivalents in a special fund. Shares, stock index funds and share derivatives held in this fund and directly held equity funds expose the Jungheinrich Group to a significant share price risk. On 31 December 2023, the total share price risk exposure of Jungheinrich Group amounted to €18,185 thousand (previous year: €8,944 thousand). If the share price level had been 10 per cent higher (lower) on 31 December 2023, this would have led to additional income (losses) in other financial income (expense) of €1,819 thousand (previous year: €894 thousand).

The special fund is managed to maintain value in order to limit share price risks. The lower value limit specified for the reporting year was not reached at any time.

Credit risks

Jungheinrich's exposure to credit risks stems almost exclusively from its core business. Trade accounts receivable from operations are constantly monitored by the business units responsible for them. Loss allowances for expected credit losses are recognised in order to offset the credit risks.

The entire business is continuously subjected to creditworthiness checks. Given the overall exposure to credit risks, accounts receivable from major customers are not substantial enough to give rise to extraordinary risk concentrations. Agreements made with customers and measures taken within the scope of risk management that minimise the creditworthiness risk largely consist of agreements on prepayments made by customers, the sharing of risks with financing partners and the permanent monitoring of customers via information portals. In addition, selected operating trade accounts receivable are collateralised by federal government credit insurance and private credit insurance covering 90 per cent of the respective receivable amount. Letters of credit are also used for collateral and generally cover 100 per cent of the receivable amount. There were no significant changes to the quality of the collateral during the reporting periods.

Notwithstanding existing collateral securities, in principle the carrying amounts of the financial assets in the balance sheet represent the maximum credit risk. As at the balance sheet date, there were no major agreements that reduced the maximum credit risk such as offsetting arrangements.

Financial assets measured at fair value through profit or loss had carrying amounts totalling €128,569 thousand (previous year: €149,464 thousand) as of 31 December 2023 in the balance sheet. The carrying amounts reflect the maximum credit risk of these financial instruments.

Liquidity risks

A liquidity reserve consisting of lines of credit and of cash is kept in order to ensure that the Jungheinrich Group can meet its payment obligations and maintain its financial flexibility at all times. Medium-term credit lines have been granted by the Group's principal banks and are supplemented by short-term credit lines of individual Group companies awarded by local banks.

Counterparty risks

The Group is exposed to counterparty risks that arise from the non-fulfilment of contractual agreements by counterparties. To mitigate these risks, such contracts are only concluded with selected financial institutions, which meet the internal demands placed on the creditworthiness of business partners. The creditworthiness of contractual partners is constantly monitored on the basis of their credit rating, which is determined by reputable rating agencies, as well as on the basis of additional risk indicators. No major risks ensued for Jungheinrich from its dependence on individual counterparties as at the balance sheet date. The fair values of derivative financial instruments are adjusted by the risk values calculated using analytical tools (credit value adjustment/debit value adjustment).

With regard to cash and cash equivalents and investments in securities, the Group monitors changes to the credit risk by tracking published ratings. To determine whether there are material increases in credit risks as at the balance sheet date which are not reflected in published ratings, the Group also monitors price changes for credit default swaps (CDSs) as well as press releases and regulatory information about the issuer. In accordance with Group investment policies, capital expenditure is only made in financial assets if they have an investment grade rating. Impairment losses for expected credit losses are calculated based on the three-level model in IFRS 9. Potential future impairment losses are calculated for all cash and cash equivalents and securities for the expected 12-month credit loss (Level 1). They are reclassified to Level 2 if the credit risk of a financial instrument has increased significantly compared to its initial recognition. Were contractual payments to become more than 30 days overdue, this would not by itself signal a significant increase in the credit risk, but it would indicate that a significant increase in the credit risk might have occurred. Jungheinrich's risk management system treats a downgrading of the counterparty's external rating below investment grade as a criterion for a significant increase in the credit risk. There were no reclassifications from Level 1 to Level 2 in the 2023 and 2022 financial years.

The general liquidity risk from the financial instruments used, which arises if a counterparty fails to meet its payment obligations or only meets them to a limited extent, is considered to be negligible.

Hedging relationships

The Jungheinrich Group concludes cash flow hedges to secure, among other things, future variable cash flows resulting from revenue and purchases of materials that are partially realised and partially forecasted, but highly probable. Comprehensive documentation ensures the clear assignment of hedges and underlying transactions. A maximum of 75 per cent of the volumes to be hedged are designated as underlying transactions. These, in turn, can be fully hedged.

In order to hedge against interest rate risks, cash flows from tranches of a promissory note with variable interest rates are hedged with a matching maturity and an identical payment schedule by means of suitable interest rate swaps.

Furthermore, the variable-interest liabilities existing for the purpose of financing the financial services business via the Group's financing company Elbe River Capital S.A., Luxembourg, are hedged against interest rate risks via interest rate swaps as cash flow hedges.

The hedging ratio for all risk types is generally 1:1.

The effectiveness of hedging relationships is determined in each case at the beginning of the hedging relationship and through regular prospective assessments to ensure that an economic relationship exists between the hedged item and the hedging instrument.

The hedging relationships can prospectively be classified as highly effective. An assessment of the retrospective effectiveness of hedging relationships is conducted at the end of every quarter using the dollar-offset method together with the hypothetical-derivative method.

Hedging can become ineffective if the counterparty's credit risk changes.

Nominal values of derivative financial instruments

Nominal volume of derivative financial instruments

	Nominal volume of hedging instruments for cash flow hedges		Nominal volume of other derivatives	
in € thousand	Currency hedges	Interest hedges	Currency hedges	Other
31/12/2023				
Total nominal volume	**249,594**	**336,074**	**477,224**	**29,631**
Maturities of up to one year	208,935	83,286	477,224	29,631
Maturities of one to five years	40,659	220,576	–	–
Maturities of more than five years	–	32,212	–	–
31/12/2022				
Total nominal volume	**209,940**	**344,226**	**312,062**	**26,212**
Maturities of up to one year	182,960	83,841	312,062	26,212
Maturities of one to five years	26,980	213,937	–	–
Maturities of more than five years	–	46,448	–	–

The nominal values of the currency hedging contracts primarily contain currency forwards that are used to hedge against rolling twelve-month exposure in individual currencies. The main foreign currency items were hedged at the following average rates as at the balance sheet date:

Average hedging rates of material foreign currency items

	31/12/2023	31/12/2022
EUR/GBP	0.8758	0.8682
EUR/CHF	0.9462	0.9888
EUR/USD	1.0851	1.0566

The nominal values of the interest hedges include interest rate hedges largely concluded to hedge long-term interest rates for variable-interest financing. As at the balance sheet date the average hedging rate was 0.85 per cent (previous year: 1.23 per cent) for interest rate hedges in EUR and 2.30 per cent (previous year: 3.41 per cent) for interest rate hedges in GBP.

Interest hedges: future cash flows that are not discounted

in € thousand	**31/12/2023**	31/12/2022
Due within one year	5,759	6,020
Due in one to five years	–948	9,614
Due in more than five years	–40	365
Total future non-discounted cash flows	**4,771**	**15,999**

The nominal volume of the other derivative financial instruments included listed futures and options in special funds.

The transactions underlying the cash flow hedges are expected to be realised in line with the maturities of the hedges shown in the table.

The fair values of the underlying transactions and hedging instruments are used to measure effectiveness. Hedging measures were not associated with any material ineffectiveness until the balance sheet date.

For the currency forwards from cash flow hedges existing as at the balance sheet date, the change in the fair values of the hedging transactions amounted to €–2,124 thousand (previous year: €2,674 thousand). The change in the fair values of the underlying transactions amounted to €2,118 thousand (previous year: €–2,674 thousand).

For the interest rate hedging contracts existing as at the balance sheet date, the change in the fair values of the hedging transactions as at the balance sheet date was €4,587 thousand (previous year: €15,106 thousand). The change in the fair values of the underlying transactions amounted to €–4,586 thousand (previous year: €–15,066 thousand).

Fair values of derivative financial instruments

The fair value of a derivative financial instrument is the price at which the instrument could have been sold on the market as at the balance sheet date. Fair values were calculated on the basis of market-related information available as at the balance sheet date and on the basis of measurement methods stated in note (33) [page 154] that are based on specific prices. In view of the varying influencing factors, the values stated here may differ from the values realised later on the market.

Fair values of derivative financial instruments

in € thousand	**31/12/2023**	31/12/2022
Derivative financial assets	**13,852**	**22,974**
Derivatives with a hedging relationship	**7,729**	**19,353**
Currency forwards/currency swaps	604	3,884
Interest rate swaps	7,125	15,469
Derivatives without a hedging relationship	**6,123**	**3,621**
Currency forwards/currency swaps	5,564	2,736
Futures	559	885
Derivative financial liabilities	**7,830**	**4,374**
Derivatives with a hedging relationship	**4,992**	**1,553**
Currency forwards/currency swaps	3,098	1,520
Interest rate swaps	1,894	33
Derivatives without a hedging relationship	**2,838**	**2,821**
Currency forwards/currency swaps	2,822	2,779
Futures	16	42

Details regarding the development of the fair value of derivatives in hedging relationships in the reporting year and previous year can be found in note (24) [page 144].

Offsetting of derivative financial instruments

The Group concludes derivative transactions according to a German framework agreement and similar national framework agreements. These agreements do not fulfil the criteria for offsetting to take place in the consolidated statement of financial position, since they only grant the right to offsetting if future events occur, such as the default or insolvency of the Group or the counterparty. All currency and interest rate hedging contracts belonging to the Jungheinrich Group fall under existing global netting agreements, meaning that, taking into account the counterparty structure, the offsetting potential as of 31 December 2023 would amount to €5,373 thousand (previous year: €3,518 thousand).

As at the balance sheet date, the gross value of derivative financial assets from currency and interest rate hedging contracts amounted to €13,293 thousand (previous year: €22,089 thousand), and the gross amount of derivative financial liabilities from currency and interest rate hedging contracts was €7,814 thousand (previous year: €4,332 thousand). After netting, this would result in receivables in the amount of €7,920 thousand (previous year: €18,571 thousand) and liabilities in the amount of €2,441 thousand (previous year: €814 thousand).

(38) Segment information

Jungheinrich is one of the world's leading solutions providers for the intralogistics sector. With a comprehensive portfolio of material handling equipment, automated systems and services, Jungheinrich is able to offer customers solutions to the challenges posed by Industry 4.0.

The integrated business model encompasses the development, production and sale of new material handling equipment and the planning and realisation of automation projects, the short-term rental of new and used material handling equipment, the refurbishment and sale of used trucks and after-sales services. Jungheinrich also supplies stacker cranes and load handling equipment.

In addition, customers receive their entire factory and office equipment from a single source. In addition to electric engines and drive controls, Jungheinrich also manufactures matching lithium-ion batteries and battery chargers. Digital products based on the latest generation of the Jungheinrich Internet of Things platform in the cloud, complement the portfolio. Customers also have access to a comprehensive range of financial services.

The Board of Management of Jungheinrich AG acts and makes decisions with overall responsibility for all the Group's business areas. Jungheinrich's business model is designed to serve customers from a single source over a product's entire life cycle.

Segment reporting is in line with the internal organisational and reporting structure, thus encompassing the reportable segments "Intralogistics" and "Financial Services".

The "Intralogistics" segment encompasses the development, production, sale and short-term rental of new material handling equipment and warehousing equipment products including automation as well as the sale and short-term leasing of used trucks and after-sales services, consisting of maintenance, repair and spare parts.

Activities undertaken by the "Financial Services" segment encompass the sales financing and usage transfer of material handling equipment and warehousing equipment products. In line with Jungheinrich's business model, this independent business area supports the operating sales units of the "Intralogistics" segment. In this context, the "Financial Services" segment finances itself autonomously.

Segment information is generally subject to the disclosure and measurement methods applied in the consolidated financial statements. One exception is that the segments do not determine or record impairments for expected credit losses pursuant to IFRS 9 "Financial instruments" for intragroup receivables. Business segments were not aggregated.

The segment income (expense) is presented as earnings before taxes (EBT). Income tax expense is not reported and managed by segment at Jungheinrich. Income tax expense is therefore only stated as a summarised item at the Group level. Accordingly, profit or loss is only stated for the Jungheinrich Group.

Capital expenditure, depreciation and amortisation, impairment losses as well as reversal of impairments concern property, plant and equipment and intangible assets, excluding capitalised development expenditure and excluding capitalised usage rights on property, plant and equipment. Segment assets and segment liabilities encompass all assets and liabilities allocable to the segment in question. All items on the statement of financial position relating to effective and deferred income tax expense are therefore also included.

The "Intralogistics" segment acquires products from long-term customer lease agreements at the end of the term of these agreements at contractually agreed residual values from the "Financial Services" segment. If the contractually agreed residual value is above the current fair value at the end of an agreement's term, the "Intralogistics" segment will take this residual value risk into consideration by forming appropriate reserves for onerous contracts. Within the Jungheinrich Group, these residual value risks are represented as reductions in either the carrying amounts of trucks for lease from financial services, receivables from financial services and/or the inventories affected, depending on the classification of long-term customer contracts. The figures from this cross-segment offsetting were included in the reconciliation items for 2023 and 2022.

The reconciliation items in the reporting year and 2022 also included the intragroup revenue, interest, interim profits and receivables and liabilities eliminated within the scope of consolidation.

Segment information for 2023

in € thousand	Intralogistics	Financial Services	Segment total	Reconciliation	Jungheinrich Group
External revenue	4,398,300	1,147,587	5,545,887	–	5,545,887
Intersegment revenue	1,197,189	174,423	1,371,612	–1,371,612	–
Total revenue	5,595,489	1,322,010	6,917,499	–1,371,612	5,545,887
Income (expense) from companies accounted for using the equity method	8,641	–	8,641	–	8,641
Earnings before interest and income taxes (EBIT)	407,063	17,375	424,438	5,870	430,308
Interest income	12,114	1,193	13,307	–5,638	7,669
Interest expense	32,892	4,849	37,741	–5,638	32,103
Other financial income (expense)	–6,737	–9	–6,746	–	–6,746
Segment income (expense) (EBT)	**379,548**	**13,710**	**393,258**	**5,870**	**399,128**
Income tax expense					99,853
Profit or loss					**299,275**
Non-current assets					
Capital expenditure	89,936	12	89,948	–	89,948
Depreciation and amortisation	90,531	306	90,837	–	90,837
Impairment losses	1,332	–	1,332	–	1,332
Intangible assets	605,945	465	606,410	–	606,410
Property, plant and equipment	748,145	42	748,187	–	748,187
Trucks for short-term rental	470,216	–	470,216	–	470,216
Trucks for lease from financial services	–	708,125	708,125	–140,222	567,903
Investments in companies accounted for using the equity method	69,759	–	69,759	–	69,759
Other financial assets	25,407	–	25,407	–24,409	998
Inventories	862,535	67,636	930,171	–3,563	926,608
Receivables from financial services	–	1,664,512	1,664,512	–13,126	1,651,386
Trade accounts receivable and contract assets	973,574	126,835	1,100,409	–136,362	964,048
Cash and cash equivalents and securities	639,066	22,553	661,619	–	661,619
Other assets	421,899	120,010	541,909	–299,185	242,724
Assets 31/12	**4,816,546**	**2,710,178**	**7,526,724**	**–616,867**	**6,909,857**
Shareholders' equity 31/12	2,282,566	121,526	2,404,092	–181,835	2,222,257
Provisions for pensions	180,207	221	180,428	–	180,428
Other provisions	456,460	551	457,011	–24,222	432,789
Financial liabilities	915,237	8,504	923,741	–	923,741
Liabilities from financial services	–	2,146,885	2,146,885	–	2,146,885
Trade accounts payable	564,613	131,843	696,456	–136,364	560,092
Contract liabilities	191,245	123	191,368	–	191,368
Other liabilities	226,218	300,525	526,743	–274,446	252,297
Liabilities 31/12	2,533,980	2,588,652	5,122,632	–435,032	4,687,600
Shareholders' equity and liabilities 31/12	**4,816,546**	**2,710,178**	**7,526,724**	**–616,867**	**6,909,857**

Segment information for 2022

in € thousand	Intralogistics	Financial Services	Segment total	Reconciliation	Jungheinrich Group
External revenue	3,799,644	963,650	4,763,294	–	4,763,294
Intersegment revenue	1,078,123	167,345	1,245,468	–1,245,468	–
Total revenue	4,877,767	1,130,995	6,008,762	–1,245,468	4,763,294
Income (expense) from companies accounted for using the equity method	4,980	–	4,980	–	4,980
Earnings before interest and income taxes (EBIT)	340,113	25,443	365,556	20,504	386,060
Interest income	3,783	248	4,031	–1,622	2,409
Interest expense	13,702	1,746	15,448	–1,622	13,826
Other financial income (expense)	–27,779	537	–27,242	–	–27,242
Segment income (expense) (EBT)	**302,415**	**24,482**	**326,897**	**20,504**	**347,401**
Income tax expense					77,826
Profit or loss					**269,575**
Non-current assets					
Capital expenditure	72,503	79	72,582	–	72,582
Depreciation and amortisation	80,271	326	80,597	–	80,597
Impairment losses	431	–	431	–	431
Reversals of impairment losses	2,737	–	2,737	–	2,737
Intangible assets	215,088	780	215,868	–	215,868
Property, plant and equipment	702,423	28	702,451	–	702,451
Trucks for short-term rental	459,143	–	459,143	–	459,143
Trucks for lease from financial services	–	712,225	712,225	–144,818	567,407
Investments in companies accounted for using the equity method	69,749	–	69,749	–	69,749
Other financial assets	25,187	–	25,187	–24,409	778
Inventories	934,318	63,264	997,582	–3,586	993,996
Receivables from financial services	–	1,476,244	1,476,244	–13,537	1,462,707
Trade accounts receivable and contract assets	962,580	123,700	1,086,280	–177,959	908,321
Cash and cash equivalents and securities	511,090	23,626	534,716	–	534,716
Other assets	368,572	137,956	506,528	–257,541	248,987
Assets 31/12	**4,248,150**	**2,537,823**	**6,785,973**	**–621,850**	**6,164,123**
Shareholders' equity 31/12	2,117,510	120,252	2,237,762	–186,310	2,051,452
Provisions for pensions	158,704	196	158,900	–	158,900
Other provisions	383,517	437	383,954	–25,617	358,337
Financial liabilities	602,878	7,022	609,900	–	609,900
Liabilities from financial services	–	1,992,448	1,992,448	–	1,992,448
Trade accounts payable	562,744	171,422	734,166	–177,970	556,196
Contract liabilities	209,306	155	209,461	–	209,461
Other liabilities	213,491	245,891	459,382	–231,953	227,429
Liabilities 31/12	2,130,640	2,417,571	4,548,211	–435,540	4,112,671
Shareholders' equity and liabilities 31/12	**4,248,150**	**2,537,823**	**6,785,973**	**–621,850**	**6,164,123**

Alongside the depreciation of property, plant and equipment and trucks for short-term rental, the main non-cash items stated as part of the "Intralogistics" segment income are monetary profit or loss resulting from the application of IAS 29, and changes in provisions for pensions and similar obligations and other provisions with an effect on profit or loss.

In addition, impairment losses of €1,332 thousand (previous year: reversals of €2,737 thousand) for acquired intangible assets and write-downs amounting to €4,163 thousand (previous year: €3,347 thousand) and reversals of impairment losses amounting to €1,554 thousand (previous year: €– thousand) in connection with capitalised development expenditure were recorded in the "Intralogistics" segment income in the reporting year. In the previous year, the "Intralogistics" segment income also included impairment losses totalling €706 thousand for property, plant and equipment and trucks for short-term rental of the Ukrainian sales company.

The ROCE financial key figure represents the Jungheinrich Group's return based on the EBIT generated in the "Intralogistics" segment (annualised for interim reports) in relation to the capital employed (average of capital employed on current balance sheet date and at the balance sheet date in the last three quarters) that is attributable to this segment. ROCE in the reporting period was 15.9 per cent (previous year: 16.3 per cent).

The following tables report revenue by recipient region and show non-current assets affecting intangible assets and property, plant and equipment, broken down by region.

Revenue by region

in € thousand	**2023**	2022
Germany	1,205,359	1,106,158
Italy	513,878	475,243
France	447,320	369,813
United Kingdom	338,035	264,437
Other Europe	1,954,789	1,801,394
Other countries	1,086,506	746,249
Revenue	**5,545,887**	**4,763,294**

There were no relationships with individual external customers accounting for a material share of revenue with respect to Group revenue in the 2023 and 2022 financial years.

The non-current assets by region shown in the following table refer to intangible assets and property, plant and equipment.

Non-current assets by region

in € thousand	**31/12/2023**	31/12/2022
Germany	527,223	492,728
Other Europe	322,767	269,641
Other countries	133,647	74,896
Consolidation	370,959	81,054
Intangible assets and property, plant and equipment	**1,354,596**	**918,318**

The consolidation item includes goodwill recognised in connection with business combinations.

(39) Earnings per share

The calculations are based on profit or loss attributable to shareholders of Jungheinrich AG, as reported in the consolidated statement of profit or loss.

Earnings per share

		2023	2022
Profit or loss	in € thousand	299,275	269,168
Shares outstanding[1]			
Ordinary shares	in thousand units	54,000	54,000
Preferred shares	in thousand units	48,000	48,000
Earnings per share (diluted/undiluted)			
Earnings per ordinary share	in €	2.92	2.63
Earnings per preferred share	in €	2.94	2.65

[1] Weighted average.

In the 2023 and 2022 financial years, no equity instruments diluted the earnings per share on the basis of the respective shares issued.

(40) Events after the close of the 2023 financial year

Purchase price financing totalling €300,000 thousand in connection with the acquisition of Storage Solutions was raised in 2023. This financing was made available via two bilateral credit line agreements. The loans were repaid in February 2024 as planned. At the same time, the purchase price was funded pro rata with the issue of a promissory note loan in the amount of €150,000 thousand.

With effect from 1 April 2024, Jungheinrich has appointed Mr Udo Panenka as a new member of the Board of Management, responsible for the new Automation division.

(41) Fees for the auditor of the consolidated financial statements and the auditor's network companies

Details on the fees charged by the auditor of the consolidated financial statements, PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Hamburg, for the year under review and the previous year are presented in the following table.

Fees charged by the auditor

in € thousand	**2023**	2022
Audit services	862	791
Other assurance services	128	91
Tax services	–	–
Other services	13	10
Total	**1,003**	**892**

Other assurance services provided in the reporting year related to the audit of non-financial reporting. The other services used over the reporting year were associated with checks to ensure the Group's SWIFT-based banking connectivity solution was compliant with the CSCF framework.

The fees paid to and to be paid to PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Hamburg, and other companies in the PwC network for financial statements audit services totalled €3,294 thousand for the financial year from 1 January to 31 December 2023.

The fees invoiced by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Hamburg, and other companies in the PwC network to Jungheinrich AG and affiliated companies over which Jungheinrich exerts control and that are included in the consolidated financial statements for the period that the consolidated financial statements cover amounted to €131 thousand for other audit services, €96 thousand for tax services and €13 thousand for other services.

(42) Related party disclosures

Jungheinrich AG's major ordinary shareholders are LJH-Holding GmbH, Wohltorf, and WJH-Holding GmbH, Aumühle.

In addition to the subsidiaries included in the consolidated financial statements, Jungheinrich has business relationships with joint ventures, associated companies, nonconsolidated affiliated companies and other companies in which Jungheinrich holds an interest. All the relationships with these companies are the result of normal business activities and are conducted, unless indicated otherwise, on arm's length terms. The transactions with non-consolidated affiliated companies involved minor amounts.

The volume of trade between fully consolidated companies of the Jungheinrich Group and joint ventures and associated companies are presented in the following table.

Business relations with joint ventures and associated companies

	Products and services provided		Products and services received		Trade accounts receivable from		Trade accounts payable to	
in € thousand	**2023**	2022	**2023**	2022	**31/12/2023**	31/12/2022	**31/12/2023**	31/12/2022
JULI Motorenwerk s.r.o., Czechia[1]	98	45	80,222	84,337	–	–	6,174	5,497
Jungheinrich Heli Industrial Truck Rental (China) Co., Ltd., China[1]	24,913	27,104	1,302	1,692	4,617	6,207	408	140
JT Energy Systems GmbH, Germany[2]	35,406	2,972	78,311	47,972	7	5	16,848	15,068
Schwerter Profile GmbH, Germany	–	–	12,600	21,125	–	–	401	647
Other joint ventures	6,929	4,658	2,474	3,208	490	462	347	524
Joint ventures	**67,346**	**34,779**	**174,909**	**158,334**	**5,114**	**6,674**	**24,178**	**21,876**
Cebalog GmbH, Germany	186	207	88,350	98,673	18	4	25,573	25,258
Magazino GmbH, Germany[3]	–	–	340	449	n/a	–	n/a	71
Associated companies	**186**	**207**	**88,690**	**99,122**	**18**	**4**	**25,573**	**25,329**

[1] Including subsidiaries.

[2] The details for products and services provided/received for 2022 only cover the period May–December 2022, as the company was consolidated as a subsidiary up to and including April 2022.

[3] The details for goods and services provided/received for 2023 only cover the period January–August 2023, as the company was consolidated as a subsidiary as from 23 August 2023.

As of 31 December 2023 there were receivables of €6,750 thousand (previous year: €9,241 thousand) from a loan granted to Schwerter Profile GmbH, Schwerte (Germany). The bullet loan, with interest charged at market rates, has a fixed term which ends on 30 June 2026. However, the borrower is entitled to repay the loan early in full or in part, without an early repayment penalty. The loan agreement contains a subordination agreement.

As of 31 December 2023 there were receivables of €6,093 thousand (previous year: €6,035 thousand) from a loan granted to JT Energy Systems GmbH, Freiberg (Germany). The bullet loan, with interest charged at market rates, had a fixed term to 24 April 2023 and continues indefinitely thereafter. The loan agreement contains a subordination agreement.

On 31 December 2023, receivables from financing vis-à-vis Malikon GmbH, Eslarn (Germany) amounted to €88 thousand (previous year: €88 thousand).

As of 31 December 2023, other liabilities from financing vis-à-vis Supralift GmbH & Co. KG, Hofheim am Taunus (Germany) amounted to €121 thousand (previous year: €120 thousand) and vis-à-vis TREX.PARTS GmbH & Co. KG, Sittensen (Germany) amounted to €3 thousand (previous year: €3 thousand).

Contingent liabilities of the Jungheinrich Group from letters of comfort issued for joint ventures and associated companies as at the balance sheet date are presented in note (35) [page 160].

Members of the Board of Management or the Supervisory Board of Jungheinrich AG are members of supervisory boards or comparable committees of other companies with which Jungheinrich AG has relationships as part of its operating activities. All transactions with these companies are conducted on arm's length terms.

Information about the remuneration of the Supervisory Board and Board of Management can be found in note (43).

(43) Total remuneration of the Board of Management and the Supervisory Board

Total remuneration of the active members of the Board of Management pursuant to Section 314, Paragraph 1, Item 6a HGB amounted to €7,281 thousand in 2023 (previous year: €4,930 thousand). In addition to basic remuneration, this included remuneration in kind and fringe benefits, the short-term incentive (STI) and long-term incentive (LTI – a share-based performance-related component with a long-term incentive effect). The appropriateness requirement was taken into consideration when determining the individual variable remuneration.

The LTI has a term of three years and is allocated annually in the form of virtual performance share (VPS) tranches. Settlement occurs exclusively in cash at the end of the relevant performance period. The target amount forms the basis for the allocation and amounts to 55 per cent of the basic remuneration for each member of the Board of Management. At the start of the term, the target amount is divided by Jungheinrich AG's average share price (the arithmetical mean of the closing prices in the last 120 trading days before the start of the performance period) to calculate the number of virtual shares (VPS) assigned conditionally. The target values for the performance criteria are set by the Supervisory Board, and the degree to which they have been achieved is decided by the Supervisory Board after the end of the performance period. The number of final VPS is always limited to 150 per cent of the originally allocated VPS.

Based on the currently applicable remuneration system, a total of 78,852.69 VPS were granted in 2023 for the last financial year's LTI (previous year: 43,046.19). The fair value determined by Monte Carlo simulation at the time when they were granted was €1,630 thousand (previous year: €1,624 thousand).

The tranches for 2021–2023, 2022–2024 and 2023–2025 have been recognised as cash-settled share-based payment transactions pursuant to IFRS 2. The fair value is calculated at every balance sheet date and recognised as a personnel expense, distributed on a straight-line basis over the vesting period and as a provision in the same amount. As of 31 December 2023, provisions had been made for the LTI amounting to €3,366 thousand (previous year: €794 thousand), of which €1,684 thousand was for the 2021–2023 LTI tranche.

The LTI calculation is based on the financial performance criteria of "return on capital employed (ROCE)" and "relative total shareholder return", and on the sustainability-related non-financial performance criterion of "lithium-ion equipment ratio".

The entitlements for the LTI for the 2021 financial year (2021–2023 tranche) were fully awarded with the activities in the 2023 financial year. In this regard, the actual payment will be measured based on target achievement determined by the Supervisory Board according to the currently applicable remuneration system and paid in April 2024. The payment of LTI is dependent on the weighted degree of overall target achievement, which is determined using the above performance criteria, and the performance of the reference share price.

Provisions of €2,019 thousand (previous year: €1,486 thousand) were reported as of 31 December 2023 for the STI for active members of the Board of Management. The entitlements were fully awarded with the activities in the 2023 financial year. In this regard, the actual payment will be measured based on target achievement determined by the Supervisory Board according to the currently applicable remuneration system and paid in April 2024. The payment of STI is dependent on the weighted degree of overall target achievement, which is determined using "Group EBT return on sales", "increase in Group revenue" and "equipment ratio of lithium-ion".

There were pension commitments for all active members of the Board of Management; the corresponding provisions amount to €3,613 thousand (previous year: €2,812 thousand). The pensions will be paid out at the end of the 63rd year as lifelong monthly pensions as long as there is no active employment relationship with Jungheinrich AG at this point. The provision for dependants for spouses or partners and children entitled to maintenance is restricted to a maximum of 100 per cent of the regular pension claim.

The disclosure of the remuneration of management staff in key positions in the Jungheinrich Group pursuant to IAS 24 includes the remuneration of active members of the Board of Management and the Supervisory Board.

Remuneration of the Board of Management and the Supervisory Board

	Board of Management		Supervisory Board	
in € thousand	**2023**	2022	**2023**	2022
Short-term benefits due	5,651	4,856	1,175	1,140
Termination benefits	1,138	–	–	–
Post-employment benefits	263	709	–	–
Share-based payments	2,573	74	–	–
Total	**9,625**	**5,639**	**1,175**	**1,140**

In the reporting year, the Supervisory Board made arrangements for succession planning for the Board of Management. The employment contracts of Mr Christian Erlach and Dr Volker Hues were extended until 31 December 2024 (Mr Erlach) and 31 March 2027 (Dr Hues) respectively. A provision for early termination was added to the contracts. Accordingly, in the event of early resignation from office with the agreement of the Supervisory Board after 30 June 2024 (Mr Erlach) or after 1 July 2025 (Dr Hues), the basic and variable remuneration as well as the fringe benefits and pension commitment will continue to be paid until the regular end of the respective employment contract. A termination agreement was concluded with Ms Sabine Neuß in the reporting year, according to which Ms Neuß will resign from office by mutual agreement by 30 June 2024. The basic and variable remuneration as well as the fringe benefits and pension commitment will continue to be paid until the regular end of the employment contract on 31 December 2025. Ms Neuß is entitled to terminate the employment contract by mutual agreement by resigning from office on 30 April 2024 at the earliest. In this case, she will receive a compensatory payment equal to half of the outstanding remuneration from the date of termination instead of the continued remuneration payment. A provision for termination benefits for Ms Neuß of €1,138 thousand was recognised as of 31 December 2023. The early termination agreement with Dr Hues and individual provisions of the agreement with Ms Neuß are subject to the approval by the Annual General Meeting in May 2024 of a selectively amended remuneration system.

Post-employment benefits include the current service cost resulting from the defined benefit obligations to the members of the Board of Management. As share-based payments, expenses from share-based payments in the 2023 financial year are reported.

The Supervisory Board remuneration includes basic annual remuneration and fixed annual remuneration for sitting on Supervisory Board committees. The full Supervisory Board remuneration is only due after the end of the financial year. As of 31 December 2023, provisions for Supervisory Board remuneration totalled €1,175 thousand (previous year: €1,140 thousand). These will be disbursed early in the next financial year. Employee representatives on the Supervisory Board receive a regular salary from their employment in the Group; the amount represents appropriate remuneration for their role and/or work within the Group.

As in the previous year, no advances or loans to members of the Board of Management or the Supervisory Board of Jungheinrich AG existed on 31 December 2023. Also as in the previous year, the company did not provide any guarantees for members of the Board of Management or Supervisory Board.

Total emoluments of former members of the Board of Management amounted to €1,195 thousand (previous year: €993 thousand).

As of 31 December 2023, Jungheinrich AG had accrued provisions amounting to €12,300 thousand (previous year: €11,868 thousand) for pensions of former members of the Board of Management.

(44) List of equity stakes held by Jungheinrich AG, Hamburg, in accordance with Section 313, Paragraph 2 of the German Commercial Code (HGB).

As of 31 December 2023, the following companies were included in the consolidated financial statements of Jungheinrich AG, Hamburg, by way of full consolidation:

Company name	Domicile, country	Share of voting rights and capital in %
Jungheinrich Vertrieb Deutschland AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Norderstedt AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Export AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Service & Parts AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Beteiligungs-GmbH	Hamburg, Germany	100.0
Jungheinrich Moosburg AG & Co. KG	Moosburg, Germany	100.0
Jungheinrich Degernpoint AG & Co. KG	Moosburg, Germany	100.0
Jungheinrich Logistiksysteme GmbH	Moosburg, Germany	100.0
Jungheinrich Projektlösungen AG & Co. KG	Offenbach am Main, Germany	100.0
Jungheinrich Digital Solutions AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Landsberg AG & Co. KG	Landsberg/Saalekreis, Germany	100.0
Jungheinrich Financial Services AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Rental International AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Financial Services International GmbH	Hamburg, Germany	100.0
Elbe River Capital S.A.	Luxembourg, Luxembourg	100.0
Hemmdal GmbH i.L.	Hamburg, Germany	100.0
Jungheinrich Systemlösungen Deutschland AG & Co. KG (formerly: ISI Automation GmbH & Co. KG)	Extertal, Germany	100.0
arculus GmbH	Munich, Germany	100.0
Magazino GmbH	Munich, Germany	100.0
Jungheinrich PROFISHOP AG & Co. KG	Hamburg, Germany	100.0
Jungheinrich Profishop GmbH	Vienna, Austria	100.0
Jungheinrich PROFISHOP AG	Hirschthal, Switzerland	100.0
Gebrauchtgeräte-Zentrum Dresden AG & Co. KG	Klipphausen/Dresden, Germany	100.0
Jungheinrich Finances Holding SAS	Vélizy-Villacoublay, France	100.0
Jungheinrich France SAS	Vélizy-Villacoublay, France	100.0
Jungheinrich Finance France SAS	Vélizy-Villacoublay, France	100.0
Jungheinrich Financial Services SAS	Vélizy-Villacoublay, France	100.0
Jungheinrich UK Holdings Ltd.	Milton Keynes, UK	100.0
Jungheinrich UK Ltd.	Milton Keynes, UK	100.0
Jungheinrich Lift Truck Finance Ltd.	Milton Keynes, UK	100.0
Jungheinrich Financial Services Ltd.	Milton Keynes, UK	100.0
Jungheinrich Italiana S.r.l.	Rosate/Milan, Italy	100.0
Jungheinrich Rental S.r.l.	Rosate/Milan, Italy	100.0
Jungheinrich Fleet Services S.r.l.	Rosate/Milan, Italy	100.0
Jungheinrich de España S.A.U.	Abrera/Barcelona, Spain	100.0
Jungheinrich Fleet Services S.L.	Abrera/Barcelona, Spain	100.0
Jungheinrich Digital Solutions s.l.	Madrid, Spain	100.0
Jungheinrich Nederland B.V.	Alphen a. d. Rijn, Netherlands	100.0
Jungheinrich Financial Services B.V.	Alphen a. d. Rijn, Netherlands	100.0
Jungheinrich AG	Hirschthal, Switzerland	100.0
Jungheinrich n.v./s.a.	Leuven, Belgium	100.0
Jungheinrich Austria Vertriebsges. m.b.H.	Vienna, Austria	100.0
Jungheinrich Fleet Services GmbH	Vienna, Austria	100.0
Jungheinrich Polska Sp. z o.o.	Ozarow Mazowiecki/Warsaw, Poland	100.0
Jungheinrich Norge AS	Oslo, Norway	100.0
Jungheinrich (ČR) s.r.o.	Modletice/Prague, Czechia	100.0
Jungheinrich Chomutov s.r.o.	Modletice/Prague, Czechia	100.0
Jungheinrich Svenska AB	Arlöv, Sweden	100.0
Jungheinrich Hungária Kft.	Biatorbágy/Budapest, Hungary	100.0
Jungheinrich Danmark A/S	Tåstrup, Denmark	100.0
Jungheinrich d.o.o.	Kamnik, Slovenia	100.0
Jungheinrich Portugal Equipamentos de Transporte, Lda.	Mem Martins/Lisbon, Portugal	100.0
Jungheinrich Lift Truck Ltd.	Maynooth/Co. Kildare,	100.0
Jungheinrich Hellas EPE	Acharnes/Athens, Greece	100.0
Jungheinrich Istif Makinalari San. ve Tic. Ltd. Sti.	Alemdag/Istanbul, Türkiye	100.0
Jungheinrich spol. s.r.o.	Senec, Slovakia	100.0
Jungheinrich Lift Truck Singapore Pte Ltd.	Singapore, Singapore	100.0
Jungheinrich Lift Truck Malaysia Sdn. Bhd.	Shah Alam/Kuala Lumpur, Malaysia	100.0
Jungheinrich Lift Truck Comercio de Empilhadeiras Ltda.	Itupeva-SP, Brazil	100.0
Jungheinrich Lift Truck OOO	Moscow, Russia	100.0

Company name	Domicile, country	Share of voting rights and capital in %
Jungheinrich Parts OOO	Moscow, Russia	100.0
Jungheinrich Lift Truck TOV	Kiev, Ukraine	100.0
Jungheinrich Lift Truck SIA	Riga, Latvia	100.0
Jungheinrich Lift Truck UAB	Vilnius, Lithuania	100.0
Jungheinrich Lift Truck Oy	Kerava, Finland	100.0
Jungheinrich (Shanghai) Management Co., Ltd.	Shanghai, China	100.0
Jungheinrich Lift Truck (Shanghai) Co., Ltd.	Shanghai, China	100.0
Jungheinrich Lift Truck Manufacturing (Shanghai) Co., Ltd.	Qingpu/Shanghai, China	100.0
Jungheinrich Lift Truck Ltd.	Samuthprakarn/Bangkok, Thailand	100.0
Jungheinrich Lift Truck India Private Ltd.	Mumbai, India	100.0
Jungheinrich Lift Truck Corporation	Houston/Texas, USA	100.0
Jungheinrich Systemlösungen GmbH	Graz, Austria	100.0
Jungheinrich South Africa (Pty) Ltd.	Edenvale/Johannesburg, South Africa	100.0
Jungheinrich Romania S.R.L.	Aricestii Rahtivani, Romania	100.0
Jungheinrich Reconditionare Romania S.R.L.	Ploiești, Romania	100.0
Jungheinrich Business Services Romania S.R.L.	Brașov, Romania	100.0
Jungheinrich Rentalift SpA	Pudahuel/Santiago de Chile, Chile	100.0
Jungheinrich Colombia SAS	Mosquera/Bogotá, Colombia	100.0
Jungheinrich Ecuador S.A.	Guayaquil, Ecuador	100.0
Jungheinrich Perú S.A.C.	Lurín/Lima, Peru	100.0
Jungheinrich doo	Novi Banovci, Serbia	100.0
MIAS GmbH	Munich, Germany	100.0
MIAS Hungary Kft.	Gyöngyös, Hungary	100.0
MIAS Holding Inc.	Charlotte/North Carolina, USA	100.0
MIAS Property LLC	Charlotte/North Carolina, USA	100.0
MIAS Inc.	Charlotte/North Carolina, USA	100.0
MIAS Singapore Pte. Ltd.	Singapore, Singapore	100.0
MIAS Materials Handling (Kunshan) Co., Ltd.	Kunshan, China	100.0
MIAS Australia Pty Ltd.	Narrabeen/Sydney, Australia	100.0
Jungheinrich Australia Holdings Pty Ltd.	Adelaide, Australia	100.0
Jungheinrich Australia Pty Ltd.	Adelaide, Australia	100.0[1]
Jungheinrich Fleet Services Pty Ltd.	Adelaide, Australia	100.0[1]
Jungheinrich New Zealand Ltd.	Auckland, New Zealand	100.0
SSI Acquisition LLC	Westfield/Indiana, USA	100.0
SSI Holdings Inc.	Westfield/Indiana, USA	100.0
Warehouse Solutions Inc.	Westfield/Indiana, USA	100.0
Storage Solutions Inc.	Westfield/Indiana, USA	100.0
Logistics Handling Solutions LLC	Westfield/Indiana, USA	100.0
SSI-SNC Solutions, LLC	Rancho Cucamonga/California, USA	100.0
Electronic Mechanical Integration Technologies Inc.	Nashville/Tennessee, USA	100.0
Universal-FORMICA-Fonds[2]	Frankfurt/Main, Germany	0.0

[1] 10.0 per cent of the shares are held indirectly via a trust.

[2] Included as a structured entity in accordance with IFRS 10.

As of 31 December 2023, the following joint ventures were included in the consolidated financial statements of Jungheinrich AG, Hamburg, using the equity method:

Company name	Domicile, country	Share of voting rights and capital in %
JULI Motorenwerk s.r.o.	Moravany, Czechia	50.0
Supralift GmbH & Co. KG	Hofheim am Taunus, Germany	50.0
Fujian JULI Motor Co., Ltd.	Putian, China	50.0
Jungheinrich Heli Industrial Truck Rental (China) Co., Ltd.	Shanghai, China	50.0
Jungheinrich Heli Industrial Truck Rental (Shanghai) Co., Ltd.	Shanghai, China	45.5
Jungheinrich Heli Industrial Truck Rental (Changzhou) Co., Ltd.	Changzhou, China	45.5
Jungheinrich Heli Industrial Truck Rental (Guangzhou) Co., Ltd.	Guangzhou, China	45.5
Jungheinrich Heli Industrial Truck Rental (Tianjin) Co., Ltd.	Tianjin, China	45.5
Malikon GmbH	Eslarn, Germany	50.0
Rocrich AGV Solutions LLC (formerly: MCJ Supply Chain Solutions LLC)	Houston/Texas, USA	50.0
TREX.PARTS GmbH & Co. KG	Sittensen, Germany	50.0
TREX.PARTS SAS	Reims, France	50.0
TREX.PARTS SRL	Mouscron, Belgium	50.0
JT Energy Systems GmbH	Freiberg, Germany	40.0
Schwerter Profile GmbH	Schwerte, Germany	50.0

As of 31 December 2023, the following associated companies were included in the consolidated financial statements of Jungheinrich AG, Hamburg, using the equity method:

Company name	Domicile, country	Share of voting rights and capital in %
Cebalog GmbH	Pyrbaum, Germany	40.0

As of 31 December 2023, the following companies were included in the consolidated financial statements of Jungheinrich AG, Hamburg at fair value:

Company name	Domicile, country	Share of voting rights and capital in %
Jungheinrich Polska Produkcja Sp. z o.o.	Bronisze, Poland	100.0
Irapol Sp. z o.o.	Łódź, Poland	100.0
Jungheinrich Business Services Croatia d.o.o.	Zagreb, Croatia	100.0
Jungheinrich Katalog Verwaltungs-GmbH i.L.	Hamburg, Germany	100.0
Gebrauchtgeräte-Zentrum Dresden Verwaltungs-GmbH	Klipphausen/Dresden, Germany	100.0
The Jungheinrich Australia Trust	Adelaide, Australia	100.0
Jungheinrich Latinoamérica y Caribe Ltda.	Pudahuel/Santiago de Chile, Chile	100.0
Jungheinrich Lift Truck Middle East (FZE)	Sharjah, UAE	100.0
Multiton MIC Corporation	Richmond/Virginia, USA	100.0
Jungheinrich Unterstützungskasse GmbH	Hamburg, Germany	100.0
FORTAL Administracào e Participacoes S.A.	Rio de Janeiro, Brazil	100.0
Boss Manufacturing Ltd.	Leighton Buzzard, UK	100.0
ISI Verwaltungs GmbH i.L.	Extertal, Germany	100.0
Supralift Beteiligungs- und Kommunikations-Gesellschaft mbH	Hofheim am Taunus, Germany	50.0
TREX.PARTS Management GmbH	Sittensen, Germany	50.0
NEOintralogistics GmbH	Düsseldorf, Germany	12.8

Investments in subsidiaries and associates were measured at fair value, which, due to their inactive or minimal business activities to the Group and for the presentation of a true and fair view of the financial position, financial performance, and results of operations, are of minor significance.

(45) Application of Section 264, Paragraph 3, and Section 264b of the German Commercial Code (HGB)

The following German subsidiaries included in the consolidated financial statements of Jungheinrich AG made use of the waiver pursuant to Section 264, Paragraph 3, and Section 264b of the German Commercial Code (HGB) to some extent:

- Jungheinrich Vertrieb Deutschland AG & Co. KG, Hamburg
- Jungheinrich Norderstedt AG & Co. KG, Hamburg
- Jungheinrich Export AG & Co. KG, Hamburg
- Jungheinrich Service & Parts AG & Co. KG, Hamburg
- Jungheinrich Moosburg AG & Co. KG, Moosburg
- Jungheinrich Degernpoint AG & Co. KG, Moosburg
- Jungheinrich Projektlösungen AG & Co. KG, Offenbach am Main
- Jungheinrich Digital Solutions AG & Co. KG, Hamburg
- Jungheinrich Landsberg AG & Co. KG, Landsberg/Saalekreis
- Jungheinrich Rental International AG & Co. KG, Hamburg
- Jungheinrich Financial Services AG & Co. KG, Hamburg
- Jungheinrich PROFISHOP AG & Co. KG, Hamburg
- Gebrauchtgeräte-Zentrum Dresden AG & Co. KG, Klipphausen/Dresden
- Jungheinrich Beteiligungs-GmbH, Hamburg
- Jungheinrich Financial Services International GmbH, Hamburg
- Jungheinrich Logistiksysteme GmbH, Moosburg
- Jungheinrich Systemlösungen Deutschland AG & Co. KG (formerly: ISI Automation GmbH & Co. KG), Extertal
- MIAS GmbH, Munich
- arculus GmbH, Munich

(46) Issuance of the declaration regarding the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG)

In December 2023, the Board of Management and the Supervisory Board issued a declaration of compliance in accordance with Section 161 of the German Stock Corporation Act (AktG) and made it permanently and publicly accessible on the website of Jungheinrich Aktiengesellschaft.

Hamburg, 12 March 2024
Jungheinrich Aktiengesellschaft, the Board of Management

Dr Lars Brzoska   Christian Erlach   Dr Volker Hues   Sabine Neuß

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Responsibility statement

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

Hamburg, 12 March 2024

Jungheinrich Aktiengesellschaft
The Board of Management

Dr Lars Brzoska | Christian Erlach | Dr Volker Hues | Sabine Neuß

Independent Auditor's Report

To Jungheinrich Aktiengesellschaft, Hamburg

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Jungheinrich Aktiengesellschaft, Hamburg, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2023, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2023, and notes to the consolidated financial statements, including material accounting policy information. In addition, we have audited the group management report of Jungheinrich Aktiengesellschaft, which is combined with the Company's management report, for the financial year from 1 January to 31 December 2023. In accordance with the German legal requirements, we have not audited the content of the disclosures marked as unaudited in section "Internal control and risk management system" 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 § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2023, and of its financial performance for the financial year from 1 January to 31 December 2023, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the disclosures in section "Internal control and risk management system" of the group management report referred to above.

Pursuant to § 322 Abs. 3 Satz [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 Audit Opinions

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

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2023. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

1. **Recoverability of goodwill**
2. **Recoverability of intangible assets, property, plant and equipment and trucks for short-term rental**
3. **Accounting of lessor contracts in the sales area**
4. **First-time consolidation of Storage-Solutions (SSI)-Group**

Our presentation of these key audit matters has been structured in each case as follows:

1. Matter and issue
2. Audit approach and findings
3. Reference to further information

Hereinafter we present the key audit matters:

1 Recoverability of goodwill

1 In the Company's consolidated financial statements goodwill amounting in total to EUR 372.7 million (5.4% of total assets or 16,8% of equity) is reported under the "Intangible assets" balance sheet item. Goodwill is tested for impairment by the Company once a year or when there are indications of impairment to determine any possible need for write-downs. The impairment test is carried out at the level of the cash-generating units to which the relevant goodwill is allocated. The carrying amount of the relevant cash-generating units, including goodwill, is compared with the corresponding recoverable amount in the context of the impairment test. The recoverable amount is generally determined using the value in use. The present value of the future cash flows from the respective cash-generating units normally serves as the basis of valuation. Present values are calculated using discounted cash flow models. For this purpose, the adopted medium-term business plan of the Group forms the starting point which is extrapolated based on assumptions about long-term rates of growth. Expectations relating to future market developments and assumptions about the development of macroeconomic factors on the business activities of the Group are also taken into account. The discount rate used is the weighted average cost of capital for the respective cash-generating units. The impairment test determined that no write-downs were necessary.

The outcome of this valuation is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows from the respective cash-generating units, the discount rate used, the rate of growth and other assumptions, and is therefore subject to considerable uncertainty. Against this background and due to the complex nature of the valuation, this matter was of particular significance in the context of our audit.

2 As part of our audit, we assessed the methodology used for the purposes of performing the impairment test, among other things. After matching the future cash inflows used for the calculation against the adopted medium-term business plan of the Group, we assessed the appropriateness of the calculation, in particular by reconciling it with general and sector-specific market expectations. In addition, we assessed the appropriate consideration of the costs of Group functions. In the knowledge that even relatively small changes in the discount rate applied can have a material impact on the value of the entity calculated in this way, we focused our testing in particular on the parameters used to determine the discount rate applied, and assessed the calculation model. In order to reflect the uncertainty inherent in the projections, we evaluated the sensitivity analyses performed by the Company. Taking into account the information available, we determined that the carrying amounts of the cash-generating units, including the allocated goodwill, were adequately covered by the discounted future cash flows. We also satisfied ourselves that the necessary disclosures were made in the notes.

Overall, the valuation parameters and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

3 The Company's disclosures on goodwill are contained in number 6 and 12 of the notes to the consolidated financial statements.

2 Recoverability of intangible assets, property, plant and equipment and trucks for short-term rental

1 In the Company's consolidated financial statements, an amount in total to EUR 1,824.8 million is reported under the balance sheet items "Intangible assets", "Property, plant and equipment", and "trucks for short-term rental". The recoverability of intangible assets, property, plant and equipment, and trucks for short-term rental was assessed as of the balance sheet date by means of impairment tests in accordance with IAS 36. The present value of the future cash flows from the respective cash-generating units normally serves as the basis of valuation. Present values are calculated using discounted cash flow models. For this purpose, the adopted medium-term business plan of the Group forms the starting point which is extrapolated based on assumptions about, for example, long-term growth rates to reflect a sustainable situation (so-called "perpetual annuity"). Expectations relating to future market developments and assumptions about the development of macroeconomic factors on the business activities of the Group are also taken into account. The discount rate used is the weighted average cost of capital for the respective cash-generating units. The impairment test determined that even after taking into account the fair value less costs of disposal, it was necessary to recognize write-downs amounting to a total of EUR 1.3 million with respect to the cash-generating units Ecuador, Denmark, Finland, Sputh Africa, Australia, Malaysia and Peru, In addition, reversals of write-downs amounting to a total of EUR 1.6 million were identified for the cash-generating unit China.

The outcome of this valuation is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows from the respective cash-generating units, the discount rate used, the rate of growth and other assumptions, and is therefore subject to considerable uncertainty. Against this background and due to the complexity of the methodological requirements, this matter was of particular significance in the context of our audit.

2 As part of our audit, we assessed the methodology used for the purposes of performing the impairment test and the determination of the weighted average costs of capital, among other things. After matching the future cash inflows used for the calculation against the adopted medium-term business plan of the Group, we assessed the appropriateness of the calculation, in particular by reconciling it with general and sector-specific market expectations. In addition, we assessed the appropriate consideration of the costs of Group functions in the impairment tests of the respective cash-generating units. In the knowledge that even relatively small changes in the discount rate applied can have a material impact on the value of the entity calculated in this way, we focused our testing in particular on the parameters used to determine the discount rate and growth rates applied, and assessed the calculation model. With regard to the cash-generating units for which the need for write-downs and reversal of write downs, respectively, was identified, we assessed whether the write-downs were appropriately determined and recognized. We also satisfied ourselves that the necessary disclosures were made in the notes. Overall, the valuation parameters and assumptions used by the executive directors are in line with our expectations and are also within the ranges considered by us to be reasonable.

3 The Company's disclosures on intangible assets, property, plant and equipment and trucks for short-term rental are contained in section "Accounting principles" and numbers 6, 12, 13 and 14 of the notes to the consolidated financial statements.

3 Accounting of lessor contracts in the sales area

1 In the Company's consolidated financial statements, carrying amounts in total to EUR 1,651.4 million (23.9% of total assets) are reported under the balance sheet item "'Receivables from financial services" and carrying amounts in total to EUR 1,038.1 million (15.0% of total assets) are reported under the balance sheet items "Trucks for short-term rental" and "Trucks for lease from financial services". Jungheinrich makes extensive use of leases as a sales instrument in the "Financial Services" operating segment. The corresponding agreements include both contracts in which Jungheinrich Group companies are contracting parties and those in which the leased asset was sold to external financial partners. Monetization mainly takes place through the long-term leasing of new trucks as leased assets to the end customer, the sale of the leased asset to a financial partner and subsequent leaseback as well as the leasing of the leased asset to the end customer at the same time (sale-and-leaseback) and the sale of the (leased) asset to a financial partner, who leases it to the end customer (vendor leasing).

Leases directly to the end customer are classified as finance leases or operating leases as defined by IFRS 16. In the case of sale and leaseback agreements concluded, the transaction is classified as a financing agreement and therefore a liability from financial services is recognized in addition to an asset. Vendor leases are classified uniformly as leases within the meaning of IFRS 16 in accordance with IFRS 15.

Leasing applications used throughout the Group have been set up to ensure the complete and correct recognition, categorization and classification of the various contract types in accordance with IFRS. The updating, programming, and administration of the classification and booking routines of the leasing applications are performed centrally in Germany, while contract recording is decentralized to the sales units or the Group's own financial services companies. The definition of criteria and parameters in the leasing applications requires discretionary decisions by the executive directors. Due to the high volume of transactions in connection with the different types of contracts, errors in this area can have a significant impact on the consolidated financial statements. Against this background, the assessment of the accounting treatment of leases in the sales area was of particular significance in the context of our audit.

2 As part of the audit, we first obtained an understanding of the process for accounting for leases in the sales area, including an understanding of the existing types of contracts as well as the company's internal controls in the leasing area. With the knowledge of the organizational structure and the overall process, the audit focused on the leasing application used and on the completeness and accuracy of the data input in the individual sub-areas. In a further step, we assessed whether the criteria and parameters defined in the leasing applications used were appropriate for accounting for the lease and whether the automatic booking and classification routines stored complied with the relevant IFRS. To this we examined the Jungheinrich Group Accounting Manual, as the basis for programming the routines, for compliance with IFRS. Furthermore, we assessed the appropriateness of the accounting and classification routines. Our assessment was based on a selected sample of contracts. Based on the data inputs, we verified for each selected contract whether the results of the leasing applications are in compliance with the relevant IFRS. We assessed the data inputs in the financial year in the individual sub-areas on a sample basis. In this context, we verified the accuracy, proper accrual and completeness of the data input using the original contracts.

We were able to satisfy ourselves that the criteria and parameters defined by the executive directors in the leasing application are appropriate overall for the accounting of leases in the sales area.

3 The Company's disclosures on accounting of lessor contracts in the sales area are contained in sections "Revenue recognition" and "Leasing and financial services" of the notes to the consolidated financial statements.

4 **First-time consolidation of Storage-Solutions (SSI)-Group**

1 With effect as at 15 March 2023, Jungheinrich Group acquired via Jungheinrich Lift Truck Corp., Houston/Texas, USA, 100% of the shares in Storage-Solutions (SSI)-Group and since then has held 100 percent of the shares in SSI Acquisition LLC, Westfield/Indiana (USA), and its subsidiaries.The total purchase price for the acquisition was EUR 325.4 million.The acquisition was accounted for as a business combination using the acquisition method in accordance with IFRS 3. In the context of the purchase price allocation, the identified assets and assumed liabilities and contingent liabilities of the company acquired were generally recognized at their fair values. After taking into account the revalued aquired assets of EUR 38.3 million, the resulting purchased goodwill amounts in total to EUR 287.1 million.

Due to the uncertainties in the estimations made in connection with the measurement of assets and liabilities as part of the purchase price allocation, and the overall material impact of the amounts involved in the acquisition on the assets, liabilities, financial position and financial performance of the Jungheinrich Group, this matter was of particular significance in the context of our audit.

2 In auditing the acquisition of Storage-Solutions (SSI)-Group, we initially inspected and assessed the corresponding contractual agreements and reconciled the purchase price paid as consideration for the acquired business operations received with the supporting payment documentation provided to us. In doing so, we assessed the delineation of the components included in the consideration transferred. Based on that, we evaluated the balance sheet underlying the acquisition based on the fair values at the time of first-time consolidation. This involved assessing the appropriateness of, among other things, the models on which the valuations were based as well as the valuation parameters and assumptions used. Given the special features relating to the calculation of the fair values within the context of the purchase price allocation, we received support in our assessment from our valuation specialists. We also checked the notes to the financial statements that are required under IFRS 3.

Overall, we were able to satisfy ourselves that this acquisition was presented appropriately in the financial statements and that the estimates and assumptions made by the executive directors are comprehensible and adequately substantiated.

3 The Company's disclosures on the first-time consolidation are contained in section "Significant aquisitions" of the notes to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the disclosures marked as unaudited in section "Internal control and risk management system" of the group management report as an unaudited part of the group management report.

The other information comprises further

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB
- the separate non-financial report to comply with §§ 289b to 289e HGB and with §§ 315b to 315c HGB
- all remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report

Our audit 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 audit opinion or any other form of assurance conclusion thereon.

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

- is materially inconsistent with the consolidated financial statements, with the group management report disclosures audited in terms of content or with our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

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 § 315e Abs. 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 audit 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 § 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 audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit 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 audit 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 § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit 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 audit 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, actions taken to eliminate threats or safeguards applied.

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 § 317 Abs. 3a HGB

Assurance Opinion

We have performed assurance work in accordance with § 317 Abs. 3a HGB to obtain reasonable assurance as to whether the rendering of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the electronic file Jungheinrich_KA_KLB_ESEF-2023-12-31.zip and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 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 electronic file identified above.

In our opinion, the rendering of the consolidated financial statements and the group management report contained in the electronic file identified above and prepared for publication purposes complies in all material respects with the requirements of § 328 Abs. 1 HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the financial year from 1 January to 31 December 2023 contained in the "Report on the Audit of the Consolidated Financial Statements and on 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 electronic file identified above.

Basis for the Assurance Opinion

We conducted our assurance work on the rendering of the consolidated financial statements and the group management report contained in the electronic file identified above in accordance with § 317 Abs. 3a HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering, of Financial Statements and Management Reports, Prepared for Publication Purposes in Accordance with § 317 Abs. 3a HGB (IDW AsS 410 (06.2022)) and the International Standard on Assurance Engagements 3000 (Revised). 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: Requirements for Quality Management in the Audit Firm (IDW QMS 1 (09.2022)).

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 § 328 Abs. 1 Satz 4 Nr. [number] 1 HGB and for the tagging of the consolidated financial statements in accordance with § 328 Abs. 1 Satz 4 Nr. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of § 328 Abs. 1 HGB for the electronic reporting format, whether due to fraud or error.

The supervisory board is responsible for overseeing the process for preparing 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 non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the assurance work. We also:

- Identify and assess the risks of material non-compliance with the requirements of § 328 Abs. 1 HGB, whether due to fraud or error, 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 work 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 electronic file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815 in the version in force at the date of the consolidated financial statements on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and 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 Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, in the version in force at the date of the consolidated financial statements, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 11 May 2023. We were engaged by the supervisory board on 11 May 2023. We have been the group auditor of the Jungheinrich Aktiengesellschaft, Hamburg, without interruption since the financial year 2020.

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

Reference to an 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 filed in the 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 "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 § 317 Abs. 3a HGB" 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

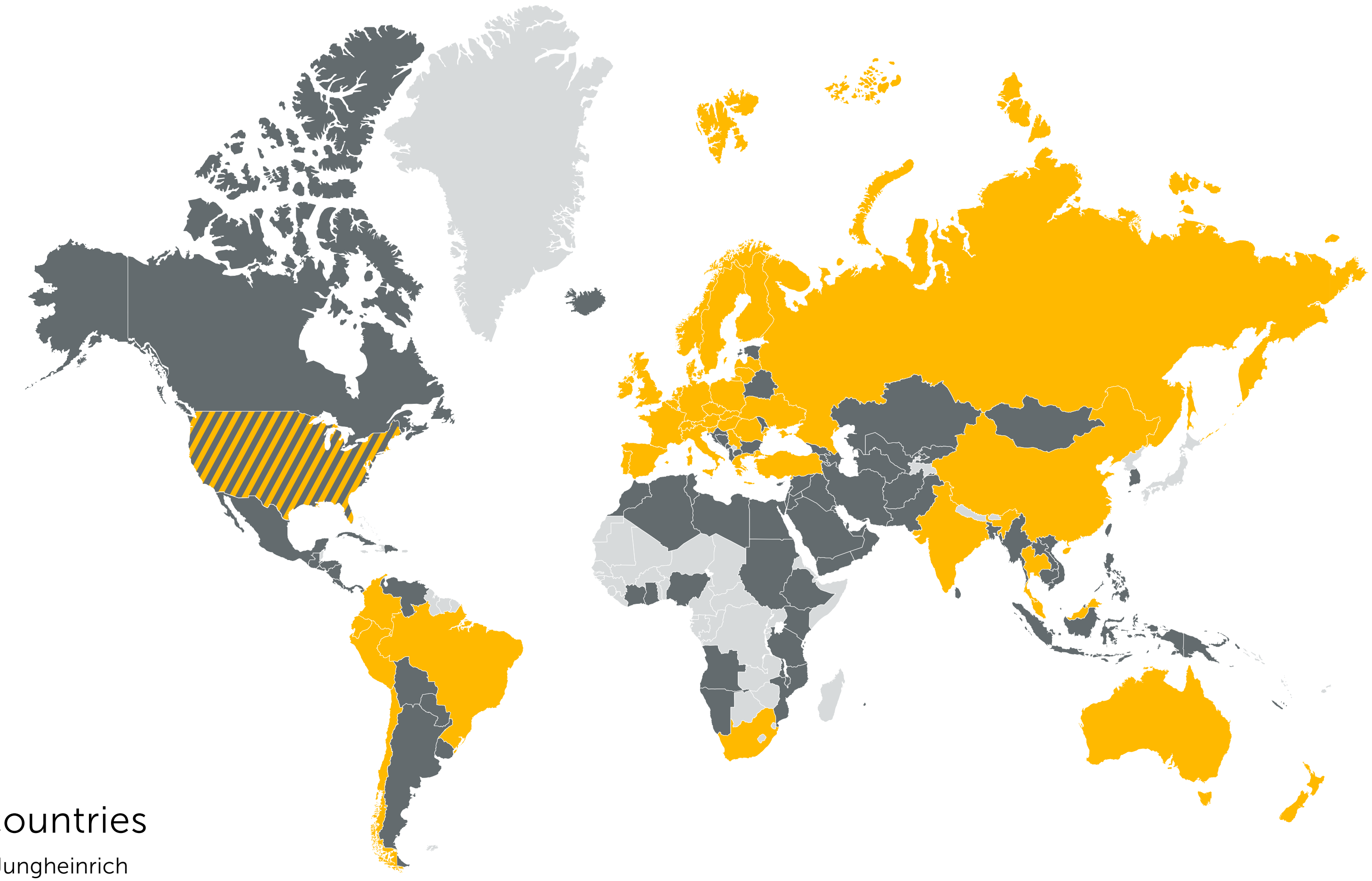
The German Public Auditor responsible for the engagement is Alexander Fernis.

Hamburg, 12 March 2024

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Alexander Fernis	ppa. Stefanie Bubbers
Wirtschaftsprüfer	Wirtschaftsprüferin
(German Public Auditor)	(German Public Auditor)

Jungheinrich worldwide



42 countries

Own direct sales companies

Approximately 80 countries

Partner of Jungheinrich

Five-year overview

Jungheinrich Group		2023	2022	2021	2020	2019
Incoming orders	Units	121,800	128,800	162,400	111,400	121,900
	€ million	5,238	4,791	4,868	3,777	3,922
Orders on hand 31/12	€ million	1,441	1,595	1,519	821	787
Revenue	€ million	5,546	4,763	4,240	3,809	4,073
thereof Germany	€ million	1,205	1,106	1,014	917	966
thereof abroad	€ million	4,341	3,357	3,226	2,892	3,107
Foreign ratio	%	78	77	76	76	76
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	€ million	877	787	737	643	670
Earnings before interest and income taxes (EBIT)	€ million	430	386	360	218	263
EBIT return on sales (EBIT ROS)	%	7.8	8.1	8.5	5.7	6.4
ROCE	%	15.9	16.3	20.2	10.8	–
Earnings before taxes (EBT)	€ million	399	347	349	200	242
EBT return on sales (EBT ROS)	%	7.2	7.3	8.2	5.3	5.9
Profit or loss	€ million	299	270	267	151	177
Free cash flow	€ million	15	–239	89	–	–
Capital expenditure[1]	€ million	90	73	71	75	157
Research and development expenditure	€ million	152	128	102	89	86
Balance sheet total 31/12	€ million	6,910	6,164	5,769	5,411	5,231
Trucks for short-term rental	€ million	470	459	363	289	353
Trucks for lease from financial services	€ million	568	567	500	516	558
Receivables from financial services	€ million	1,651	1,463	1,407	1,327	1,260
Liabilities from financial services	€ million	2,147	1,992	1,896	1,803	1,760
Shareholders' equity 31/12	€ million	2,222	2,051	1,803	1,546	1,488
thereof subscribed capital	€ million	102	102	102	102	102
Equity ratio (Group)	%	32	33	31	29	28
Equity ratio (Intralogistics)	%	47	50	48	45	46
Net debt (+)/Net credit (–)	€ million	262	75	–222	–194	172
Indebtedness ratio	Years	0.36	0.11	<0	<0	0.32
Employees 31/12	FTE[2]	21,117	19,807	19,103	18,103	18,381
thereof Germany	FTE[2]	8,688	8,251	7,995	7,577	7,635
thereof abroad	FTE[2]	12,429	11,556	11,108	10,526	10,746
Earnings per preferred share[3]	€	2.94	2.65	2.62	1.49	1.75
Dividend per share – ordinary share	€	0.73[4]	0.66	0.66	0.41	0.46
– preferred share	€	0.75[4]	0.68	0.68	0.43	0.48

Explanatory notes to the key financial data:

Equity ratio = Shareholders' equity ÷ Total capital × 100

EBIT return on sales (EBIT ROS) = EBIT ÷ Revenue × 100

EBT return on sales (EBT ROS) = EBT ÷ Revenue × 100

EBIT return on capital employed Intralogistics (ROCE) = EBIT intralogistics ÷ average capital employed Intralogistics × 100

Net indebtedness = Financial liabilities – Cash and cash equivalents and securities

Indebtedness ratio = Net indebtedness ÷ EBITDA (excluding the depreciation of trucks for lease from financial services)

1 Property, plant and equipment and intangible assets without capitalised development expenditure and right-of-use assets.

2 FTE = full-time equivalents.

3 Based on share of earnings attributable to the shareholders of Jungheinrich AG.

4 Proposal.

Financial calendar, Legal notice, Contact

FINANCIAL CALENDAR

28 March 2024
Balance sheet press conference (virtual)
Publication of the Annual Report 2023

28 March 2024
Analyst conference (virtual)

7 May 2024
Interim statement as of 31 March 2024

15 May 2024
Annual General Meeting 2024

20 May 2024
Dividend payment

9 August 2024
Interim report as of 30 June 2024

12 November 2024
Interim statement as of 30 September 2024

LEGAL NOTICE

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The German version shall always take precedence.

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