

OUR MISSION: GREEN MOBILITY

Annual report 2023



Key Group figures		2023	2022
Orders received	€ mill.	1,217.4	1,247.0
Order backlog	€ mill.	761.2	799.6
Income statement data			
Sales revenues	€ mill.	1,214.3	1,046.1
Core Components	€ mill.	546.7	482.1
Customized Modules	€ mill.	537.4	456.1
Lifecycle Solutions	€ mill.	163.5	136.0
EBITDA	€ mill.	158.0	131.2
EBITDA margin	%	13.0	12.5
EBIT	€ mill.	98.5	78.1
EBIT margin	%	8.1	7.5
Net interest result	€ mill.	(16.0)	(10.6)
EBT	€ mill.	82.5	67.5
Net income	€ mill.	55.3	56.0
Earnings per share	€	2.21	2.38
Return on capital employed ¹	%	10.5	8.2
Value added ¹	€ mill.	18.9	11.5
Balance sheet data			
Fixed assets ²	€ mill.	746.1	731.6
Capital expenditure	€ mill.	74.5	58.2
Depreciation/amortization	€ mill.	59.5	53.1
Closing working capital	€ mill.	193.1	191.6
Closing capital employed	€ mill.	939.2	923.2
Equity	€ mill.	638.5	625.1
Noncontrolling interests	€ mill.	28.1	27.2
Hybrid capital	€ mill.	148.3	148.3
Net financial debt	€ mill.	182.9	197.6
Net financial debt (including lease liabilities)	€ mill.	219.5	237.5
Total assets	€ mill.	1,392.7	1,368.8
Equity ratio	%	45.8	45.7
Cash flow statement data			
Gross cash flow	€ mill.	163.4	130.5
Cash flow from operating activities	€ mill.	137.3	71.6
Cash flow from investing activities	€ mill.	(65.4)	(44.9)
Cash flow from financing activities	€ mill.	(39.4)	(29.3)
Free cash flow	€ mill.	70.9	27.9
Workforce data			
Annual average headcount	Number	3,999	3,794
Core Components	Number	1,017	937
Customized Modules	Number	2,290	2,241
Lifecycle Solutions	Number	609	549
Vossloh AG/Holding Companies	Number	83	67
Personnel expenses	€ mill.	255.2	226.8
Share data			
Year-end closing price as of December 31	€	41.95	39.10
Closing market capitalization as of December 31	€ mill.	736.8	686.8

¹ Based on average capital employed

² Fixed assets = Intangible assets plus property, plant and equipment plus investment property plus investments in companies accounted for using the equity method plus other noncurrent financial instruments

Letter from the CEO	4	Risk and opportunity report	66
Overview of the year 2023	8	Internal control system	74
Vossloh stock	10	Outlook	77
Our mission: green mobility	12	Nonfinancial Group statement	80
Report of the Supervisory Board	26		
Declaration on Corporate Governance/ Corporate Governance Report	30	Consolidated financial statements of Vossloh AG	117
Combined management report	37	Income statement	118
Business and market environment	38	Statement of comprehensive income	118
Economic report	40	Cash flow statement	119
Macroeconomic and industry-specific conditions	40	Balance sheet	120
Company acquisitions	41	Statement of changes in equity	121
Results of operations	41	Notes to the consolidated financial statements	122
Financial position and investing activities	45	<i>Segment information by division and business unit</i>	122
Asset and capital structure	48		
General statement on the business performance and economic situation of the Vossloh Group	49	Responsibility statement	177
Business performance Core Components	50	Independent Auditor's report	178
Business performance Customized Modules	52	Remuneration report	185
Business performance Lifecycle Solutions	53	Service	
Vossloh AG – Analysis of the separate financial statements	54	Financial calendar 2024/2025	194
Statutory takeover-related disclosures pursuant to Section 289a and Section 315a HGB	56	Glossary	195
Workforce	60	Addresses	196
Research and development	61	Ten-year overview	197

Letter from the CEO

Dear shareholders,
ladies and gentlemen,

The instability in our world seems to be steadily increasing. The German Language Society has named the word „Crisis mode“ word of the year 2023, followed by „anti-Semitism“ and „unable to read“. In its review of the year, „Zeit Online“ refers to 2023 as the year of caesuras. War in the Middle East and Ukraine, the ongoing conflict in Syria, military coups in Africa, tensions between China and Taiwan. In other regions, earthquakes, forest fires and floods caused catastrophic damage and unimaginable human suffering. According to a report by the UN refugee agency UNHCR, around 110 million people worldwide were displaced in 2023.

In times of ever-increasing complexity, people are looking for supposedly simple answers and problem-solving strategies. As a result, right-wing political parties are gaining ground in many European countries and threatening the democratic order. Global economic growth lost significant momentum in 2023. The International Monetary Fund (IMF) forecasts global economic growth of 3.1 percent for 2024, which is still well below the average figure of 3.8 percent in recent years. For Germany, the IMF expects growth of just 0.5 percent in 2024, while the German government forecasts growth of just 0.2 percent. The DIHK industry association predicts that Germany will experience the biggest economic crisis in the last 20 years.

So the world around us is on the move, the speed of change is noticeably increasing and important events seem to be happening at breakneck speed. And we at Vossloh, with our distinctly international positioning, are not only part of it, but literally right in the middle of it. In 2023, Vossloh generated sales revenues in around 70 countries around the world. In many cases, the governments of the countries in which we operate are directly or indirectly our customers. So we are much more than just observers. We have to deal with the increasing complexity around us on a daily basis, act flexibly and quickly and constantly adapt to changing conditions. And this is precisely what we did remarkably well once again in 2023.

The past financial year was the third year in a row in which we recorded impressive sales growth. After an increase of 11.0 percent in the previous year and 8.4 percent in the year before, we succeeded in increasing our sales revenues by a remarkable 16.1 percent to €1.214 billion in 2023 – a new historic high in the rail infrastructure sector. It is particularly pleasing that our home market of Germany made a major contribution to this with sales growth of almost 40 percent. At €98.5 million, earnings before interest and taxes (EBIT) exceeded the previous year's figure by a remarkable 26.2 percent. The company's performance in 2023 was thus at the upper end of the guidance ranges for sales revenues and EBIT last issued in October 2023. We have thus once again proven that Vossloh is an excellently positioned company that is far more crisis-resistant than average.

This is also reflected in our orders received, which at €1.217 billion were just above our sales revenues. It marks the second-highest figure in the infrastructure business in the history of our company and was only slightly below the previous year's record figure by 2.4 percent. Winning important, long-term framework agreements, which are not directly reported as orders received, also underlines our sales success and reflects the high level of trust our customers place in us. At €761.2 million, our order backlog remains well above the historical average in the infrastructure sector. As a result, all of this forms an extremely solid basis for the current year 2024 and allows us to look to the future with confidence and optimism. In addition, we were able to further strengthen our position as a leading system house for all aspects of the rail track in the past financial year and expand our existing business relationships with key market participants. Significant examples include the expansion of our cooperation with Deutsche Bahn in the switches and service business and the long-term framework agreement with the Danish rail network operator Banedanmark for the supply of switch systems.



Oliver Schuster
CEO

Finally, I would like to emphasize the very remarkable improvement in our free cash flow. This figure rose significantly from €27.9 million in the previous year to €70.9 million. The group-wide Cash4Growth initiative, which we launched in spring 2023, played a noticeable role in the positive development of this key figure. This enabled us to identify and exploit considerable potential, particularly in the optimization of our net working capital. Another example of how we are constantly improving and becoming more efficient thanks to the input of our employees is our Fit 4 Future ideas program, which has been running since 2021. In 2023 alone, we received over 900 suggestions on how we can further improve our products and processes and reduce costs. In total, we implemented more than 400 ideas in the reporting period. Once again, it is clear that our success is largely due to the commitment and dedication of our employees, who make a decisive contribution every day. On behalf of my colleagues on the Executive Board, I would like to take this opportunity to thank them for their tireless efforts.

We are particularly pleased that a recent internal survey revealed that over 84 percent of our employees identify with Vossloh as an employer. This high approval rate is a clear sign of the trust and satisfaction of our workforce with their working environment and their prospects with us. It confirms our efforts to create an inspiring and supportive environment in which our employees feel valued, motivated and encouraged.

Our positioning as a green company in a future-oriented market certainly also plays an important role. Our ecologically sustainable business model is also reflected in our impressive results in the EU taxonomy – a classification system for sustainable economic activities. Here, 100 percent of our sales revenues are classified as taxonomy-eligible and 63 percent as taxonomy-aligned, making us one of the best business enterprises in Germany in these categories. The importance of these key figures is further underlined by the recent placement of sustainability-linked Schuldschein loans in the amount of €60 million in July 2023. The interest coupon on these loans is linked to the taxonomy alignment rate of our sales revenues through a bonus-malus rule, which underlines our commitment to environmental protection and responsible corporate governance. We are convinced that these aspects are decisive factors for our long-term success.

The rail infrastructure market is undergoing a profound transformation that continues to gain momentum. Advancing digitalization is changing the demands that customers place on us. It is no longer enough to supply high-quality products – a comprehensive understanding of the rail track system and the ability to provide customized solutions to individual customer problems are growing in importance. Digital applications are indispensable here – for example in the analysis, monitoring or maintenance of the track and its components. In this area, we are living

up to our pioneering role in rail infrastructure. With the development of our cloud-based digital platform Vossloh connect and its live launch in October 2023, we have reached another important milestone. As a one-stop shop platform for customers from the entire rail industry, Vossloh connect offers a range of state-of-the-art solutions that optimize the management and maintenance of rail infrastructure and thus contribute to higher safety, lower life cycle costs and improved overall performance. All digital solutions – mainly in-house developments by Vossloh, with additional complementary products from selected external partners – are integrated into a user-friendly system. Customers receive a holistic overview and can access real-time status information on their rail infrastructure as well as corresponding maintenance solutions. In addition, the acquisition of RailWatch's technology and team has enabled us to gain significant expertise in areas such as wheel-rail contact.

Ladies and gentlemen, as you can see, we at Vossloh are helping to shape the transformation of the rail industry and are planning to do so in the future. On the one hand, we want to enter into strategic partnerships to strengthen our innovative power, as we did in September 2023 with the Swedish digitalization expert Predge. On the other hand, we also plan to grow through acquisitions in view of the incipient consolidation that we are seeing in our industry. We will be one of the drivers of the inevitable consolidation of our market and thereby further expand value creation for our customers.

At the same time, we will be making significant investments in expanding our capacities over the next few years to ensure that we can continue to meet the increasing demands of our customers in the future. We are already working at full capacity at some locations. In order to meet the expected market growth, we will be investing significantly in Australia and Sweden, for instance. The development of new products and technologies naturally also plays a major role in this context. For example, we are currently implementing the series production of our self-developed EPS composite tie in Poland, a sustainable alternative to wooden ties impregnated with carcinogenic tar oil.

My dear shareholders, we have every reason to look ahead with confidence. We have set the course for a promising future. Despite the expiry of some major projects, we expect sales revenues of between €1.160 billion and €1.260 billion in 2024 thanks to strong overall market demand. We expect a further noticeable increase in EBIT to between €100 million and €115 million. Based on the mean value of the sales guidance, the EBIT margin should be between 8.3 percent and 9.5 percent.

Due to the continued good order situation and the positive business development, the Executive Board and Supervisory Board will propose to Vossloh AG's Annual General Meeting an increased dividend of €1.05 per share for the 2023 financial year compared to the previous year (€1.00 per share).

Ladies and gentlemen, on behalf of all the members of the Executive Board, I would like to thank you for the trust you have placed in us over the past financial year. We would be delighted if you continued to accompany us on our growth path and in this way contribute to advancing the economically and ecologically sensible turnaround in transportation all over the world.

Yours



Oliver Schuster
Chief Executive Officer, Vossloh AG



Oliver Schuster (CEO)

Jan Furnivall (COO)

Dr. Thomas Triska (CFO)

Q1 2023

✓ The Supervisory Board of Vossloh AG **extends the terms of office and contracts of Dr. Thomas Triska (CFO) and Jan Furnivall (COO)** for a further five years until October 31, 2028. Both have been members of the Executive Board since November 2020 and had already played a key role in shaping the future of the company in various management positions within the Vossloh Group over many years. With the reappointment, the Supervisory Board recognizes the very successful cooperation of all Executive Board members, which is characterized by great respect, trust and collegiality, and ensures the long-term continuation of the company's successful course.

✓ **Vossloh has made an extremely successful start** to the new fiscal year. Orders received in the first quarter amounted to €344.9 million, only slightly below the previous year's record figure. As of March 31, order backlog reached a new all-time high of €868.6 million. All divisions contributed to this. Group sales in the first quarter amounted to €256.3 million. Vossloh thus achieved the highest sales figure in the infrastructure business in a first quarter in the company's history. EBIT in the first quarter of 2023 rose to its highest level in twelve years.

Q2 2023

✓ Vossloh AG once again holds its **Annual General Meeting** as an in-person event in Düsseldorf. The shareholders approve all agenda items proposed by the Executive Board and Supervisory Board by a large majority. This also includes the dividend proposal of €1.00 per dividend-bearing share. 73.26 percent of the share capital is represented at the Annual General Meeting. The election of the four shareholder representatives on the Supervisory Board is also scheduled. Prof. Dr. Rüdiger Grube, Chairman of the Supervisory Board since 2020, Ulrich M. Harnacke, member of the Supervisory Board since 2015 and Deputy Chairman of the Supervisory Board as a whole, as well as Dr. Roland Bosch and Dr. Bettina Volkens, members of the Supervisory Board since 2020, are confirmed in their offices. The six-member body is completed by the employee representatives Martin Klaes and Marcel Knüpfer.

✓ Vossloh receives a **major order** to supply rail fastening systems for the construction of a high-speed line **in China**. The line connects the cities of Xiong'an in the northern province of Hebei and Shangqiu in the central Chinese province of Henan. With a planned route length of over 600 kilometers and speeds of up to 350 km/h, this line will make a significant contribution to improving the mobility of the population and to the economic development of the region.

✓ Based on the latest business development, **Vossloh raises its sales and EBIT forecast for the full year 2023**. The company now expects sales revenues of between €1.125 billion and €1.2 billion. The EBIT forecast has also been adjusted upwards and specified. For the current financial year, Vossloh expects EBIT of between €87 million and €94 million.

Q3 2023

✓ Vossloh AG issues **Schuldschein loans** with a volume of €60 million as part of a private placement. Half of the loan amount has a term of five years and the other half a term of seven years. Both tranches have variable interest rates. The special feature: **The amount of the interest coupon is linked to the alignment rate of sales revenues in accordance with the EU Taxonomy Regulation as part of a bonus-malus rule**. Vossloh is one of the best commercial enterprises in Germany in terms of the taxonomy-eligible and taxonomy-aligned criteria.

✓ Vossloh and DB Netz AG proceed on with their **successful cooperation in the field of preventive rail maintenance** with the high-speed grinding technology developed by Vossloh. The scope of high-speed grinding for 2024 is set to be at least 13,000 kilometers. The focus of the work is once again on the most heavily used connections, the so-called high-performance network. In addition to the actual grinding work, DB Netz AG has once again increased the use of extensive digital measurement and analysis technology. Important status data is collected and evaluated in real time during the crossing. This creates the basis for a transition from deadline-based to condition-based maintenance.

/ With effect from September 1, 2023, **Vossloh has taken over the extensive monitoring technology from Bonn-based RailWatch GmbH, thereby significantly expanding its digital competencies.** The RailWatch technology allows the identification of passing wagons, locomotives and multiple units, as well as the recording of the condition of wheels and brakes, including the detection of overheating brakes and axles and the distribution of axle loads, also with the help of artificial intelligence. Recording the condition data of rail vehicles is the next logical step in the further expansion of systematic track understanding, as the condition of the track over time is significantly influenced by wheel-rail contact.

/ **Vossloh and the data analysis company Predge** from Luleå, Sweden, join forces. The **strategic collaboration** combines Vossloh's in-depth expertise in the development and manufacture of switches with Predge's comprehensive expertise in data analysis and artificial intelligence. Together, the two companies have set themselves the goal of developing a predictive model that provides precise failure forecasts and valuable insights into imminent failures of track components such as point machines.

/ **Two further high-speed lines under construction in central China are being equipped with rail fastening systems from Vossloh.** The line between Xi'an, the capital of Shaanxi Province, and the automobile stronghold of Shiyan in Hubei Province is a good 300 kilometers long. The second line between the metropolises of Chongqing and Wanzhou in central China, which is around twice as long, will also noticeably shorten travel times there.

Q4 2023

/ Vossloh significantly expands its **market share in the attractive Danish rail infrastructure market.** Two framework agreements for the supply of switch systems and corresponding spare parts with a term of four years and a total volume of around €40 million are concluded with the state-owned network operator Banedanmark. Both contracts can be optionally extended. With on-site production, Vossloh can supply Banedanmark with rail infrastructure components very cost-efficiently, with short lead times and in an ecologically sustainable manner.

/ Vossloh is a **finalist for the prestigious German Sustainability Award 2023**, Europe's most important award for ecological and social commitment, which recognizes the pioneers of sustainability in Germany. The nomination is further confirmation of Vossloh's commitment and contribution to green mobility. At the same time, Vossloh is continuously reducing its greenhouse gas emissions caused by production processes and services.

/ With the **introduction of the cloud-based Vossloh connect platform**, Vossloh is once again living up to its pioneering role in the rail infrastructure business. The one-stop shop platform offers a range of state-of-the-art solutions that optimize the management and maintenance of rail infrastructure and contribute to higher safety, lower costs and improved overall performance. The platform not only offers customers access to all digital solutions developed by Vossloh itself, but is also available as a marketplace for selected third parties offering complementary products and solutions.

/ Having signed a four-year **framework agreement with Deutsche Bahn in the Customized Modules** division, Vossloh further expands its market position in Germany. For the first time, Vossloh has succeeded in winning a framework agreement for complete switches with firmly committed delivery quantities. In addition to at least 600 switches, Vossloh will continue to supply Deutsche Bahn with a substantial volume of switch components.

/ For the third time, the Eduard Vossloh Award is presented as the highlight and conclusion of **Vossloh's internal ideas program for higher efficiency, Fit 4 Future.** The idea presented by Vossloh Fastening Systems from Werdohl to refurbish bending tools using mass finishing instead of laborious manual work receives the most votes from the jury and is therefore the winner! The Sustainability Awards are presented for the best idea in the area of sustainability. The winner is a joint idea from Vossloh Fastening Systems China, Germany and Poland – the installation of solar panels on factory roofs to generate renewable electricity and reduce CO₂ emissions by up to 3,000 tons per year.

Vossloh stock

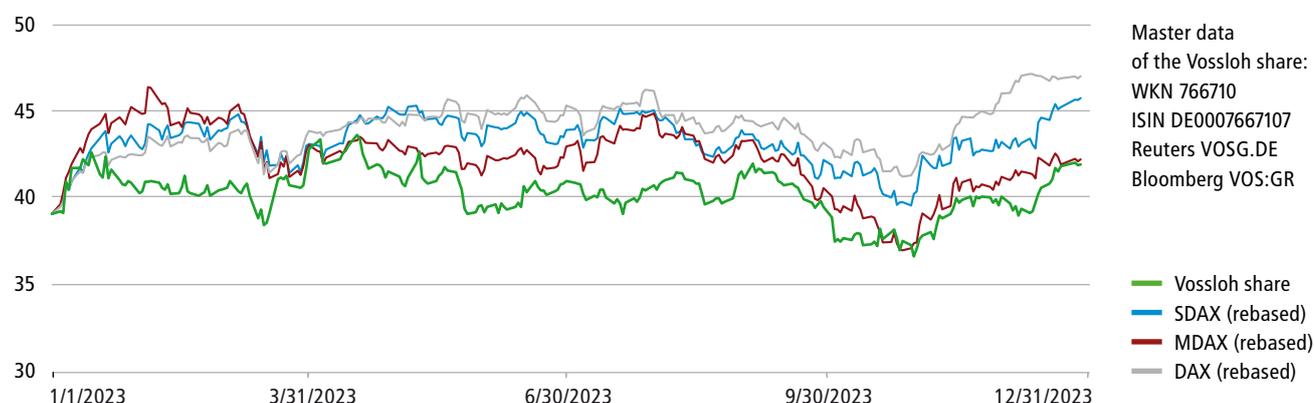
2023 was another exciting year on the stock market for investors. In the last two months in particular, prices rallied, especially the DAX benchmark index, but also the MDAX and SDAX, posting significant gains in some cases. Although the restrictive monetary policy of the central banks in connection with the slow decline in inflation rates, the ongoing war in Ukraine and the escalation in the smouldering Middle East conflict from mid-October slowed economic growth worldwide, the global economy ultimately performed better than expected overall.

Most central banks continued their restrictive monetary policy in the first half of 2023 and raised key interest rates further. For example, the US Federal Reserve has raised the Fed Funds Rate to between 5.25 percent and 5.50 percent in a total of eleven steps since March 2022. The European Central Bank followed suit with a time lag and increased the main refinancing rate by a total of 450 basis points. Against the backdrop of significantly lower inflation rates in some cases over the course of the year – not least due to the sharp fall in energy prices compared to the previous year – the pressure on central banks to act has decreased, meaning that the peak in interest rates in the USA and the eurozone has probably been reached. However, both the Fed and the ECB had announced that they would leave interest rates at a higher level for a longer period of time.

In 2023, most stock exchanges were able to recover the losses suffered in the particularly weak previous year. Overall, all selection indices recorded higher closing levels than in the previous year. In particular, the DAX bounced back from its low of 14,810 points at the end of October and closed at 16,751 points on the last trading day of 2023. This corresponds to an increase of 20.3 percent compared to the close of trading in 2022. The MDAX and SDAX selection indices also rose over the year as a whole. The MDAX ended the trading year 2023 at 27,137 points – an increase of 8.0 percent compared to the last trading day of the previous year. The SDAX outperformed the MDAX from the second quarter onwards and closed at 13,960 points. Compared to the previous year, this corresponds to an increase of 17.0 percent. In particular, companies with a relatively low trading volume tended to record below-average performance.

Vossloh AG's share was also unable to match the comparatively strong performance of the previous year despite numerous positive reports on the company's operating performance. At that time, Vossloh's share had outperformed the most important German benchmark indices overall. The chart shows the performance of Vossloh's share without taking into account the dividend paid out in 2023.

Stock price trend from January 1, 2023 to December 31, 2023



Vossloh stock indicators		2023	2022
Earnings per share	€	2.21	2.38
Dividend per share ¹	€	1.05	1.00
Annual average number of shares outstanding	thousand shares	17,564	17,564
Number of shares outstanding at year-end	thousand shares	17,564	17,564
Closing share price	€	41.95	39.10
Price high/low	€	44.65/36.50	46.35/29.30
Closing market capitalization	€ mill.	736.8	686.8
Trading volume	thousand shares	2,365	3,020
Average daily trading volume	thousand shares	9.3	11.8

¹ Proposed dividend for the 2023 fiscal year, subject to the approval of the Annual General Meeting

On a comparable basis to the performance of the indices and thus taking into account the dividend payment made in 2023 as an amount reinvested in the share, the share price rose by 10.0 percent.

The Vossloh share started the 2023 stock market year at a price of €39.35 and peaked at €44.65 on April 4, 2023. Over the course of the financial year, the performance lagged significantly behind the benchmark indices in some cases. The share fell to €36.50 on November 1, 2023, but then recovered noticeably and closed at €41.95 at the end of the year. This corresponds to a market capitalization of €736.8 million as at December 31, 2023.

Dividend

At the Annual General Meeting scheduled for May 15, 2024, Vossloh AG's Executive Board and Supervisory Board will propose to the shareholders a dividend payment of €1.05 (previous year: €1.00) per share for the 2023 financial year. Based on the number of dividend-bearing shares, this corresponds to a dividend payout of around €18.4 million.

Shareholder structure

Nadia Thiele, the widow of the deceased major shareholder Heinz Hermann Thiele, respectively Robin Brühmüller as executor of his estate are Vossloh AG's largest shareholders with a share of 50.09 percent according to their most recent voting rights notifications via KB Holding GmbH. Vossloh AG is not aware of any other shareholders with a share of voting rights above the statutory reporting threshold of 3 percent. As of December 31, 2023, the freely disposable share of Vossloh AG's share capital was 49.91 percent.

Analysts' ratings

This report was created by the end of February 2024 when eight financial analysts were covering Vossloh AG's share with regular commentaries and value assessments. Five of them recommend to buy Vossloh shares and three others recommend to hold the stock. The average target price for the Vossloh share was €48 based on the analyst ratings available up to the end of February 2024. The target prices adopted ranged between €42 and €53.

Sustainability

For the third time, business reporting was subject to the obligations arising from the EU Taxonomy Regulation. This standardized classification system defines and evaluates ecologically sustainable economic activities. As in previous fiscal years, Vossloh can also report figures for 2023 that explicitly underline the sustainable business model: 100 percent of sales revenues are classified as taxonomy-eligible, 63 percent as taxonomy-aligned. This key figure is also of particular importance in light of the fact that

Vossloh AG placed *Schuldschein* loans in the amount of €60 million at the end of July 2023, the interest coupon of which is linked to the alignment rate of sales revenues as part of a bonus-malus rule.

Vossloh's comprehensive sustainability activities have been regularly assessed by renowned international rating agencies – including ISS ESG, MSCI ESG Research and EcoVadis – for several years. The ISS ESG agency has awarded Vossloh prime status. In December 2023, MSCI ESG Research reaffirmed its AA rating (the second best on a scale from AAA to CCC). The analysts at EcoVadis recently awarded Vossloh silver status, placing it in the top seven percent of all companies rated by EcoVadis. Further information on sustainability at Vossloh can be found in the non-financial Group statement starting on page 80 et seq. (see also the information on the website at www.vossloh.com > „Investor Relations“ > „Sustainability“).

The ISS ESG and MSCI ESG Research ratings are also important for Vossloh due to the sustainability-linked hybrid note that the Group placed at the beginning of 2021. The redemption amount of the note is linked to Vossloh's sustainability performance, which is based on the agency ratings.

Capital market dialog

The Executive Board and the Investor Relations team of Vossloh AG remained in regular and close contact with institutional and private investors in the 2023 fiscal year. During the period under review, the company took an active role in a number of capital market conferences, organized its own meetings with investors and analysts and held regular conference calls to give capital market participants the opportunity to submit their questions to the members of Vossloh AG's Executive Board.

The Executive Board and the Investor Relations team of Vossloh AG are at your disposal for any inquiries submitted in writing or by phone. Comprehensive information about the company and the Vossloh AG share is also available online at www.vossloh.com. In addition to up-to-date financial reports, presentations and press releases, the website also provides information about creditor relations. You can send an email to investor.relations@vossloh.com or call us at (+49-2392) 52-609.

A woman and a young boy are looking out a window. The woman is in the upper left, and the boy is in the lower left. They are looking towards the right. The background is a blurred green landscape with rolling hills and two wind turbines in the distance. The text "THE WORLD NEEDS GREEN MOBILITY" is overlaid in white, bold, uppercase letters, with a vertical green line to its left.

**THE WORLD NEEDS
GREEN MOBILITY**



Modern man is on the move. Advanced transportation technologies have long since shrunk the world into the proverbial global village. Homo mobilis transcends space and time, his spatial flexibility is seen as a sign of intellectual freedom and a willingness to constantly evolve. However, a look at the history of mankind shows that mobility is by no means a modern invention. It is certain that human development began in Africa around seven million years ago. Around 100,000 years ago, our ancestors set off from there for the first time on their journey to conquer the world. Mobility is a characteristic feature of human beings and is largely responsible for our social, ethnic, cultural and, of course, economic development. Societies then as now have benefited from diversity. Mobility enables the exchange of thoughts and ideas and is therefore one of the key drivers of all progress.

The speed of international integration of people and societies has increased rapidly, especially in the recent past. In addition to the direct effects on people, this promotes international trade activities on the one hand and leads to ever greater internationalization and division of labour, for example in production processes, on the other. Digital media and technologies are further reinforcing this trend. Global flows of goods have shown enormous growth rates for decades, and global networking has never been stronger than it is today. Goods exports accounted for around 25 percent of global gross domestic product in 2022. Globalization is one of the central megatrends of our time, despite the many and often justified criticisms.



THE NEED FOR MOBILITY WILL CONTINUE TO INCREASE

Following a pandemic-related temporary slump in passenger numbers in public transport, global transport performance has already returned to the 2019 level in 2023 with around 61 trillion passenger kilometers. In its Transport Outlook 2023, the International Transport Forum (ITF) expects global passenger transport to almost double to around 110 trillion passenger kilometers by 2050. This figure would result if every one of the world's current 8.1 billion people were to travel from Anchorage in Alaska to Buenos Aires in Argentina, more than 13,400 kilometers away, once in a year.

Global supply chains and their inherent dependencies were questioned during the peak phase of Covid-19, but according to Deloitte's study results from 2023, value creation will continue to be relocated intensively. The experts assume that transport performance in global freight traffic will multiply in the future. In the ITF Transport Outlook 2023, around 332 trillion tonne-kilometres are expected by 2050, almost double the figure for 2021. The logistics company DHL Freight estimates that rail freight traffic will amount to 19 trillion tonne-kilometres in 2050 compared to 4 trillion tonne-kilometres in 2010.

In addition to globalization as such, one of the main reasons for this enormous increase is global population growth. In its World Population Report, the United Nations assumes that the global population will continue to grow steadily until the end of the century. In November 2022, the eight billion people mark was passed. The UN forecasts predict nine billion people by 2036 and ten billion people on Earth by 2057. At the same time, the need for mobility per inhabitant is increasing. In the European Union the number of passenger kilometers per inhabitant has increased by 27 percent over the past 25 years, according to the EU statistics authority Eurostat. In addition to a correlation between prosperity and transport performance, transport researchers have also observed another phenomenon: For generations, the time budget for individual mobility has remained constant – a person

„The ITF Transport Outlook expects global freight transport to almost double by 2050 compared to 2021.“



„Mobility enables the exchange of thoughts and ideas and is therefore one of the key drivers of any progress.“

spends an average of 60 to 90 minutes on the road every day, regardless of their country's level of development. Higher speeds, for example by choosing a faster means of transport, do not lead to a reduction in the time budget, but are used to cover greater distances within the time budget.

GLOBAL WARMING DEMANDS SWIFT ACTION

At the UN Climate Change Conference in Dubai (COP 28), it was decided to reduce net emissions to zero by 2050 and to take the measures urgently needed to achieve this in the current decade. The participating countries agreed to move away from fossil fuels and reduce emissions by 43 percent by 2030. The share of renewable energies is to be tripled and energy efficiency doubled over the next five years. Time is of the essence to slow down global warming. According to the EU's Copernicus Earth Observation Program, 2023 will be the warmest year globally since records began in the mid-19th century. From February 2023 to January 2024, the global average temperature was 1.52 degrees Celsius above the pre-industrial reference period of 1850-1900,

as Copernicus announced in February 2024.

RAIL IS UNRIVALED IN TERMS OF SUSTAINABILITY, EVEN COMPARED TO OTHER FORMS OF ELECTROMOBILITY

In view of the increasing demand for mobility, the targets appear extremely ambitious. The rail track will play a key role in this respect, as it is clear that rail-based transport is unrivaled in terms of sustainability. Within the EU, rail transport accounts for just under 2 percent of total energy consumption in the transport sector. At the same time, however, rail accounts for 13 percent of freight transport and 7 percent of passenger transport.

The superiority of rail as a mode of transport also applies in comparison with other forms of electromobility. A high-speed train such as the ICE or the French TGV consumes 3 to 4 kWh per passenger over 100 kilometers at a load factor of 50 to 60 percent. The consumption of a battery-electric car is estimated at a relatively economical 15 to 20 kWh per 100 kilometers. In Germany, statistics show that an average of 1.5 people travel in a car in long-distance transportation. This corres-

ponds to a consumption per passenger of approximately 10 kWh per 100 kilometers. Last but not least, the capacity of long-distance trains is superior to private transport. A high-speed rail link has twice the transport capacity of a highway with three lanes on both sides and uses less land.

The switches are therefore set for a renaissance of rail as the most sustainable mode of mass transportation by far and in every respect. Greenhouse gas emissions, air quality, land consumption: Rail beats all other modes of transport hands down.



THE CHALLENGE: MORE CAPACITY ON THE RAILS



RAILROADS ARE LIFELINES FOR PEOPLE AND INDUSTRIAL DEVELOPMENT

In addition to rail's indispensable contribution to achieving climate protection goals, there is so much more to rail as a mode of transportation. Rail connects people.

Together with European partner railroads, Deutsche Bahn has drawn up a study on the expansion of high-speed transport in Europe in 2023. With the proposal for „Metropolitan Network“, all 230 metropolitan regions and the major cities in Europe are to be connected to the high-speed rail network at least every hour.



Metropolitan regions are defined as agglomerations of more than 250,000 inhabitants. This would give around 60 percent of EU citizens direct access to high-speed trains. The starting point for the study is the EU Commission's Green Deal. According to this, European high-speed transport is set to make an important contribution to reducing CO₂ emissions with a planned doubling by 2030 and tripling by 2050. If the proposal were to be implemented, 21,000 kilometers of rail network would have to be built or upgraded across Europe. The proposal goes even further than the EU's plans to develop a trans-European transport network (TEN-T). The European Parliament and the European Council reached a political agreement on the regulation for the development of this transport network in December 2023. The TEN-T core network comprises nine European transport corridors, six of which also run through the Federal Republic of Germany. These European arterial routes are used for passenger and freight transport and are therefore both lifelines and drivers of industrial development.

IN ADDITION TO POLITICALLY DESIRED NEW CONSTRUCTION AND EXPANSION, AVAILABILITY MUST BE MAXIMIZED

The DB survey on the metropolitan network also states that the infrastructure measures currently in planning or under construction are not sufficient to achieve a doubling of high-speed traffic by 2030. According to a study by the German Railway Industry Association (VDB), the rail network in Germany is about as long today as it was in 1880. However, the industry association concludes that climate protection will only work with significantly higher rail capacities.

Governments around the world have announced significant capital expenditure on rail transport, with the EU alone announcing 260 billion euros as part of its Green Deal. In less than two decades, China has expanded its high-speed rail network so massively that it now covers two thirds of the global high-speed network. Today, 55 percent of the world's

population already lives in urban metropolitan regions. Urban metro and light rail traffic is growing at a correspondingly rapid pace, especially in Asia. However, significant investments are also being made in new projects in the USA, Australia, Saudi Arabia, Qatar, Ecuador and South Africa. Nevertheless, the current expansion of the network is not keeping pace with the growing demand for transportation. The investment volumes are considerable, the spatial requirements are not always given and too often complex planning procedures prevent timely implementation.

In addition, as a result of decades of underinvestment, the reserves of wear and tear in the existing rail infrastructure have been exhausted in many places and substance has been lost. As a result, lines are not available or only available to a limited extent, which runs counter to the important political goal of shifting traffic to rail. Even a single unexpected switch fault can have a massive and large-scale impact on timetables. Switch malfunctions currently account for around 40 percent of all faults in the track.

In addition, there is now less time available for refurbishment or maintenance on busier routes, while at the same time wear and tear is noticeably increasing. Traditional maintenance concepts are coming to nothing here and a fundamental rethink is required. In addition to organizational measures, such as the complete refurbishment of entire sections of track, the issue of maintenance efficiency is particularly important in this context.



A large-scale rail track maintenance operation at night. A yellow gantry crane is positioned over the tracks, with its lights illuminating the scene. Several workers in high-visibility yellow safety gear are visible, some kneeling on the tracks. The background shows a dark sky and silhouettes of trees. The overall atmosphere is one of industrial activity and precision.

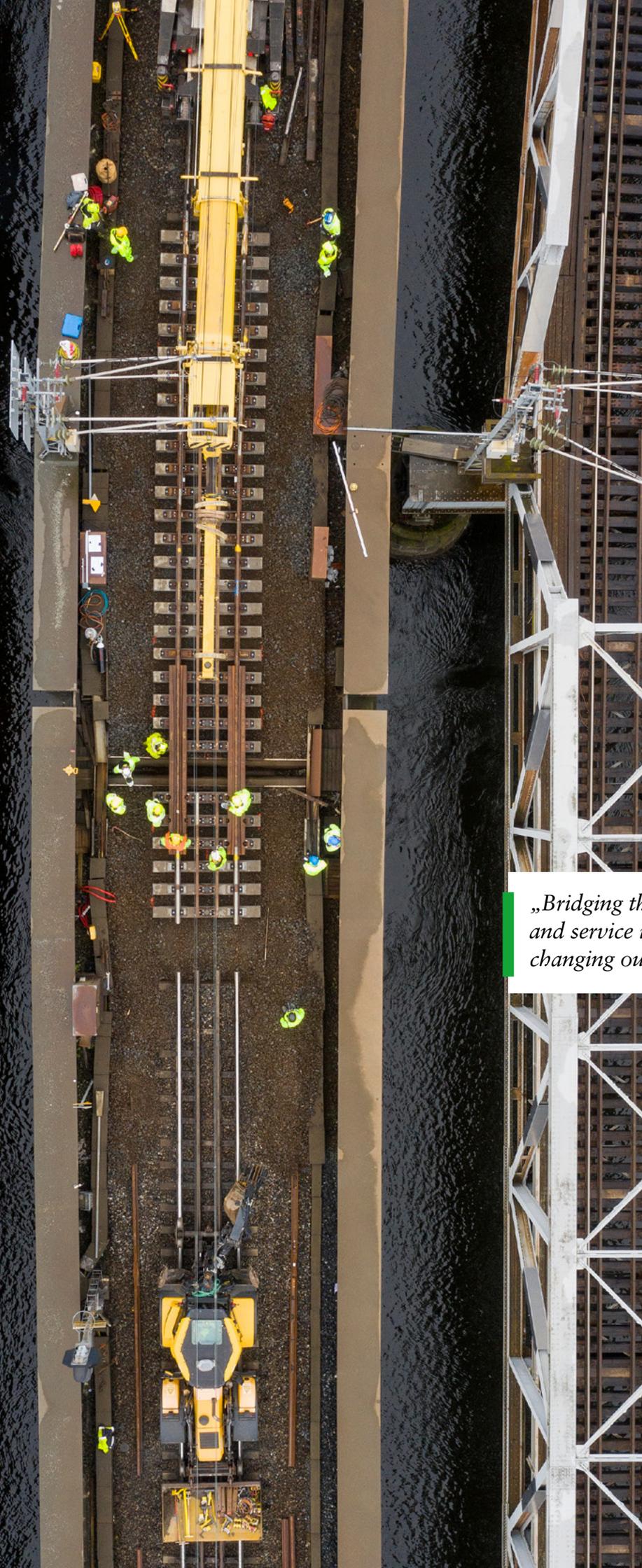
VOSSLOH'S SYSTEMIC APPROACH MAKES THE DIFFERENCE

THE RAIL TRACK NEEDS INNOVATIVE MAINTENANCE SOLUTIONS

The supposed conflict of objectives between increasing wear and tear and shorter time windows for maintenance work requires innovative approaches. And this is where digital solutions and tools come into play. From permanent communication between track and train to autonomous driving and digital interlockings, the main focus is on gaining insights into the actual condition of the rail infrastructure as a prerequisite for the transition from deadline-based to condition-based, or even better, predictive maintenance.

RAIL INFRASTRUCTURE HAS LONG LIFE CYCLES

Historically speaking, disruptive innovation is not a fundamental characteristic of rail-bound mobility. The ancient Romans had already laid paved roads with ruts on a large scale to make it easier for horse-drawn vehicles to get around. Then came wooden rails 500 years ago, cast iron rails 200 years later and rolled rails a further 70 years later, around the beginning of the 19th century. Trains still run on roughly these rails today. At the same time, the first railroad cars came into use, very similar to the ones we know today. The first steam locomotive to be taken seriously, George Stephenson's Locomotion No. 1, had exactly the same track gauge in 1825 as can still be found in many parts of the world today. Air brakes and couplings, which are essentially still in use today, as well as the first electric locomotive by Werner von Siemens were introduced to the world between 1872 and 1879. The last steam locomotive in Germany was sidelined in 1977. Innovation cycles in the field of rail-bound mobility can therefore be described as generally long.



„Bridging the gap between product and service is fundamentally changing our business model.“

And there are good reasons for this. A rail network is not only a huge asset, but also a very complex system. Track components have to withstand enormous loads and are also designed for a long service life. And they are highly relevant to safety, which almost inevitably leads to complex approval processes and increased reliance on proven technology. Dealing with rail infrastructure therefore requires one thing above all else, in addition to technical expertise: experience. This is precisely one of the reasons for Vossloh's success. We have been in business for around 140 years and are one of the global market leaders in our industry with customers in over 100 countries. With a uniquely broad portfolio of products and services for the rail track, we are excellently positioned to



„A rail network is not only a huge asset, but also a very complex system.“

address the needs of our customers and make a significant contribution to their success. Regardless of whether the products are made of steel, concrete, plastic, elastomer or modern composite materials, whether preventive or corrective maintenance is involved: Vossloh enjoys the trust of customers worldwide and is the technologically leading partner of choice.

ALL ESSENTIAL COMPONENTS AND SERVICES UNDER ONE ROOF AND THUS ALSO THE UNDERSTANDING OF THE SYSTEM

It is an integral part of Vossloh's strategy to further strengthen the existing business because it is the nucleus of the company and forms the indispensable basis for future business models. The fact that Vossloh develops and manufactures all key components of the rail track under one roof is an important competitive advantage. As a result, we not only understand the physics of each individual component, but also their systemic interaction within the track. On this basis, our experts are able to include the interaction

between the track and the rolling stock, the so-called wheel-rail contact, in their analyses. Thanks to its global presence, Vossloh can also draw on experience from very different markets, including in terms of technology.

This comprehensive understanding of the highly dynamic rail system also makes Vossloh the ideal maintenance and service partner. In addition to technologies such as milling or high-speed grinding, we offer our customers stationary and mobile welding services, long rail and switch logistics as well as comprehensive switch service. This diversity makes it possible to find the most efficient maintenance method for every track condition. Efficiency in maintenance can hardly be overestimated, because with the exception of our high-speed grinding, maintenance always means that a track is not available for use for a certain period of time.

HIGHER TRACK AVAILABILITY – VOSSLOH OFFERS THE SOLUTION

A key driver when it comes to maintenance efficiency is the transition from

deadline-based to status-based and, ideally, predictive maintenance. Studies show that efficiency increases of 25 percent and more are possible as a result. The importance of continuous sensor-based recording of the condition and behaviour of the track system and the resulting findings for maintenance cannot therefore be overestimated, not to mention the positive effects on the development of new products and the optimization of maintenance technologies. In perspective, this will fundamentally change our business model. While our customers have so far focused on highly standardized track components that are comparable to those of the competition, the optimization of the overall system is now increasingly coming to the fore. The availability of the track and the consideration of its life cycle costs are replacing the short-term optimization of purchase prices. As a result, the combination of physical components and their maintenance over their entire service life is also moving to the center of attention, as the expenses for maintenance and repair account for by far the largest part of the life cycle costs of the rail track.



„An integrated digital ecosystem for customers and partners.“

A stronger focus on this will also ease the burden on public budgets in the long term and free up funds for other purposes. In the long term, this will replace a once-delivered order with a long-term business relationship with Vossloh as a provider of integrated solutions. „Availability as a service“ will gain in importance as a business model. Digitalization has thus become an additional and important tool for us to ensure the long-term success of our customers.

These developments represent a decisive leap in innovation for the rail industry. Track availability is one of the key success factors, if the desired shift of more traffic to rail is finally to become a reality. Every disruption to the rail system costs money. Unpunctual trains lead to dissatisfaction among users and jeopardize the acceptance of rail as a mode of transport as a whole. Rail infrastructure must function reliably, always and everywhere; unforeseen technical problems must be avoided. This is what we at Vossloh stand for: technical expertise in products and services, the greatest possible experience, reliability, efficiency and in-depth digital expertise.

WE COLLECT DATA FROM ALL PERSPECTIVES

It all starts with sensory data acquisition. For measurements on the track, for example, acceleration sensors or high-precision laser installations are used to observe the behavior of switches during the passage of a train. Electrical currents or hydraulic pressure are also recorded in signaling components. Environmental data such as temperature and humidity complete the data collection. Vossloh's smart maintenance machines supplement the data collection with numerous other parameters. Fan lasers record the rail and track geometry. Eddy current and ultrasonic measurements allow a look inside the rail.

With last year's acquisition of Rail-Watch GmbH, we have added further crucial perspectives to data acquisition on the track and from the vehicle. These include the identification of passing wagons, locomotives and multiple units as well as the recording of the condition of wheels and brakes, the detection of over-

heating brakes and axles and the distribution of axle loads. With 98 percent detection accuracy using artificial intelligence, the monitoring system is one of the best image processing technologies in the railroad sector.

VOSSLÖH CONNECT: OPEN PLATFORM FOR MAXIMUM TRACK AVAILABILITY

And Vossloh is going one step further. With the Vossloh connect platform, we have created an integrated digital ecosystem for customers and partners. The one-stop shop platform offers a range of state-of-the-art solutions that optimize the management and maintenance of rail infrastructure and contribute to higher safety, lower costs and improved overall performance. The platform not only offers customers access to all digital solutions developed by Vossloh itself, but is also available as a marketplace for selected third parties offering complementary products and solutions. The tools enable real-time monitoring of the condition of the infrastructure and provide relevant information for its maintenance. In addition, the platform includes advanced analysis and warning systems to significantly reduce the risk of accidents and disruptions. Last but not least, it is the highly developed algorithms for predictive maintenance that form the core of Vossloh connect. The interface to specific maintenance measures is then formed, for example, by Vossloh's mapl-e software, which visualizes the processed data on rail condition for our customers, simulates maintenance scenarios and recommends specific measures. With MR.pro, we also have an asset management system for optimized management of entire networks. The special feature of MR.pro is that, in addition to tracks and switches, other components such as traction power supply, contact wire, signalling technology, stops, real estate, ancillary facilities and much more are visualized as digital twins in a uniform database. This gives network operators a complete overview of the value of their rail infrastructure and allows them to plan maintenance measures and budgets over long periods of time.

SIMULATIONS CREATE PREDICTABILITY - PREDICTABILITY CREATES EFFICIENCY AND RELIABILITY

In order to extend the life cycle of the complex and safety-relevant system of switches and, above all, to avoid acute faults, it can be virtually recreated in a digital twin and constantly adapted to reality with the help of real status data. The virtual model then ages artificially in order to anticipate malfunctions - so it is possible to react in the real world before the malfunction occurs in the real network. Today, we can even fully simulate the installation process of a switch virtually, taking into account the actual conditions at the subsequent construction site, thus significantly increasing the efficiency of the work and avoiding surprises. This is also an important aspect in achieving the goal of higher track availability and thus greater rail reliability. The future of sustainable mobility will be multimodal and therefore largely characterized by a seamless transition between individual modes of transport. The reliable and seamless interplay between trains, buses, car sharing and e-scooters will be decisive in determining whether people are prepared to adapt their mobility behavior in the long term.



THE STRENGTH IS THE PEOPLE AT VOSSLOH

THE DEMANDS ON US ARE INCREASING

Availability as a service – a business model like this takes the pressure off network operators, but it also increases our own responsibility. We are required to carefully preserve and constantly expand our systemic knowledge and digital expertise in order to meet the high expectations of our customers. This draws attention to the true value of our Group: the people who work for this company.

BUILDING NETWORKS, PROMOTING AND DEVELOPING TALENT, LEARNING OPPORTUNITIES ALWAYS AND EVERYWHERE

At Vossloh, we have extensive expertise in the rail system and our specialists are among the best. Today, more than 120 people in the company are working on digital solutions alone. What is remarkable about this is not the number, but the fact that these experts are represented in all Vossloh business units and specialist areas. We have interlinked this unique know-how in a powerful network.



However, the increasing relevance of digitalization and, above all, the close integration of traditional business with digital topics make it essential to involve all employees. We can only successfully implement our strategy in an increasingly dynamic environment if we recognize, promote and develop the strong potential and skills of each individual. In order to empower and motivate employees for new tasks, Vossloh relies on a structured process to identify and assess talent and potential. Personnel development at Vossloh is objective and transparent and, above all, creates visibility for individuals. We achieve this by taking the assessment – figuratively speaking – out of the quiet room and extending it across several levels. This allows us to discuss talent internally according to uniform criteria and, above all, at an early stage, even if there are several hierarchical levels in between. And we can deploy them internally and/or across disciplines.

„The true value of our Group consists of the people who work for this company.“

At Vossloh, we know that continuous learning is the key to growth and to mastering future tasks. Today, learning content must be available anytime and anywhere. It has to fit into tight time budgets. The ability to share content and exchange ideas is also expected as a matter of course. The Vossloh Online Academy offers all of this.

A broad-based study from 2023 confirms that we are on the right track. The joint study by the German Aerospace Center, Saarland University and the Frankfurt School of Finance & Management found that an organizational culture geared towards digitalization makes the greatest contribution to the success of digital transformation. As a result, it is

not the technical expertise of a few experts alone that guarantees success, but the digital affinity of the workforce as a whole.

SUSTAINABILITY IS OUR TRUMP CARD

With our global presence and the associated internationality of our workforce, our local, medium-sized structures in which employees can take on responsibility at an early stage and, last but not least, our special Vossloh cohesion and cross-border cooperation, the Group is excellently positioned for future tasks. The results of the 2023 employee survey on the Vossloh brand confirm this with a very positive mood. The fact that we are working for green mobility and making great progress overall in the area of sustainability can hardly be overestimated in terms of its importance for motivating our workforce and attracting new talent. Sustainability issues are seen as very relevant by the workforce. Sustainability is now an integral part of our DNA and is becoming increasingly important in our day-to-day business, not least in our customers' tenders. Our outstanding performance in this area not only creates value for society, but also gives us an advantage over our competitors.

Because our mission remains the same:

enabling green mobility.



*Prof. Dr. Rüdiger Grube
Chairman of the Supervisory Board*

Supervisory Board of Vossloh AG

Prof. Dr. Rüdiger Grube, *Chairman,
Managing Partner of Rüdiger Grube International Business
Leadership GmbH and former Chairman of the Executive
Board of Deutsche Bahn AG, Hamburg*

Ulrich M. Harnacke, *Vice Chairman,
Independent Accountant, Tax Advisor and
Business Consultant, Mönchengladbach*

Dr. Roland Bosch, *Managing Director of WOLFF & MÜLLER
Holding GmbH & Co. KG, Königstein/Taunus*

Martin Klaes (since May 24, 2023), *Company Fitter,
Chairman of the Works Council of Vossloh Fastening
Systems GmbH and Vossloh AG, Werdohl*

Marcel Knüpfer, *Technical Administration Specialist
and Shift Supervisor, Chairman of the General Works
Council of Vossloh Rail Services Deutschland GmbH and
Member of the Group Works Council, Zwenkau*

Dr. Bettina Volkens, *self-employed Consultant and
Member of various Supervisory Boards, Königstein/Taunus*

Andreas Kretschmann (until May 24, 2023), *Certified
Social Security Professional, Chairman of the Group
Works Council and Member of the Works Council of
Vossloh Fastening Systems GmbH, Neuenrade*

Report of the Supervisory Board

Dear shareholders,

In the 2023 fiscal year, the Supervisory Board once again discharged the duties incumbent upon it pursuant to the law and the Articles of Incorporation with due care. The Supervisory Board continually monitored the work of the Executive Board and advised the Executive Board on the company's management. The Executive Board met its information obligations and regularly informed the Supervisory Board of all the issues relevant to Vossloh AG and the Group with regard to corporate strategy, planning, business development, the ever-changing risk situation, sustainability and compliance on a comprehensive and prompt basis, in written and in verbal form. The reporting also included information about deviations in the actual development from the previously reported targets and deviations in business performance from the plans.

The Supervisory Board discussed the Executive Board's reports in detail and verified the plausibility of the economic situation depicted in these reports as well as the development prospects of the Group, the individual divisions/business units and the key investees in Germany and abroad together with the Executive Board. The Supervisory Board was involved in all decisions of significance to the company and was therefore assured at all times of the legality, appropriateness and regularity of the work of the Executive Board. At all times, the Supervisory Board members had sufficient opportunity to critically examine and comment on the reports and draft resolution proposals presented by the Executive Board. Insofar as the approval of management decisions or measures was required pursuant to statutory regulations, the Articles of Incorporation or the Rules of Procedure, the members of the Supervisory Board examined the resolution proposals and granted the necessary approval.

The Supervisory Board was also informed by the Executive Board of significant events between meetings. In addition, there was a regular and close exchange of information between the Chairman of the Supervisory Board and the CEO outside of meetings. In this way, the Supervisory Board was always informed of the intended business policies, the business plans including financial, investment and staff planning, profitability, the business situation, the corporate strategy, the sustainability strategy and the overall situation of the company and the Group.

Focus of the meetings

A total of seven plenary meetings were held in the 2023 fiscal year. The Supervisory Board convened for five ordinary meetings on March 13, May 23, September 13 (ordinary meeting and strategy meeting) and November 23, 2023. Extraordinary meetings

were held on May 24 and July 4, 2023. The members of the Supervisory Board attended almost all Supervisory Board meetings in full. Only Mr. Andreas Kretschmann was unable to attend two meetings. Attendance at the meetings was therefore 95.2 percent overall. Every meeting was held in person with the exception of the extraordinary meeting in July, which was held by video conference. The members of the Supervisory Board were also in regular contact for the purpose of discussing and preparing for meetings. The Executive Board members attended the meetings of the Supervisory Board; some parts of the meetings were not attended by members of the Executive Board. The Supervisory Board also heard from experts and individuals on specific topics, such as the auditor at the balance sheet meeting.

In the last fiscal year, the Supervisory Board and Executive Board discussed the further development of the Vossloh Group at every meeting. In addition, the Executive Board reported on the business situation in all the meetings and provided detailed information regarding the development of sales revenues and earnings in the individual business units, on business development opportunities and risks, and on key managing measures. The Supervisory Board also regularly dealt with the effects of material and energy price trends on the Group as well as sustainability issues. In addition, the Supervisory Board dealt on several occasions with the status of the civil proceedings that have been ongoing for some time in connection with earlier anticompetitive agreements, as well as with compliance issues and the further development of Vossloh's Compliance Management System.

The Supervisory Board also focused on the following issues in the individual meetings:

The balance sheet meeting on March 13, 2023, considered in particular the audit of the separate and consolidated financial statements for 2022, the remuneration report in accordance with the German Stock Corporation Act (AktG), as well as the format, agenda and the draft proposals for the Annual General Meeting on May 24, 2023. The Supervisory Board also used this meeting as an opportunity to discuss preparations for the Annual General Meeting, the remuneration system for the members of the Executive Board, their employment contracts and the extension of the appointments of Dr. Thomas Triska and Mr. Jan Furnivall. In addition, the Supervisory Board approved an investment project at the Werdohl site after detailed discussion and dealt in detail with an update on ongoing acquisition projects.

In addition to the regular reporting topics, the agenda on May 23, 2023, included the status of Group financing, a focus on Vossloh's business in China and an investment project for the construction of a new switch plant in Sweden. The Supervisory Board also prepared the Annual General Meeting 2023. At the constituent Supervisory Board meeting on May 24, 2023, following the Annual General Meeting, the Supervisory Board elected its Chairman (Prof. Dr. Rüdiger Grube) and Deputy Chairman (Mr. Ulrich M. Harnacke) and decided on the composition of the committees.

At the extraordinary meeting on July 4, 2023, the Supervisory Board discussed the sale of the Signaling Systems activities held by Vossloh Cogifer SA and approved the sale after detailed deliberation.

At the annual strategy meeting on September 13, 2023, the Supervisory Board dealt in detail with the Group's direction and corporate strategy and discussed these with the Executive Board and various Vossloh division heads. Key topics included digitalization, sustainability and the M&A strategy. This was followed by the ordinary meeting of the Supervisory Board, which, in addition to the regular reporting topics, mainly focused on the realignment of sales.

At its final ordinary meeting of the year on November 23, 2023, the Supervisory Board focused on standard reporting topics, business development in the fiscal year under review as well as planning for the years 2024 through 2026. Following an in-depth review and discussion with the Executive Board, the Supervisory Board approved the budget for 2024 and set the performance targets for the 2024 fiscal year, which are decisive for Executive Board remuneration. The Supervisory Board also conducted a review of the efficiency of its activities and, together with the Executive Board, adopted the 2023 Declaration of Conformity with the German Corporate Governance Code. The Supervisory Board also dealt in detail with Group financing and succession planning for the Executive Board and approved the Executive Board's proposal to refinance the current syndicated loan.

The Supervisory Board and the company are committed to providing support for new members and continuous training for existing Supervisory Board members. The company provides the members of the Supervisory Board with an appropriate level of support in this regard. Mr. Martin Klaes, the new employee representative, was given a detailed introduction to the tasks and duties of a Supervisory Board member.

Supervisory Board committees

The Supervisory Board has formed three committees in order to execute its duties efficiently: the Personnel Committee, the Audit Committee and the Nomination Committee. These committees focus on the issues assigned to them and prepare decisions for plenary meetings where necessary. Insofar as is permissible by law and considered appropriate by the Supervisory Board, the Supervisory Board has also delegated its decision-making authority to the committees in certain cases. The committee chairs report on relevant issues and the results of discussions in the plenary Supervisory Board meeting following each committee meeting. The minutes of the meetings of the Audit Committee are made available to the Chairman of the Supervisory Board.

The Audit Committee held seven meetings in the reporting year. The members attended almost all Audit Committee meetings in full. Mr. Andreas Kretschmann was unable to attend one meeting. Attendance at the meetings was therefore 95.2 percent. Four meetings were held as video conferences and three as face-to-face meetings. Almost every meeting was attended by representatives of the auditor and the individuals responsible for Accounting as well as Legal Affairs and Compliance at Vossloh AG. A discussion was held with the auditor without the members of the Executive Board being present. The Heads of relevant central divisions were available for reports and to answer questions. Other experts were asked to attend in order to provide input about specific agenda items.

Among other things, the Audit Committee focuses its activities in particular on auditing the company's accounts, the separate and consolidated financial statements prepared by the Executive Board, the combined management report, the dependent company report (Section 312 AktG), the proposal for the appropriation of net earnings and related party transactions which the Supervisory Board has charged the Audit Committee to monitor.

At its meeting on March 13, 2023, the Audit Committee decided, on the basis of the auditor's reports on the audit of the annual financial statements of Vossloh AG and the Vossloh Group as well as the combined management report and the remuneration report, to propose to the Supervisory Board the approval of the consolidated financial statements, the annual financial statements of Vossloh AG and the combined management report for the 2022 fiscal year and to adopt the remuneration report after a detailed discussion in the presence of the auditor. At its meetings on April 26, August 2 and October 24, 2023, the Audit Committee discussed the half-year report and the quarterly statements with the Executive Board before their publication.

The company's relationship with the auditor also falls within the responsibility of the Audit Committee. On March 13, 2023, the committee submitted the proposal for the election of the auditor to the full Supervisory Board, awarded auditing responsibility to the auditor elected by the Annual General Meeting on May 24, 2023 and agreed the focal points of the audit and the remuneration with the auditor. The committee also monitored the independence of the auditor and assessed the quality of the audit. The auditor may only be contracted to perform nonaudit services subject to the mandatory approval of the Audit Committee.

In all of its meetings, the Audit Committee also dealt with the key risks and legal and compliance issues. The Audit Committee discussed the main risks identified within the Group in detail with the Executive Board, as well as the necessity and adequacy of the risk provisioning, in particular also for risks due to legal disputes relating to earlier anticompetitive agreements. Each of the meetings provided opportunities for discussion between the members of the committee and the auditor without the members of the Executive Board being present. The Audit Committee

also considered compliance issues continuously and in depth, and received comprehensive information about related issues, how they were being handled and the ongoing monitoring and improvement of Vossloh's Compliance Management System. The Audit Committee discussed the internal control system and the risk management system along with the extent to which they are adequate and effective. The Audit Committee also addressed sustainability-related issues as well as any related opportunities and risks for the Group. The Audit Committee focused on compliance topics and issues related to CSR reporting. At the meeting on November 23, 2023, Internal Audit reported to the Audit Committee on its activities in the 2023 year.

At an extraordinary meeting on December 15, 2023, the Audit Committee also discussed possible strategic opportunities in detail.

The Nomination Committee met once in the reporting year, on February 15, 2023, by way of a video conference, to prepare the Supervisory Board elections for 2023 and the election proposals for the Supervisory Board as the basis for the Supervisory Board's proposal to the Annual General Meeting. All members attended the meeting.

The Personnel Committee met on January 13, February 15, 20 and 27 and again on November 13, 2023, each of which was held as a video conference. All members attended the meetings. The meetings focused on appointments and succession planning for the Executive Board, reviewing the appropriateness of Executive Board remuneration as well as reappointments and contractual matters relating to Executive Board members.

Corporate Governance and Declaration of Conformity

The Supervisory Board attaches great importance to ensuring good corporate governance. At its meeting on November 23, 2023, the Supervisory Board addressed the recommendations of the GCGC and, together with the Executive Board, issued the Declaration of Conformity in accordance with Section 161 AktG, which is permanently available on the company's website (see also page 30 of the annual report). Since issuing the last Declaration of Conformity in November 2022, Vossloh AG has complied with all recommendations of the GCGC as amended on April 28, 2022, with two exceptions, and will continue to do so in the future. Details on the company's corporate governance can be found in the Declaration on Corporate Governance and the Corporate Governance Report (page 30 et seq. of the annual report).

Separate and consolidated financial statements 2023

The annual financial statements of Vossloh AG in accordance with German accounting standards, the consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) applicable in the EU and the combined

management report for Vossloh AG and the Group for the 2023 fiscal year, including the accounting, were examined by the auditor duly appointed by the Annual General Meeting on May 24, 2023, Deloitte GmbH Wirtschaftsprüfungsgesellschaft based in Munich (Düsseldorf office), and were each issued with an unqualified audit opinion. In its audit opinion, the auditor concluded that the Executive Board had taken the necessary steps to put in place an appropriate risk identification system as required by Section 91 (2) AktG and that the system was suitable for identifying going concern risks early on.

The auditor also examined the dependent company report prepared by the Executive Board (Section 312 AktG) in accordance with Section 313 AktG and issued the following audit opinion: "After due and proper examination and assessment, we hereby confirm, first of all, that the information contained in the report is correct and second, that payment made by the company for the transactions stated in the report was not inappropriately high." The Executive Board and Supervisory Board also prepared the remuneration report in accordance with Section 162 (1) AktG. This also was audited by the auditor and issued with an unqualified auditor's opinion.

The financial statements including the nonfinancial Group statement (Section 315b of the German Commercial Code, HGB) and the auditor's reports were distributed to the members of the Supervisory Board in good time prior to the meeting held on March 19, 2024, to approve the financial statements. During the meeting, the auditor reported on the key findings of their audit and provided additional information. The Supervisory Board comprehensively discussed all the issues that arose in relation to these documents following the Audit Committee's preparations and in the presence of the auditor. The auditor also reported on the Vossloh Group's early risk detection system. The auditor additionally read and acknowledged other information including the Declaration of Conformity in accordance with Section 161 AktG, the Declaration on Corporate Governance/ Corporate Governance Report and the nonfinancial statement of the Group (Section 315b HGB) and found nothing that suggested this information constituted a material misrepresentation. The Supervisory Board also contracted Deloitte GmbH Wirtschaftsprüfungsgesellschaft to perform a voluntary audit of its nonfinancial Group statement (Section 315b HGB) in accordance with ISAE 3000 (Revised) to achieve a certain degree of assurance therefor, as well as the remuneration report in accordance with Section 162 (1) AktG. These did not give rise to any objections.

The Supervisory Board likewise reviewed the annual financial statements submitted by the Executive Board, the consolidated financial statements and the combined management report for Vossloh AG and the Vossloh Group for the 2023 fiscal year including the nonfinancial Group statement (Section 315b HGB), the dependent company report including the Executive Board's closing statement, and the proposal for the appropriation of net earnings. According to the final result of its own review, the

Supervisory Board raised no objections. The Supervisory Board approved the annual financial statements and consolidated financial statements on December 31, 2023. The annual financial statements were thus adopted on December 31, 2023. The Supervisory Board concurred with the combined management report, in particular the statements on the company's continued development and the disclosures pursuant to Sections 289a and 315a HGB, and with the dependent company report. The Supervisory Board approved the Executive Board's proposal for the appropriation of the 2023 net earnings, which recommended the payment of a dividend in the amount of €1.05 per dividend-bearing share.

The Supervisory Board would like to sincerely thank the Executive Board and all employees of the Vossloh Group for their extraordinary commitment and their contribution to the once again very successful financial year 2023. Vossloh made excellent progress in the past financial year, despite the many challenges.

Werdohl, March 19, 2024

The Supervisory Board
Prof. Dr. Rüdiger Grube
Chairman

Declaration on Corporate Governance/ Corporate Governance Report

The following Declaration on Corporate Governance in accordance with Sections 289f (1) and 315d HGB is the central element of the corporate governance reporting process (Principle 23 of the German Corporate Governance Code (GCGC) as per April 28, 2022). The Executive Board and Supervisory Board jointly issue the Declaration on Corporate Governance and are each responsible for the relevant sections of the Declaration.

Management and control structure

Vossloh AG is subject to the provisions of Germany's Stock Corporation Act (AktG), capital market legislation and codetermination laws that apply in Germany as well as its own Articles of Incorporation. As with all German stock corporations, Vossloh AG has a dual management and monitoring structure as reflected in the two bodies, the Executive Board and the Supervisory Board. The Annual General Meeting is responsible for important fundamental decisions made by the company. All three bodies are obligated to act in the best interests of the company and its shareholders.

Executive Board

The three members of the Executive Board are responsible for jointly running the company. As CEO, Mr. Oliver Schuster is responsible for coordinating the work of the Executive Board in the central areas of Strategy and M&A, Media Relations, Legal Affairs and Compliance, IT and Digital Business, Innovation and Research & Development, Human Resources and Internal Audit. As Chief Financial Officer, Dr. Thomas Triska is responsible for Accounting and Taxes, Controlling, Treasury and Investor Relations. As Chief Operating Officer, Mr. Jan Furnivall is responsible for Sales, Technology, EHS/Sustainability and Marketing/Communication. Divisions are also allocated to individual members of the Executive Board. Mr. Oliver Schuster oversees the Core Components division, Dr. Thomas Triska the Customized Modules division and Mr. Jan Furnivall the Lifecycle Solutions division. More information on the members of the Executive Board of Vossloh AG can be found on page 174 of this annual report.

The work of the Executive Board is regulated by the Executive Board's Rules of Procedure. The members of the Executive Board work cooperatively and inform one another on an ongoing basis about important measures and events within their respective areas of responsibility. The entire Executive Board makes decisions regarding all significant issues. Potential conflicts of interest are immediately made known to the Supervisory Board and the other Executive Board members. Secondary employment requires the prior approval of the Supervisory Board.

The Supervisory Board is responsible for the appointment and dismissal of the Executive Board members. In this regard, the Supervisory Board observes specific target figures stipulated by the German Act on Equal Participation of Men and Women in Executive Positions in the Public and Private Sectors and also the age limit stipulated for members of the Supervisory Board in the Rules of Procedure (i.e. the statutory retirement age). The Supervisory Board discusses the issue of long-term succession planning on a regular basis (at least once per fiscal year) in order to identify and develop suitable female and male candidates and so that vacancies can be filled as quickly as possible with the most suitable candidate.

Vossloh AG has concluded D&O insurance policies against economic loss for Executive Board and Supervisory Board members with a deductible amounting to 10 percent of the loss up to one-and-a-half times the fixed annual remuneration of the board member in question.

Supervisory Board

The Supervisory Board, which comprises six members in accordance with Article 10 (1) sentence 1 of the Articles of Incorporation, is composed subject to the provisions of the AktG and the German One-Third Participation Act (DrittelbG). Two thirds of its members are shareholder representatives and one third is made up of employee representatives. In accordance with the recommendations of the GCGC, the shareholder representatives were elected individually. The terms in office of all the current Supervisory Board members end on conclusion of the Annual General Meeting in 2028, at which a resolution will be passed to formally approve the actions of the Supervisory Board members in the 2027 fiscal year. More information on the members of the Supervisory Board of Vossloh AG, including how long they have been on the Board, can be found on page 175 of this annual report.

The Supervisory Board oversees and advises the Executive Board on its management of business and discusses business development, planning, the strategy and its implementation, risk management and compliance issues with the Executive Board at regular intervals. It approves the annual plan, adopts the annual financial statements of Vossloh AG and approves the consolidated financial statements, in addition to deciding whether or not to approve related party transactions in accordance with Section 111b AktG. Furthermore, certain material transactions and measures regulated by the Executive Board's Rules of Procedure are subject to the approval of the Supervisory Board. The work methods of the Supervisory Board are regulated by the Rules of Procedure, which are published on the company's website.

The Supervisory Board most recently stipulated concrete targets for its composition at its meeting on November 23, 2023 and reviewed and updated the competency profile for the body as a whole. The "Requirements and Objectives for the Composition of the Vossloh Aktiengesellschaft Supervisory Board" are published on the company's website and also include the diversity concept. With regard to diversity, the Supervisory Board is setting its sights on a composition within the parameters of the company-specific situation that takes into account a varied career and international experience and, in particular, the appropriate involvement of all genders. On November 25, 2021, the Supervisory Board set itself a target of at least 16.67 percent women (one female member of the Supervisory Board) for the target period between December 15, 2021 and December 14, 2026. This target is currently being met.

The Supervisory Board's other requirements and objectives regarding its composition relate, in addition to other factors, to the full board's expertise, the independence of its members, potential conflicts of interest, availability, an age limit (usually 70) and the duration of board tenures (usually no longer than three terms). In the opinion of the Supervisory Board, the current composition of the body as a whole fulfills the stated requirements and objectives. The personal and professional qualifications of each member of the Supervisory Board are listed below:

	Prof. Dr. Rüdiger Grube	Ulrich M. Harnacke	Dr. Roland Bosch	Martin Klaes	Marcel Knüpfer	Dr. Bettina Volkens
Management and monitoring of medium-sized or large, international companies						
Industry and corresponding value chains						
Research and development (particularly in the area of relevant technologies for Vossloh)						
Production, marketing, sales						
Significant markets for Vossloh						
Capital market						
Corporate transactions (Mergers & Acquisitions)						
Sustainability (Environment, Social)						
Accounting and financial reporting						
Auditing						
Controlling, risk management						
Corporate Governance, Compliance						
Supervisory Board member since	2/2020	5/2015	5/2020	5/2023	6/2020	5/2020

To maintain the independence of its members, the Supervisory Board has determined that more than half of the shareholder representatives should be independent from the company and the Executive Board in accordance with Recommendation C.7 of the GCGC. In accordance with Recommendation C.9 Sentence 2 of the GCGC, at least one shareholder representative should be independent from the majority shareholder of Vossloh AG. The Supervisory Board concludes that as of December 31, 2023, all shareholder representatives on the Supervisory Board were deemed independent within the meaning of Recommendations C.7 and C.9 of the GCGC. The election proposals put to the Annual General Meeting by the Supervisory Board are to consider the "Requirements and Objectives for the Composition of the Vossloh Aktiengesellschaft's Supervisory Board" as adopted by the Supervisory Board.

The Supervisory Board performs its duties both as a plenary body and through its three current committees, which it established to improve the efficiency of its activities. The committee chairs report on relevant issues and the results of discussions in the plenary Supervisory Board meeting following each committee meeting.

The Personnel Committee has four members: Prof. Dr. Rüdiger Grube, Dr. Bettina Volkens, Mr. Ulrich M. Harnacke and Mr. Marcel Knüpfer. Mr. Marcel Knüpfer succeeded Mr. Andreas Kretschmann as employee representative, who left the Supervisory Board with the end of the Annual General Meeting on May 24, 2023. The Personnel Committee is mainly responsible for Executive Board matters. It prepares personnel decisions, resolutions and the reviews of the full Supervisory Board regarding the remuneration system and the total remuneration of the individual Executive Board members. The Chairman of the Supervisory Board, Prof. Dr. Rüdiger Grube, is simultaneously the Chairman of the Personnel Committee and deemed independent within the meaning of Recommendation C.10 of the GCGC.

The Audit Committee members are Mr. Ulrich M. Harnacke, Dr. Roland Bosch and, since the end of the Annual General Meeting on May 24, 2023, Mr. Marcel Knüpfer, who replaces Mr. Andreas Kretschmann, who was previously a member of the Audit Committee. The Chairman of the Audit Committee is Mr. Ulrich M. Harnacke. The Audit Committee is first and foremost responsible for monitoring accounting, the accounting process, the adequacy and effectiveness of the internal control system, the risk management system, the internal audit system, the financial statement audits and compliance. The Audit Committee prepares the Supervisory Board's auditing of the annual and consolidated financial statements, the combined management report and the audit reports of Vossloh AG and the Vossloh Group. The quarterly statements and half-year report are discussed jointly by the Audit Committee and the Executive Board prior to publication. The Audit Committee recommends auditors to the Supervisory Board and commissions audits for the annual financial statements and

consolidated financial statements and reviews of interim reports. It also works with the auditor to define which areas their audit will focus on, and assesses the quality of audits based on a range of criteria. The Chairman of the Audit Committee also remains in contact with the auditor on a regular basis outside of the meetings of the Audit Committee and exchanges information with the auditor, in particular on the progress of the audit. Furthermore, the Audit Committee obtains regular reports directly from the Internal Audit department and the Chief Compliance Officer. The members of the Audit Committee also exercise their right to information in accordance with Section 107 (4) sentence 4 AktG. In addition, the Audit Committee reviews related party transactions in accordance with Section 111 a (2) sentence 1 and 2 AktG. Members of the Audit Committee have expertise in the areas of accounting and auditing, each including sustainability reporting. Mr. Ulrich M. Harnacke is a tax advisor and auditor as well as the former managing director of Deloitte GmbH and former member of the Executive Board of BDO AG. As a financial expert with expertise in the area of auditing and accounting, he meets the requirements stipulated in Section 100 (5) AktG as well as Recommendation D.3 of the GCGC; this also includes sustainability reporting and the related audits. In addition, he is to be regarded as independent within the meaning of recommendation C.10 of the GCGC. Dr. Roland Bosch is managing director of WOLFF & MÜLLER Holding GmbH & Co. KG and the former CEO of Deutsche Bahn Cargo AG. His expertise lies in a number of areas, including accounting (Section 100 (5) AktG, Recommendation D.3 of the GCGC), including sustainability reporting and the related audits.

The Nomination Committee is responsible for long-term succession planning for the Supervisory Board and for preparing candidate proposals for employee representatives on the Supervisory Board. Its four shareholder representatives are Prof. Dr. Rüdiger Grube, Dr. Bettina Volkens, Dr. Roland Bosch and Mr. Ulrich M. Harnacke. The Supervisory Board then selects the election proposals that will be presented to the Annual General Meeting for an appointment decision. The Chairman of the Nomination Committee is Prof. Dr. Rüdiger Grube.

The Supervisory Board assesses the efficiency of its activities and its committees on a regular basis by alternating between using external assistance and performing self-evaluations. The performance of the Supervisory Board and its committees was last reviewed in November 2023 on the basis of a self-evaluation. The results of this self-evaluation were extremely positive. It focused on how well the Supervisory Board members work together, the organization and work methods of the Supervisory Board and its committees and the exchange of information in the Supervisory Board.

Every Supervisory Board member is obligated to act in the company's best interests. Potential conflicts of interest must be reported to the Chairman of the Supervisory Board immediately. Members of the Supervisory Board are required to recuse themselves from any decision made by the Supervisory Board regarding them individually or related parties or companies. No member of the Supervisory Board received remuneration or benefits for services rendered personally in addition to their emoluments for their Supervisory Board activities from any company in the Vossloh Group. There are no former members of the Executive Board on the Supervisory Board of Vossloh AG.

Compliance

Vossloh considers compliance to be conduct in line with all the applicable laws and internal guidelines. As a global enterprise with a 140-year history, Vossloh has a social responsibility toward its customers, partners, employees, investors and the public. This social responsibility involves Vossloh and all its employees adhering to the applicable laws, respecting basic ethical values and acting in an exemplary fashion at all times and in all situations in the course of their work.

The Executive Board of Vossloh AG has unequivocally summed up these principles in its Compliance Commitment, which states: "Compliance with the law has absolute priority over closing a deal or achieving internal targets. We would rather forgo a business opportunity than violate the law. We will not tolerate any violation of the law or of our internal guidelines and policies and will sanction any such behavior (zero tolerance policy)." The Compliance Commitment is also published on the company's website. The Executive Board of Vossloh AG has put a Compliance Management System in place for the Vossloh Group. The Vossloh Compliance Management System is designed to identify compliance violation risks and to minimize these risks in order to prevent Vossloh and its employees from incurring damage. Anti-corruption and the strict observance of antitrust regulations play a particularly important role.

Since 2007, the Vossloh Compliance Management System has been based on the Vossloh Code of Conduct, which stipulates the value of integrity and is mandatory for the entire Group and all employees. The Code of Conduct was comprehensively revised and enhanced in 2016. The latest version is available on the company's website. With this and the compliance guidelines, which apply equally throughout the Group, all the employees have a canon of rules that serves as a yardstick for their daily work and helps them make good and lawful decisions. The compliance rules are available in the Group's main languages and have been distributed to all Vossloh Group employees around the world. Based on a compliance training concept, all employees receive regular training on compliance issues that is tailored to the target group in question. Vossloh has also established a compliance e-learning program for all employees with a computer workstation.

To implement and monitor compliance, the Executive Board established the Compliance Organization, stipulating its structure, the responsibilities and tasks of the individual compliance positions, and their reporting channels in the Rules of Procedure of the Compliance Organization. The Vossloh Compliance Organization comprises the Chief Compliance Officer (supported by a Compliance Office), the Group Compliance Committee at Vossloh AG, Compliance Officers and Compliance Committees within the business units and Local Compliance Officers within the operating companies. The Chief Compliance Officer regularly reports to the Executive Board and Supervisory Board.

Vossloh set up a whistleblower hotline in partnership with an international law firm in order to uncover potential compliance violations. The whistleblower hotline allows company employees and external whistleblowers to report possible misconduct to an independent external contact (ombudsperson). The whistleblower hotline has so far been set up for 24 countries. As such, the main regions and the languages spoken within the Vossloh Group are essentially covered. The Chief Compliance Officer follows up all reports and implements appropriate measures where necessary. The same applies to reports which employees can make internally. Employees can contact Vossloh's Compliance Office directly.

The Chief Compliance Officer and the Group Compliance Committee continually review the appropriateness and effectiveness throughout the Group of the Compliance Management System. In the 2017 fiscal year, the Vossloh Group's Compliance Management System was also subjected to a comprehensive audit in accordance with Assurance Standard 980 of the Institute of Public Auditors in Germany (IDW) (IDW AsS 980) by KPMG AG Wirtschaftsprüfungsgesellschaft regarding the subsections of antitrust law and anticorruption. The audit was performed as an effectiveness assessment and was concluded in February 2018. KPMG confirmed that the Vossloh Group's Compliance Management System is implemented appropriately and was effective in the period under review. Vossloh has published the audit report on the company's website in the "Investor Relations" section under "Corporate Governance" > "Compliance". A review of compliance risks carried out in the 2023 financial year with the support of BDO, including a survey on the effectiveness and acceptance of the Compliance Management System among 128 representatively selected managers and employees, was conducted. The participants primarily from management, sales and purchasing have once again confirmed the previous risk assessment and the high effectiveness and acceptance of the Compliance Management System. Additional measures related to the adequacy and effectiveness of the Vossloh Group's Compliance Management System are covered starting on page 98 of this annual report.

The Group Compliance Committee additionally performs regular incident-unrelated audits, usually with the assistance of external auditors, in addition to risk dialogues, in order to check the adequacy and effectiveness of the Compliance Management System within the Group companies and to identify new or changed risks and any scope for improvement.

Risk and control management

The principles of good corporate governance include the responsible management of business risks as well as the environmental and social impacts of the company's activities and the sustainability goals established on this basis. The Vossloh AG Executive Board and the management teams of Vossloh Group companies have Group-wide and company-specific reporting and control systems at their disposal that ensure that such risks are recorded, assessed and managed, along with sustainability-related data. The systems are continually checked for their effectiveness, adapted to changing parameters if applicable and examined by the auditor as part of the statutory auditing requirements. As described above, the Supervisory Board and Audit Committee are regularly briefed on and involved in the risk management process. Details of risk management within the Vossloh Group can be found in the risk report section (from page 66 of this annual report). This also includes the report on the accounting-related internal control and risk management system.

Declaration of Conformity

Once again in 2023, the Executive Board and Supervisory Board of Vossloh AG dealt extensively with the recommendations of the German Corporate Governance Code. Vossloh's corporate governance practices are regularly reviewed accordingly.

The Executive Board and Supervisory Board issued the following Declaration of Conformity in November 2023:

Declaration of Conformity with the German Corporate Governance Code by the Executive Board and the Supervisory Board of Vossloh Aktiengesellschaft

Vossloh Aktiengesellschaft currently complies with all of the recommendations of the German Corporate Governance Code as amended on April 28, 2022 (GCGC) published in the Federal Gazette by the Federal Ministry of Justice on June 27, 2022, with the exceptions listed below. It will remain compliant in the future, with the exceptions listed below.

Recommendation C.4: "A Supervisory Board member who is not a member of any Executive Board of a listed company shall not accept more than five Supervisory Board mandates at non-group listed companies or comparable functions, with an appointment as Chairman of the Supervisory Board being counted twice."

Explanation: In addition to acting as the Chairman of the Supervisory Board of Vossloh AG, Prof. Dr. Grube holds a further Supervisory Board mandate at a listed company (Hamburger Hafen- und Logistik AG), where he is being Chairman. Prof. Dr. Grube has three additional other mandates at companies which are not listed (see disclosure on the company's website). These could be considered comparable functions in the sense of GCGC Recommendation C.4. Prof. Dr. Grube will soon take on another mandate that could be considered comparable. One other mandate exists with a function that is not considered comparable. In the opinion of the Executive Board and Supervisory Board, Prof. Dr. Grube significantly enriches the company due to his outstanding expertise and many years of experience in the industry. This is not impaired by his aforementioned mandates. In particular, Prof. Dr. Grube has sufficient time to diligently fulfill his role as the Chairman of the company's Supervisory Board.

Recommendation G.10: "Taking the respective tax burden into consideration, Management Board members' variable remuneration shall be predominantly invested in company shares by the respective Management Board member or shall be granted predominantly as share-based remuneration. Granted long-term variable remuneration components shall be accessible to Executive Board members only after a period of four years."

Explanation: The Supervisory Board considers the share price-based component of the variable remuneration of the Executive Board, which currently accounts for around one third of the variable remuneration for Executive Board members, as being sufficient. The Supervisory Board takes into account the fact that, for share price-based remuneration components, changes in the share price depend not only on the performance of the Executive Board members and the company, but also on external factors over which the company and its bodies do not have any influence. The Supervisory Board takes the view that using a four-year assessment period for the long-term variable remuneration of Executive Board members (or a payout block of an additional year directly after the three year assessment period) is not appropriate, particularly in light of the fact that the GCGC recommends that the first-time appointment of Management Board members should be for a period of not more than three years – a recommendation which the company puts into practice on a regular basis.

Furthermore, since issuing the most recent Declaration of Conformity in November 2022, Vossloh AG has complied with all of the recommendations of the German Corporate Governance

Code in the version dated April 28, 2022, with the exception of the deviations from Recommendations C.4 and G.10 set out above.

This Declaration of Conformity and others from previous years are available on the Vossloh AG website.

Shareholders and Annual General Meeting

The shareholders of Vossloh AG exercise their rights at the Annual General Meeting, including their voting rights. The Chairman of the Supervisory Board usually presides over the Annual General Meeting. The Annual General Meeting makes binding decisions in all of the matters assigned to it by law, in particular on a regular basis regarding the appropriation of net earnings, formal approval of the actions of the Executive Board and Supervisory Board and the election of the auditor, as well as the approval of the remuneration report. Each Vossloh share entitles the holder to one vote at the Annual General Meeting. The shareholders may exercise their voting rights themselves at the Annual General Meeting or have them exercised by an authorized representative of their choosing or by a company-nominated proxy acting on their instructions. The voting results can be found on the company's website immediately after the Annual General Meeting.

Investor Relations

Vossloh ensures that its shareholders and other capital market participants all receive the same information in a swift and efficient manner. All the information published by Vossloh regarding the company is immediately made accessible on the company website www.vossloh.com in English and German. This applies in particular to the annual report, the half-year report, the interim quarterly statements and the invitation to the Annual General Meeting. The scheduled dates of major recurring events and publications, specifically the Annual General Meeting, annual reports and interim reports and statements, are listed in a financial calendar that is published in good time on the Vossloh AG website. The consolidated financial statements are published within 90 days of the end of the fiscal year, and the half-year report and interim statements are made public at the latest within 45 days of the end of the reporting period. If insider information arises or becomes known outside of the regular reporting that affects Vossloh and has the potential to significantly influence the stock market price of the Vossloh share, this information is made known by means of ad hoc disclosures in accordance with Article 17 of the Market Abuse Regulation. In addition, the website www.vossloh.com provides extensive and up-to-date information on the Vossloh Group and the Vossloh share.

Accounting and auditing

Vossloh Group accounting is based on the International Financial Reporting Standards (IFRS) as applicable in the EU. The annual financial statements of Vossloh AG, on the other hand, are prepared in accordance with the HGB as stipulated by law. Both the consolidated financial statements in accordance with IFRS and the separate financial statements pursuant to German accounting regulations were audited by Deloitte GmbH Wirtschaftsprüfungsgesellschaft in accordance with the German regulations and taking into account the generally accepted German auditing principles promulgated by the Institute of Public Auditors in Germany (IDW), this audit firm having been elected by the 2023 Annual General Meeting at the Supervisory Board's proposal. The audit work was contracted by the Supervisory Board's Audit Committee in accordance with the recommendations of the GCGC following verification beyond doubt of the auditor's independence. An agreement was reached with the auditor that the auditor would notify the Supervisory Board without delay of any findings or events of significance to the Supervisory Board's duties that came to light in the course of its audit and would notify the Supervisory Board of any facts identified that could make its declaration of conformity with the GCGC incorrect. No indications of any such facts were identified in the course of the audit. The condensed interim consolidated financial statements and the interim Group management report as of June 30, 2023, were subjected to an auditor's review.

Involvement of women and men in executive positions

The Supervisory Board and Executive Board set the targets outlined below for Vossloh AG in accordance with the relevant legislation (for information on the targets for the Supervisory Board, see the "Supervisory Board" section above).

On November 25, 2021, the Supervisory Board set a target of 0 percent for the Executive Board of Vossloh AG, which currently comprises three male members, for the next target period up to December 14, 2026. The Supervisory Board justified this target as follows:

"The Supervisory Board of Vossloh AG is well aware of the legal requirements related to increasing the number of women in leadership positions and its responsibilities when it comes to achieving gender equality. The Supervisory Board has set a target of 16.67 percent of places being occupied by women (equivalent to one woman in the body as a whole, which is made up of six people and four shareholder representatives). Vossloh AG is not legally required to appoint a woman to the Executive Board. After carefully considering the circumstances, the Supervisory Board believes that it would currently be difficult to apply a long-term voluntary target in excess of zero.

The Supervisory Board discusses the issue of long-term succession planning on a regular basis (at least once per fiscal year) in order to identify and develop suitable female and male candidates and so that vacancies can be filled as quickly as possible with the most suitable candidate. The Supervisory Board is committed to ensuring that the Executive Board actively promotes suitable female talent. Mainly because of the small size of Vossloh AG's Executive Board, a general diversity concept is not in place for the Executive Board. Instead, the Supervisory Board makes every effort to find the most suitable candidates for vacant seats on the Executive Board on a case-by-case basis. Executive Board members are selected on the basis of a systematic selection process, which focuses in particular on expertise and personality, and numerous other features, including the diversity of the Executive Board.

The Executive Board currently consists of highly qualified senior executives who have worked for Vossloh AG for a significant amount of time and have a considerable amount of expertise in the area which they are responsible for. The Supervisory Board wishes to retain the freedom to appoint members of the relatively small Executive Board of Vossloh AG on the basis of merit as specified above. The number of women who work in the rail industry and adjacent industries is relatively small, with even fewer having relevant management experience. Vossloh AG has experienced this regrettable situation a number of times when recruiting for (leadership) positions below the level of the Executive Board, as women are generally underrepresented in the pool of applicants. Because of this situation, the Supervisory Board believes that obliging ourselves to put a minimum number of women in these positions is not compatible with the principles of selecting candidates based on merit, particularly in light of the small size of the Executive Board."

Female candidates were considered as part of the selection process when preparing for the last changes to the Executive Board in November 2020. In March 2023, the Supervisory Board extended the terms of office and contracts of Dr. Thomas Triska and Mr. Jan Furnivall for a further five years each until October 31, 2028. No changes or additions to the Executive Board are currently intended.

On November 25, 2021, the Executive Board set a target for women to occupy 25 percent of positions on both the first and second management levels below the Executive Board, to be achieved by December 14, 2026. A total of 25 percent of positions on the first management level were held by women on December 31, 2023, meaning that this target has been reached. Women made up 50 percent of the second management level at the end of the 2023 fiscal year, which exceeded the target.

Executive Board and Supervisory Board remuneration

The current remuneration system for the members of the Executive Board pursuant to Section 87(a)(1) and (2) AktG (approved by the Annual General Meeting on May 24, 2023) and the remuneration system for the members of the Supervisory Board (approved by the Annual General Meeting on the same date pursuant to Section 113(3) AktG) are available at www.vossloh.com/de/investor-relations/corporate-governance/verguetung. Both the remuneration report and the auditor's report in accordance with Section 162 AktG are available on the same page. The most recent resolutions passed by the Annual General Meeting on the remuneration system and the remuneration report are also available on the company's website. The remuneration system of Executive Board members makes a significant contribution to promoting and implementing the corporate strategy of the Vossloh Group, namely strengthening the product business and further expanding the conventional and digital service business with the aim of sustainably increasing the value of the company.

Combined management report

of the Vossloh Group and Vossloh AG as of December 31, 2023

38	Business and market environment
40	Economic report
40	Macroeconomic and industry-specific conditions
41	Company acquisitions
41	Results of operations
45	Financial position and investing activities
48	Asset and capital structure
49	General statement on the business performance and economic situation of the Vossloh Group
50	Business performance Core Components
52	Business performance Customized Modules
53	Business performance Lifecycle Solutions
54	Vossloh AG – Analysis of the separate financial statements
56	Statutory takeover-related disclosures pursuant to Section 289a and Section 315a HGB
60	Workforce
61	Research and development
66	Risk and opportunity report
74	Internal control system
77	Outlook
80	Nonfinancial Group statement

Business and market environment

Segmentation and competitive position

Vossloh is active in rail infrastructure markets worldwide. The Group provides a wide range of rail track-related services under one roof: rail fastening systems, concrete ties, switch systems and crossings as well as innovative and increasingly digital-based services for the entire lifecycle of rails and switches. Vossloh's customers are public and private local, freight and long-distance transport operators who make capital expenditures after predominantly long-term decision-making processes and as part of long-term financing. Vossloh accompanies its customers as a partner over many years. Together with them, the company plans and develops solutions for their individual product and service requirements. This usually leads to delivery and project periods of several months to several years, with long-term framework agreements often being agreed with customers. Vossloh is committed to sustainable governance and climate protection and plays an important role in sustainable passenger and freight mobility with its products and services. Its business activities are organized into three divisions – Core Components, Customized Modules and Lifecycle Solutions. The Core Components division is made up of two business units, Vossloh Fastening Systems and Vossloh Tie Technologies. The other two divisions comprise one business unit each: Vossloh Switch Systems is part of Customized Modules and Vossloh Rail Services is part of Lifecycle Solutions. You can find detailed descriptions of the individual divisions on page 50 et seq.

Vossloh holds the following competitive positions in the rail infrastructure sector:

- Vossloh is a leading global supplier and technological leader in rail fastening systems.
- Vossloh is one of the global market and technology leaders in the switches and crossings segment.
- Vossloh is a leading supplier of innovative technologies and services for the entire lifecycle of rails and switches.
- Vossloh is a leading manufacturer of concrete ties in North America and Australia.

Organization

The Vossloh Group is active around the world. Local presence and customer proximity are integral elements of our business activities. Important production sites for the rail fastening systems produced by the Fastening Systems business unit are located in Germany, China, Poland and the USA. The Tie Technologies business unit manufactures concrete ties in the USA, Mexico, Canada and Australia. The switch systems in the Customized Modules division are manufactured primarily in France, Sweden, Luxembourg, Poland, Australia, India, Finland, Portugal, the UK, the Netherlands, Serbia, Malaysia and China. The majority of rail services in the Lifecycle Solutions division are provided in Western and Northern Europe, in addition to China.

Vossloh operates globally via sales companies and branches. The company enters into joint ventures and cooperation agreements with expert local partners on a case-by-case basis. Key Group companies and management companies are:

- Vossloh Fastening Systems GmbH, Werdohl, Germany, and Rocla Concrete Tie, Inc., Lakewood, Colorado, USA, for the Core Components division
- Vossloh Cogifer SA, Rueil-Malmaison, France, for the Customized Modules division and
- Vossloh Rail Services GmbH, Hamburg, Germany, for the Lifecycle Solutions division.

Controlling system

The most significant financial performance indicators for the Vossloh Group are value added, sales revenues, EBIT (earnings before interest and taxes) and EBIT margin (EBIT/sales revenues). While the company uses sales, EBIT and EBIT margin as key performance indicators for short-term planning, the long-term management of the business units within the framework of the value-oriented growth strategy has a focus on value added. Value added is the key earnings indicator for the divisions and business units within the framework of external reporting.

Positive value added is generated when a premium is earned on top of the return claimed by investors and lenders (cost of capital). This premium is the difference between the return on capital employed (ROCE, calculated as EBIT/average capital employed) and the cost of capital, which is calculated as the weighted average cost of equity and debt. Multiplying the premium by average capital employed (working capital plus fixed assets) gives the value added over a period in absolute terms. For internal controlling purposes, ROCE and value added are calculated before taxes.

Cost of equity is largely composed of a risk-free interest rate plus a market risk premium. The interest rate factor is adjusted according to the result before taxes. Cost of debt is calculated on the basis of the Group's average financing terms. The ratio of equity to interest-bearing debt, which is used to determine the weighted cost of capital, is not derived from balance sheet data since it is not only predicated on a benchmark for the funding structure but also because equity is based on target market values in this case and not the carrying amounts recognized on the balance sheet. A weighted average cost of capital before taxes (WACC) of 8.5 % was used as the yield expected by investors and lenders for the purposes of intragroup controlling in the 2023 fiscal year (previous year: 7.0 %).

There are two ways of increasing value added: increasing EBIT and optimizing capital employed. ROCE is derived from both values. Vossloh seeks to improve the parameters it can influence to optimize this performance indicator. As a result, the company also focuses on working capital, working capital intensity (average working capital/annual revenue) and free cash flow.

Management uses nonfinancial performance indicators for the purpose of managing the company and making long-term strategic decisions. However, nonfinancial performance indicators do not play a central role in the management of the company. Instead, they provide information about the situation within the Group and are used as a basis for decisions. Accordingly, the Vossloh Group does not use nonfinancial performance indicators in the sense of Section 289c (3) sentence 5 HGB. Nonfinancial performance indicators that are not primarily relevant for management purposes are provided in the nonfinancial Group statement, which begins on page 80.

The management of Vossloh AG considers monthly financial reporting to be a central element for the ongoing analysis and control of the divisions, business units and the Group itself. To this end, the financial statements and key performance indicators prepared by the group companies are consolidated and analyzed in the same way as the annual forecast updated each month. Deviations are investigated in relation to their effects on the financial targets. The monthly updates to annual projections are supplemented by risk reports that aim to identify any potential reductions or increases in assets. The effectiveness of measures aimed at ensuring targets are met is continuously analyzed. The figures of the operating units are intensively discussed by their respective management and the Executive Board with the involvement of the relevant central departments of Vossloh AG.

Economic report

Macroeconomic and industry-specific conditions

Investments in rail infrastructure are generally made around the world on the basis of long-term decision-making processes. For this reason, short-term economic developments are only reflected in the sales markets for rail technology to a limited extent. More significant is the development of debt levels in Vossloh's sales markets, as the overwhelming majority of the Group's clients are public-sector customers. The debt ratio (the ratio of public debt to GDP) of the euro countries at the end of the third quarter of 2023 was 89.9 % according to the statistical office of the European Union (Eurostat). This was the most recent figure available when this annual report was prepared. At the same time in the previous year, it was 92.2 %. At the end of September 2023, the debt ratio for the entire EU was 82.6 % compared to 84.6 % in the previous year. The decline in debt ratios was driven by GDP rising at a faster rate than government debt.

From a global perspective, the rail technology market has been growing steadily for many years. This is the result of rising demand around the world for environmentally friendly, safer and more economical mobility for both people and goods. The driving forces for this development include megatrends such as population growth, urbanization and, most significantly, increasing environmental awareness. No other means of mass transportation has a better eco-balance than rail. Both passengers and freight need to be shifted onto the rail network if the aim is to increase their mobility while also reducing their environmental footprint in the interest of combating climate change. There are investment programs around the world to promote rail as a mode of transport. The programs mentioned above play an important role for Vossloh as they affect markets in which Vossloh holds a strong competitive position with at least one business unit. In its "Green Deal" climate protection program, the European Union has set itself the goal of reducing transport-related CO₂ emissions by 90 % by 2050 (already by 55 % by 2030). To achieve this, the European Commission wants passenger rail traffic in the high-speed sector to double by 2030 and triple by 2050. Rail freight transport is set to increase by 50 % by 2030 and double by 2050. The objectives of the European Green Deal will have a positive impact on the rail industry in the coming years and decades. Other examples of investment programs include the "Strong Rail" program adopted in Germany in 2020. The government and Deutsche Bahn have agreed to jointly invest a record sum of €86 billion in the maintenance and modernization of the existing rail network by 2030. In addition, over €30 billion is currently set to be invested in rail infrastructure over the next few years despite the difficult budget situation. In 2021, Congress in the USA passed an investment program that earmarks USD 66 billion for the rail industry. The "Egypt Vision 2030" infrastructure investment plan envisages Egypt investing almost €50 billion in the expansion of the rail network by then, including a 1,800-kilometre high-speed line. Indian Railways wants to be climate-neutral by the end of 2030. The Indian state railroad is therefore investing heavily in the expansion of the huge rail network on the subcontinent, in the modernization of rolling stock and in wind and solar parks to electrify the lines. The railway industry is also undergoing a profound transformation beyond this. Digitalization and automation, artificial intelligence and the standardization and liberalization of rail transport are changing the framework conditions significantly. Innovations are becoming increasingly important.

A number of studies regularly analyze developments in the global rail technology market. The most important publication is the „World Rail Market Study“, published by the European rail industry association UNIFE. The study is updated every two years. The findings from the most recent study were published in September 2022 at InnoTrans, the world's largest trade fair for transport technology held in Berlin. According to UNIFE, the current global volume of the rail market is around €177 billion per year. UNIFE currently considers about 61 % of the total volume of the rail market – some €107 billion – to be accessible. In this case, accessible means that this market is, in principle, open to European suppliers and market demand is not exclusively met by domestic manufacturers.

Vossloh focuses on rail infrastructure products and services. The market segments of infrastructure and infrastructure services are therefore of particular importance for Vossloh. According to UNIFE data, €22.8 billion of the infrastructure market is accessible each year. UNIFE estimates that around €6.1 billion of the market for infrastructure services is currently accessible.

Company acquisitions

With effect from September 1, 2023, Vossloh RailWatch GmbH, which was previously acquired as a shelf company and then renamed, acquired a business operation. The acquisition significantly expands the digital monitoring portfolio in terms of camera-based technology by using optical and acoustic sensors to record information on wheel damage and brake blocks, among other things. This provides crucial insights into wheel-rail contact, which has a significant influence on the condition of the rail track over time. The company is not assigned to any business unit.

Results of operations

Vossloh divisions – Orders received and order backlog

€ mill.	Orders received		Order backlog	
	2023	2022	2023	2022
Core Components	542.7	554.4	262.1	285.4
Customized Modules	524.1	563.3	461.3	488.1
Lifecycle Solutions	175.5	162.3	40.8	37.5
Consolidation	(24.9)	(33.0)	(3.0)	(11.4)
Group	1,217.4	1,247.0	761.2	799.6

In the 2023 fiscal year, Vossloh once again achieved a very high level of orders received and order backlog. Orders received were only 2.4 % below the previous year's record figure, marking the second-highest figure in the infrastructure business in Vossloh's history. Orders received in the Core Components division fell slightly by 2.1 % compared to the previous year. This was mainly due to the Fastening Systems business unit (–9.1 %), which, following major orders in Egypt and China in the previous year, now recorded a decline in these two regions in particular. In contrast, Vossloh Tie Technologies, the second business unit in the Core Components division, exceeded the previous year's figure by 20.1 % due to a significant increase resulting from a major order in Mexico. The 6.9 % decline in the Customized Modules division was due in particular to lower orders received in the Middle East, Italy, India and Egypt. On a positive note, there was a pleasing increase in the important markets of France and Germany. The Lifecycle Solutions division achieved a noticeable increase of 8.1 %, mainly due to continued high demand in Germany. The book-to-bill ratio at group level, i.e. the ratio of orders received to sales revenues, was 1.00 (previous year: 1.19).

Orders received again at a high level

The Vossloh Group's order backlog as at December 31, 2023 reached the second-highest level in the company's history at the end of a year. Only at the end of 2022 was a higher figure achieved.

Due to the high number of framework agreements, the order backlog performance indicator is only of limited significance, as the order volume from acquired framework agreements is usually only recorded in orders received at the time of the respective requests.

Sales revenues significantly higher than expected at around €1.2 billion

The Vossloh Group achieved a significant increase in sales revenues in the 2023 fiscal year. After €1,046.1 million in the previous year, sales revenues rose by 16.1 % to €1,214.3 million. This was well above the originally expected forecast range of €1.05 billion to €1.15 billion and at the upper end of the forecast range of €1.175 billion to €1.225 billion, which was raised at the end of 2023. All divisions achieved strong sales growth.

Vossloh Group – Sales by region

	€ mill.	%	€ mill.	%
	2023		2022	
Germany	141.8	11.7	101.7	9.7
France	95.1	7.8	89.7	8.6
Rest of Western Europe	101.6	8.4	87.7	8.4
Northern Europe	139.9	11.5	130.1	12.4
Southern Europe	116.5	9.6	101.9	9.8
Eastern Europe	88.4	7.3	78.9	7.5
Total for Europe	683.3	56.3	590.0	56.4
Americas	189.5	15.6	122.6	11.7
Asia	215.1	17.7	204.6	19.6
Africa	14.7	1.2	22.3	2.1
Australia	111.7	9.2	106.6	10.2
Total	1,214.3	100.0	1,046.1	100.0

Significant increase in sales revenues in Europe; Germany up almost 40 % on the previous year

Compared to the previous year, sales revenues in Europe increased by 15.8 % in the year under review. The Lifecycle Solutions division achieved higher sales revenues, particularly in Germany. The Customized Modules division and the Fastening Systems business unit also contributed to the increase in sales. Sales revenues in Northern Europe exceeded the previous year's level by 7.5 %, in particular due to higher sales in the Customized Modules division. This division was also largely responsible for the 13.1 % sales growth in Southern Europe and 12.1 % in Eastern Europe, with a significant increase in sales in Italy and a new construction project in Serbia.

Sales revenues in the Americas up by more than half

In the Americas, sales revenues increased by 54.6 % year on year in 2023. The increase was largely due to higher sales revenues in the Core Components and Customized Modules divisions in connection with a new construction project in Mexico. Sales revenues in the USA also exceeded the previous year's figure thanks to the performance of the Tie Technologies business unit.

Sales in Asia slightly higher year on year

In Asia, the group's sales revenues were 5.1 % higher than in the previous year. This was largely due to higher sales revenues in the Customized Modules division in the Middle East region.

Sales in Australia up slightly

Group sales in Australia exceeded the previous year's already high level by 4.8 %. The slight increase in sales resulted in particular from higher sales revenues in the Customized Modules division.

Sales in Africa below previous year's level

In Africa, the Vossloh Group recorded 34.3 % lower sales revenues. The decline was mainly due to lower sales revenues in the Customized Modules division and the Fastening Systems business unit in Egypt.

The Vossloh Group's cost of sales amounted to €898.3 million in the year under review and was thus significantly higher than in the previous year (€809.3 million), in line with the sales trend. The cost of sales as a percentage of sales revenues amounted to 74.0 %, primarily due to a lower cost of materials ratio as a result of an overall improved project mix compared to the previous year (77.4 %). The Vossloh Group's selling and administrative expenses increased from €163.7 million to €214.4 million.

This increase was mainly due to higher logistics costs as a result of higher freight prices. In addition, higher consulting costs due to the implementation of group projects and increased personnel expenses also contributed to this, as a result of which the share of these expenses in sales revenues rose to 17.7 % compared to the previous year's figure of 15.6 %. The other operating result – the balance of other operating income of €17.7 million (previous year: €20.9 million) and other operating expenses of €10.9 million (previous year: €11.3 million) – amounted to €6.8 million. This figure was lower than the previous year's figure of €9.6 million.

Vossloh Group – Sales revenues and earnings

	€ mill.	%	€ mill.	%
	2023		2022	
Sales revenues	1,214.3	100.0	1,046.1	100.0
EBITDA/EBITDA margin	158.0	13.0	131.2	12.5
EBIT/EBIT margin	98.5	8.1	78.1	7.5
Net income	55.3	4.6	56.0	5.4
Earnings per share (in €)	2.21		2.38	

In the 2023 fiscal year, Vossloh achieved a significant increase in earnings before interest and taxes (EBIT) compared to the previous year. EBIT improved by 26.2 %. This increase was primarily attributable to the Core Components division. The Customized Modules division also made a significant contribution to the increase. The improvement in group EBIT is all the more remarkable given that holding costs in 2023 were extraordinarily high, particularly as a result of higher costs for individual group projects and increased personnel costs. EBIT was well above the original guidance range of €79 million to €88 million and at the upper end of the range of €94 million to €100 million, which was raised at the end of 2023. The EBIT margin also exceeded the original forecast of 7.2 % to 8.0 % and was in the middle of the most recently adjusted range of 7.8 % to 8.3 %.

EBIT 26.2 %
higher than in the
previous year

Net interest income in the 2023 fiscal year fell to €(16) million compared to the previous year's figure of €(10.6) million. This was mainly due to higher financing costs from financial liabilities as a result of the general interest rate trend. Earnings before income taxes increased to €82.5 million in the reporting year (previous year: €67.5 million).

Income taxes in the Vossloh Group amounted to €28.2 million in the year under review (previous year: €12.5 million). The absolute increase was mainly due to the higher operating result and was also influenced by higher non-tax-deductible costs. In addition, the tax rate in the previous year was unusually low, as deferred tax assets were recognized in the domestic tax group, particularly as a result of a corporate restructuring.

Net income for 2023 was roughly on a par with the previous year, mainly due to the higher tax rate. Net income attributable to hybrid capital investors amounted to €6.0 million (previous year: €6.0 million), while €10.6 million was attributable to other shareholders (previous year: €8.3 million). Net income attributable to the shareholders of Vossloh AG amounted to €38.7 million, slightly below the previous year's figure of €41.7 million. With an unchanged average number of shares outstanding of 17,564,180, this resulted in slightly lower earnings per share of €2.21 compared to the previous year (previous year: €2.38).

Earnings per
share 2023 at
€2.21

Dividend of €1.05 per share planned for 2023

The Executive Board and Supervisory Board of Vossloh AG are committed to ensuring that its shareholders benefit from the economic performance of the Group. The Executive Board and Supervisory Board will, therefore, propose an increased dividend of €1.05 (previous year: €1.00) for the 2023 fiscal year at the Annual General Meeting scheduled for May 15, 2024.

Vossloh Group – Value management

€ mill.	2023	2022
Average capital employed	937.2	950.6
ROCE (in %)	10.5	8.2
Value added	18.9	11.5

Value added significantly increased in 2023

ROCE was significantly higher than in the previous year due to the operational improvement. The WACC used for internal management purposes – the weighted cost of capital of equity and debt providers – was raised to 8.5 % for the 2023 fiscal year (previous year: 7.0 %) as a result of the general interest rate trend. Nevertheless, value added significantly exceeded the previous year's figure as a result of the strong EBIT development.

The following table presents a reconciliation of the ROCE and value added performance indicators to the EBIT shown in the income statement:

Reconciliation of value added and ROCE to EBIT

€ mill.	2023	2022
Premium in % (ROCE – WACC)	2.0	1.2
Average capital employed	937.2	950.6
Value added	18.9	11.5
Cost of capital on the average capital employed	79.6	66.6
EBIT	98.5	78.1

Financial position and investing activities

As the group's management holding company, Vossloh AG is responsible for managing the group's finances and funding. Corporate Treasury Management is responsible for the central management of cash flows and for ensuring the financing of all group companies as well as for hedging and managing financial risks. These not only include liquidity risks, but particularly risks from interest and exchange rate fluctuations. Derivatives and other financial instruments are used for hedging. The group companies' funding level is largely ensured by Vossloh AG providing the necessary cash resources. Only in isolated cases where funding outside Germany is either economically preferable or required by law do individual group companies obtain original local financing.

The net financial debt of the Vossloh Group (calculated as financial liabilities minus cash and cash equivalents and short-term securities) excluding lease liabilities decreased from €197.6 million at the end of 2022 to €182.9 million at the end of the 2023 fiscal year. The decrease was mainly due to a significant improvement in free cash flow. Net financial debt, including lease liabilities in the amount of €36.6 million (previous year: €39.9 million), came to €219.5 million (previous year: €237.5 million) at the end of 2023.

Net financial debt down thanks to significantly improved free cash flow

Financial liabilities amounted to €320.0 million at the end of the year under review and were therefore slightly higher than the previous year's figure of €316.6 million. €90 million of the financial liabilities were attributable to a Schuldschein loan placed in the 2017 fiscal year with a term of seven years (until July 2024) and a fixed interest rate of 1.763 %. In July 2023, two further Schuldschein loans of €30 million each were issued with terms until July 2028 and July 2030 with variable interest rates above the 6-month Euribor. At the end of November 2023, both Schuldschein loans were hedged with two payer interest rate swaps. A Schuldschein loan in the amount of €25 million with a term of seven years (until December 2028) and a fixed interest rate of 0.8 % had already been placed at the end of 2021. Further around €52 million of the financial liabilities at the end of 2023 were attributable to drawings on the syndicated loan concluded in November 2017 with a current volume of €230 million and a term until November 2024. The interest rate at the end of the year was 4.5 % and was based on the respective reference interest rate (Euribor or €STR) and a margin agreed in the loan agreement, which is based on the ratio of net financial debt to EBITDA. A maximum amount is set for this ratio (covenant), which, if exceeded, gives the lending banks the option of early termination. Compliance with the covenant must be demonstrated every six months; this was the case at the end of the first half and at the end of 2023. Furthermore, at the end of 2023 – unchanged from the previous year – Vossloh AG had a loan of €20 million with DZ-Bank with a term until July 2024 and a margin of 0.75 % above the 3-month Euribor. Due to the reclassification of this loan and the Schuldschein loan also maturing in July 2024 and drawings on the syndicated loan, the share of current financial liabilities increased from €49.2 million in the previous year to €198.4 million. The syndicated loan was refinanced ahead of schedule in February 2024. The new loan agreement has a term of five years until February 2029. When added together, the sum total of cash and cash equivalents and short-term securities came to €100.5 million at the end of the fiscal year under review (previous year: €79.1 million).

The group's contingent liabilities decreased from €51.7 million at the end of 2022 to €29.0 million. The majority of this, €23.7 million, was attributable to the former Locomotives business unit. For the outstanding contingent liabilities, Vossloh AG received an irrevocable and unconditional guarantee at first request from a first-class bank.

As of the end of the year, the Group had committed but unutilized credit facilities of €244.4 million (previous year: €219.6 million).

The hybrid note issued in February 2021 of €150 million with an indefinite term can be called and repaid by the company for the first time after five years. The interest rate over the first five years is 4.0 %. In addition, depending on the sustainability performance measured by ISS ESG and MSCI ESG Research ratings, the redemption amount may increase. The structure of the note means that it is treated as equity in the consolidated financial statements. The resulting increase in the equity ratio and the associated strengthening of the balance sheet structure lead to significantly greater financial flexibility, which positively bolsters the implementation of the corporate strategy.

Vossloh Group – Development of cash flows

€ mill.	2023	2022
Cash flow from operating activities	137.3	71.6
Cash flow from investing activities	(65.4)	(44.9)
Cash flow from financing activities	(39.4)	(29.3)
Net cash inflow/outflow	32.5	(2.6)
Cash and cash equivalents at the beginning of the period	28.9	29.6
Cash and cash equivalents at the end of the period	62.4	28.9
Free cash flow	70.9	27.9

Significant increase in free cash flow

Cash flow from operating activities significantly exceeded the previous year's figure. This was due in particular to a higher gross cash flow (calculated as the sum of EBIT from continuing and discontinued operations, depreciation/amortization/impairment of non-current assets [netted with write-ups] and changes in non-current provisions), that was above the previous year's level due to the increased EBIT. Positive effects such as a lower increase in working capital compared to the previous year also had an impact. Free cash flow (defined as cash flow from operating activities less investments in intangible assets and property, plant and equipment as well as investments in companies accounted for using the equity method and plus proceeds from profit distributions or the sale of companies accounted for using the equity method) increased significantly compared to the previous year despite significantly higher cash outflows from investments in intangible assets and property, plant and equipment. Cash flow from financing activities was lower than in the previous year, partly due to the repayment of drawdowns under the syndicated loan in the amount of €40.0 million. Cash and cash equivalents at the end of 2023 increased significantly compared to the previous year due to a positive net cash inflow.

Vossloh Group – Capital expenditure and depreciation/amortization

€ mill.	2023		2022	
	Capital expenditure	Depreciation/ amortization	Capital expenditure	Depreciation/ amortization
Core Components	24.8	25.5	18.9	24.6
Customized Modules	25.3	19.2	16.3	15.1
Lifecycle Solutions	19.5	14.2	16.7	12.7
Vossloh AG/Consolidation	4.9	0.6	6.3	0.7
Total	74.5	59.5	58.2	53.1

Capital expenditure in 2023 significantly exceeded the previous year's level. In the Core Components division, capital expenditure increased noticeably. The largest single item of capital expenditure related to the establishment of series production for composite ties at the Fastening Systems business unit's Polish production site. Capital expenditure in the Customized Modules division increased significantly. Material capital expenditure was made, among other things, in connection with the strategically important project for digital-based switch monitoring in Sweden and for the acquisition of a flash butt welding system at the Polish site. Capital expenditure on the new plant in Australia also contributed to the increase. Capital expenditure in the Lifecycle Solutions division was also noticeably higher than in the previous year. Investments were made for technical revisions to individual milling machines, among other things. The capital expenditure shown in the table above reflects additions in the fiscal year and also includes capital expenditure in assets financed by a lease agreement. Capital expenditure is included in the cash flow statement if it has already resulted in cash outflows. The values therefore differ. Depreciation and amortization at Group level, which is added back to EBIT in the cash flow statement, includes impairments/reversals of impairment losses and were at the same level as in the previous year.

Capital expenditure commitments for the acquisition of intangible assets and property, plant and equipment totaled €6.8 million as of December 31, 2023 (previous year: €23.2 million). As a result of the progress made in the establishment of series production for composite ties in the Fastening Systems business unit, investment obligations fell sharply compared to the previous year.

Asset and capital structure

Vossloh Group – Asset and capital structure

		2023 12/31/2023	2022 12/31/2022
Total assets	€ mill.	1,392.7	1,368.8
Equity	€ mill.	638.5	625.1
Equity ratio	%	45.8	45.7
Closing working capital ¹	€ mill.	193.1	191.6
Average working capital	€ mill.	209.4	218.1
Average working capital intensity	%	17.2	20.8
Fixed assets ²	€ mill.	746.1	731.6
Closing capital employed ³	€ mill.	939.2	923.2

¹ Working capital = trade receivables (including contract assets) plus inventories minus trade payables (including contract liabilities) minus prepayments received minus other current provisions (adjusted for matters not attributable to the operating business)

² Fixed assets = Intangible assets plus property, plant and equipment plus investment properties plus investments in companies accounted for using the equity method plus other non-current financial instruments

³ Capital employed = working capital plus fixed assets

Equity ratio
remains above 45 %

The Vossloh Group's equity at the end of 2023 increased slightly compared to the previous year. This was due to the positive net income in 2023. The equity ratio remained almost unchanged compared to the previous year due to the increase in total assets.

Working capital
intensity significantly
lower

Despite the significant increase in sales, working capital as at December 31, 2023 was at the previous year's level. Average working capital in 2023 had even decreased slightly compared to the previous year, resulting in an average working capital intensity that was 3.6 percentage points lower. A key driver of this positive development was the Cash4Growth project launched in the second quarter of 2023, which aims to achieve a sustainable reduction in working capital.

General statement on the business performance and economic situation of the Vossloh Group

The 2023 fiscal year was characterized by numerous crises such as the ongoing war in Ukraine, the escalation of violence in the Middle East and the persistently high inflation rates accompanied by large interest rate increases. The Vossloh Group once again demonstrated its above-average level of resilience and was able to continue its growth trajectory for the third year in a row. Sales revenues in the infrastructure business reached an all-time high, increasing by 16.1 % year on year to €1,214.3 million. This was well above the original guidance range of €1.05 billion to €1.15 billion and at the upper end of the raised forecast of €1.175 billion to €1.225 billion at the end of 2023. EBIT also increased significantly by 26.2 % to €98.5 million. This significantly exceeded the original guidance range of €79 million to €88 million and was also at the upper end of the last forecast range of €94 million to €100 million. The EBIT margin of 8.1 % in the 2023 fiscal year also rose more strongly than originally expected (between 7.2 % and 8.0 %), but was within the forecast of 7.8 % to 8.3 % that was raised at the end of the year. The positive development of value added was also pleasing, rising noticeably despite an increase in the WACC from 7.0 % to 8.5 %. It amounted to €18.9 million (previous year: €11.5 million) and was therefore significantly higher than the range of €0 to €10 million originally forecast by the company.

Orders received also developed positively and were only slightly below the record level of the previous year. This marks the second-highest figure in the infrastructure business in Vossloh's corporate history. The order backlog also remains well above the historical average in the infrastructure business.

In view of the general conditions, the net assets and financial position are also positive. Equity increased to €638.5 million (previous year: €625.1 million). At 45.8 %, the equity ratio remained almost unchanged at the previous year's high level. Of particular note is the free cash flow of €70.9 million, which significantly exceeded the previous year's figure of €27.9 million. Overall, this led to a decrease in net financial debt from €237.5 million at the end of 2022 to €219.5 million at the end of 2023.

The 2023 fiscal year was also successful from a strategic perspective. Among other things, Vossloh acquired RailWatch's innovative technology in 2023, enabling Vossloh to expand its monitoring portfolio and extend its digital expertise to include wheel-rail contact, which has a significant influence on the condition of the track over time. In addition, significant progress was made in the year under review in setting up series production for innovative and sustainable composite ties at the Fastening Systems business unit's Polish production site. The innovative composite tie is a more environmentally friendly alternative to wooden ties that is fully recyclable and has significantly lower lifecycle costs. Series production is set to begin in the course of 2024.

From an operational and strategic perspective, 2023 was an extremely successful fiscal year overall for the Vossloh Group.

Business performance of Core Components

In the Core Components division, Vossloh has combined its range of industrially manufactured series products, which are required in large quantities for rail infrastructure projects. This includes the rail fastening systems developed, produced and marketed in the Fastening Systems business unit for all areas of application worldwide – from heavy-haul to high-speed rail lines and urban transport. The Tie Technologies business unit is the leading manufacturer of concrete ties in North America and Australia. In addition to concrete rail ties, the business unit also manufactures switch ties, concrete low-vibration blocks for slab track and crossing panels.

Core Components

		2023	2022
Orders received	€ mill.	542.7	554.4
Order backlog	€ mill.	262.1	285.4
Sales revenues ¹	€ mill.	546.7	482.1
EBITDA	€ mill.	95.3	68.4
EBITDA margin	%	17.4	14.2
EBIT	€ mill.	69.8	43.7
EBIT margin	%	12.8	9.1
Average working capital	€ mill.	101.1	125.1
Average working capital intensity	%	18.5	26.0
Average capital employed	€ mill.	329.5	367.6
ROCE	%	21.2	11.9
Value added	€ mill.	41.8	18.0

¹ Sales revenues include external sales revenues and sales to other divisions.

Orders received slightly below the previous year's high level

Orders received by the Core Components division in the 2023 fiscal year were only slightly below the previous year's high figure (-2.1 %). Lower order volumes in the Fastening Systems business unit were almost completely offset by Vossloh Tie Technologies. The order backlog at the end of 2023 was €23.3 million or 8.2 % below the previous year's figure.

Sales revenues again up significantly by 13.4 %

The Core Components division increased its sales revenues by 13.4 % in the year under review. While the Fastening Systems business unit recorded slight sales growth of 2.4 %, the Tie Technologies business unit contributed to the positive development with a considerable increase of 43.3 %.

The volume of sales revenues between the business units in the Core Components division increased by €11.3 million in 2023 compared to the previous year. This is due to higher demand from Vossloh Tie Technologies for rail fastening systems for an order won in Mexico at the beginning of 2023 and from the Class I companies in the USA.

EBIT and EBIT margin significantly improved compared to 2022

EBIT in the Core Components division was €26.1 million higher than in the previous year. This is primarily due to the additional sales revenues and a higher-margin order mix. In the previous year, the sharp rise in material and energy prices had a significant negative impact on profitability. Higher profitability in China also had a positive effect in 2023. The EBIT margin improved significantly from 9.1 % in the previous year to 12.8 % in the 2023 fiscal year.

The higher EBIT with a simultaneous decrease in average capital employed is also reflected in the return on capital employed (ROCE), which increased by 9.3 percentage points in the 2023 fiscal year. The average working capital intensity fell considerably compared to 2022 with significantly higher sales revenues, primarily due to further optimized receivables management. The value added by the Core Components division also more than doubled despite the higher weighted average cost of capital to be applied.

Vossloh Fastening Systems

Orders received by Vossloh Fastening Systems in the 2023 fiscal year totaled €356.1 million, compared with €391.8 million in the previous year. In addition to very high orders received in China, an order for the supply of rail fastening systems for the construction of a new high-speed line in northern Egypt in particular led to the very high prior-year figure. In 2023, an increase in orders was recorded, primarily from Mexico, Romania and Greece. The order backlog at the end of 2023 decreased slightly by €9.9 million to €189.2 million compared to the previous year's reporting date.

Orders received down due to major project in previous year

Sales revenues at Vossloh Fastening Systems in 2023 amounted to €349.4 million after €341.3 million in the previous year. The previous year's figure was exceeded primarily in Mexico and the German market. Sales growth was also recorded in Italy and the Netherlands in particular. This more than compensated for lower revenue in Australia, Eastern Europe, Egypt, Turkey and Finland.

Sales revenues up slightly once again

The value added for Vossloh Fastening Systems more than doubled to €43.8 million (previous year: €18.5 million).

High positive value added once again

Vossloh Tie Technologies

Orders received in the Tie Technologies business unit reached an all-time high in the year under review. They amounted to €213.9 million, up €35.9 million on the previous year's figure of €178.0 million. The main driver here was an order won in Mexico at the beginning of 2023. In Australia, the high order volumes from framework agreements from the previous year were not achieved. New orders in the US and in Canada were slightly below the previous year's level. The order backlog at the end of 2023 amounted to €76.7 million (previous year: €89.5 million).

High order intake in Mexico in 2023

Sales revenues also reached a record level in the Tie Technologies business unit, totaling €224.1 million. This was significantly higher than the previous year's figure of €156.3 million. Sales in Mexico increased significantly due to the processing of the order won at the beginning of the year under review. Sales revenues in the USA also increased thanks to higher call-off orders from the Class I companies. In the Australian market, the level of sales was also increased again compared to 2022.

Sales revenues reach record level

Value added by Vossloh Tie Technologies of €(1.5) million was slightly below the previous year's level (€(0.2) million) due to the higher weighted average cost of capital.

Business performance of Customized Modules

All of the Group's services for the manufacture, installation and maintenance of individualized infrastructure modules for the rail industry are bundled in the Customized Modules division. The division includes the Switch Systems business unit, one of the largest providers of switch systems worldwide. The product portfolio covers a very wide range of applications, extending from light-rail to high-speed applications.

Customized Modules

		2023	2022
Orders received	€ mill.	524.1	563.3
Order backlog	€ mill.	461.3	488.1
Sales revenues ¹	€ mill.	537.4	456.1
EBITDA	€ mill.	61.8	52.3
EBITDA margin	%	11.5	11.5
EBIT	€ mill.	42.7	37.1
EBIT margin	%	7.9	8.1
Average working capital	€ mill.	79.0	73.1
Average working capital intensity	%	14.7	16.0
Average capital employed	€ mill.	379.7	376.2
ROCE	%	11.2	9.9
Value added	€ mill.	10.4	10.8

¹ Sales revenues include external sales revenues and sales to other divisions.

Orders received remain at record level after previous year's good level

Orders received in the Customized Modules division were 6.9 % below the previous year's historically highest figure. In the Middle East, Italy, India and Egypt in particular, new orders were down on the previous year, while France, Germany and Switzerland recorded increases in orders received.

Sales revenues at record level

Sales revenues in the division exceeded the 2022 figure by €81.3 million and reached a new all-time high. Growth was recorded in Italy, Serbia and Germany in particular, which more than compensated for declines in Turkey and Egypt in particular.

Positive earnings trend continues

The division's EBIT in 2023 was 14.8 % higher than in the previous year. This was mainly due to higher earnings contributions from the locations in Luxembourg, Poland and France. The EBIT margin was only slightly below the 2022 level despite the impairment of an investment and project-related follow-up costs.

In line with this overall positive development, ROCE was up on the previous year with only a slight change in average capital employed. Value added hardly changed despite the positive EBIT development due to the offsetting negative impact of the higher cost of capital.

Working capital intensity in turn improved

Average working capital increased in particular due to higher inventories. However, the percentage increase was lower than the growth in sales. As a result, the average working capital intensity fell by 1.3 percentage points compared to 2022.

Business performance of Lifecycle Solutions

Through its Rail Services business unit, the Lifecycle Solutions division concentrates on specialist services for the maintenance of rails and switches. Its innovative technologies promote the safety of rail lines and contribute to extension of the service life of rails and switches as well as improved track availability. The service portfolio mainly includes maintenance, grinding and milling for the corrective and preventive care of rails and switches, welding services and rail and switch logistics. Lifecycle Solutions' extensive range of services complements the product portfolios of Core Components and Customized Modules.

Lifecycle Solutions

		2023	2022
Orders received	€ mill.	175.5	162.3
Order backlog	€ mill.	40.8	37.5
Sales revenues ¹	€ mill.	163.5	136.0
EBITDA	€ mill.	25.8	24.2
EBITDA margin	%	15.8	17.8
EBIT	€ mill.	11.6	11.5
EBIT margin	%	7.1	8.4
Average working capital	€ mill.	34.0	24.2
Average capital intensity	%	20.8	17.8
Average capital employed	€ mill.	220.2	205.0
ROCE	%	5.3	5.6
Value added	€ mill.	(7.1)	(2.9)

¹ Sales revenues include external sales revenues and sales to other divisions.

In the 2023 fiscal year, the Lifecycle Solutions division recorded significantly higher orders received compared to the previous year, which were mainly generated in Germany in the Track Supply division and in the Netherlands. The order backlog at the end of 2023 was slightly higher than in the previous year.

Orders received noticeably above the previous year

The Lifecycle Solutions division generated 20.3 % higher sales revenues than in the previous year, the highest figure in the company's history. The increase was due in particular to higher sales revenues in Germany and the Netherlands. In Germany, sales growth of around 34 %, which was due in particular to the framework agreement for preventive rail maintenance (high-speed grinding) signed with Deutsche Bahn in the previous year and to the Track Supply division. The degree of internationalization of the Lifecycle Solutions division – measured in terms of sales revenues generated outside Germany – fell to 49.2 % in the 2023 fiscal year (previous year: 54.4 %) due to the strong increase in sales in Germany.

Sales revenues up by 20.3 %

The division's EBIT was almost unchanged from the previous year. While EBIT from preventive and corrective maintenance services (high-speed grinding and milling) in particular increased noticeably, especially earnings contributions from machine sales were down on the previous year.

In the reporting year, ROCE in the division was lower due to the higher average capital employed. Average working capital was higher than in the previous year due to higher inventories.

Vossloh AG – Analysis of the separate financial statements

As an operational management and financial holding company, Vossloh AG serves as the parent of the Vossloh Group and controls and oversees all major operations and activities within the Group. In addition to determining corporate strategy and controlling corporate development, Vossloh AG allocates the financial resources, particularly for capital expenditures and acquisitions, and is responsible for corporate accounting and controlling, Group-wide treasury management, risk and opportunity management and internal auditing as well as for innovation and development, EHS/sustainability, IT, legal affairs and compliance, investor relations and corporate communications among others. The company oversees sales activities, including marketing communications. In addition to HR policy, it is also responsible for personnel development and supporting the Group's senior management. Business unit representatives report on the events and developments in their area of responsibility on a regular basis. The Executive Board exerts a direct influence on the operational management of the business units in this context, alongside its management responsibility for different functions. A comprehensive catalog of approval requirements also ensures that the Executive Board is closely involved in significant operational decisions.

Vossloh AG prepares its annual financial statements in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The following notes refer to the separate financial statements and present the key determinants of the net assets, financial position and results of operations and thus additionally required disclosures for Vossloh AG's separate financial statements. In isolated cases, certain transactions are handled differently in the consolidated financial statements according to IFRS. The relevant provisions of the German Commercial Code (HGB) have not changed significantly in the fiscal year.

Analysis of the separate financial statements

The sales revenues of €15.5 million reported by Vossloh AG for the 2023 fiscal year (previous year: €11.7 million) resulted primarily from intercompany allocations with Group companies that obtain a wide range of services via Vossloh AG (mainly in the areas of IT and marketing, in addition to services related to digitalization and international sales). The first two companies using the new ERP system were invoiced for their share of the costs.

Operating expenses were mainly incurred in connection with the company's management and financing functions. The business performance and economic development of Vossloh AG follow the activities of its subsidiaries and investees. The most significant performance indicators for Vossloh AG are the general administrative expenses, the net financial result and the result after tax/net income.

At €20.3 million, administrative expenses in 2023 were slightly higher than in the previous year (€19.0 million). Personnel expenses of €14.3 million increased slightly compared to the previous year (€13.7 million), which was due to higher salaries and higher variable remuneration due to the result. While trade fair costs, which are significant in the years in which the industry trade fair InnoTrans takes place, fell significantly compared to the previous year, consulting costs, particularly for IT in light of the SAP S/4 project currently underway, increased considerably.

At €2.2 million, other operating expenses increased slightly in the year under review compared to the previous year (€1.7 million); they exclusively include losses from foreign currency valuations. Other operating income amounted to €1.3 million (previous year: €2.6 million). While income was realized in the year under review from subsequent effects of an M&A transaction, the previous year was characterized by the reversal of a provision.

The net financial result for 2023 increased very significantly from €(46.3) million in the previous year to €115.7 million in the reporting year. The main drivers were significant income from investments (€40.1 million; previous year: €20.0 million), profit transfer agreements (€42.7 million; previous year: €17.1 million) and from write-ups on financial assets (€29.6 million). In the previous year, loss transfers in the amount of €6.1 million and, in particular, write-downs on investments in the amount of €74.7 million contributed to the negative financial result. Due to the improved business prospects, particularly in the long term, the fair value of an investment increased substantially despite a further slight increase in the risk-free interest rate.

In addition, interest income more than doubled to €16.9 million (previous year: €8.0 million) – mainly from the on-lending of short-term loans or longer-term loans to Group companies – while interest expenses increased by just over 26 % year-on-year to €15.0 million (previous year: €11.9 million). As in the previous year, income taxes of €0.5 million (previous year: €0.0 million) were only incurred in a very small amount due to the minimum taxation regulations. In the year under review, Vossloh AG's net income amounted to €93.9 million (previous year: net loss of €64.3 million).

Total assets rose from €855.0 million in the previous year to €938.3 million. The increase of €83.3 million was triggered in particular by the aforementioned write-ups in financial assets and higher receivables from affiliated companies (an increase of €49.6 million). Intangible fixed assets decreased significantly in the year under review from €9.7 million in the previous year to €1.2 million. The expenses for the conversion of the ERP software in the Group, which were previously recognized in fixed assets at Vossloh AG and are attributable to the Group companies and charged to them in the respective go-lives, were reclassified to current assets in the year under review. In line with the progress of the project, €12.4 million is now reported as work in progress under inventories following the reclassification and taking into account the expenses incurred in the year under review.

At €247.3 million, liabilities to banks on the liabilities side of the balance sheet increased only slightly as at the reporting date compared to the previous year (€238.0 million). Liabilities to affiliated companies continued to fall in the year under review by €4.6 million to €13.2 million (previous year: €17.8 million). At €31.7 million, provisions remained at almost the same level as in the previous year (€31.6 million). Here, the increase in the provision for variable remuneration due to the good annual result was almost offset by a reduction in the pension provision due to the contribution to a reinsurance policy. Equity increased again significantly from €408.4 million to €484.7 million due to the significantly higher net profit for the year compared to the dividend payment. The equity ratio rose accordingly from 47.8 % in the previous year to 51.7 %. Overall, the Executive Board considers Vossloh AG's net assets and financial position to be positive in view of the balance sheet structure and the increased equity ratio at the end of the financial year. Following the write-up on financial assets and the positive net interest result in the period under review, the earnings situation can be classified as very satisfactory.

Dependency report

The Executive Board of Vossloh AG considers Vossloh AG to be dependent in accordance with Section 17 of the German Stock Corporation Act as Mrs. Nadia Thiele respectively Mr. Robin Brühmüller, as executor of the estate of the deceased Heinz Hermann Thiele, continue to indirectly hold 50.09 % of its share capital on December 31, 2023. In accordance with Section 312 AktG, the company prepared a report on its relationships with affiliated companies containing the following declaration: "In respect of the legal transactions listed in the report on relationships with affiliated companies, the company, according to the circumstances known at the time when the legal transactions were made, received an appropriate consideration for each legal transaction. No measures were enacted that put the company at a disadvantage at the request or in the interest of Mrs. Thiele or Mr. Brühmüller, or companies affiliated with the aforementioned persons. This assessment is based on the facts and circumstances known by us at the time such reportable transactions were conducted." The report was audited by the auditor and was issued with an unqualified auditor's opinion.

Statutory takeover-related disclosures pursuant to Section 289a and Section 315a HGB

The provisions of Sections 289a and 315a HGB require that the following takeover-related disclosures be made as of December 31, 2023.

Composition of the subscribed capital

The subscribed capital (share capital) of the company amounts to €49,857,682.23. It is distributed across 17,564,180 no-par-value ordinary shares.

Restrictions on voting rights and share transferability

All shares carry the same rights. Each share grants one vote at the Annual General Meeting. The Executive Board of the company is not aware of any restrictions on voting rights or share transferability.

Shareholding in excess of 10 % of the voting rights

On the basis of the notifications of voting rights submitted to the company in accordance with the provisions of the German Securities Trading Act (WpHG), the company holds an interest in the company's capital that exceeds 10 % of the voting rights. KB Holding GmbH, Grünwald, Germany, holds 50.09 % of the voting rights in Vossloh AG. Based on the notifications of voting rights pursuant to Section 34 (1) of the German Securities Trading Act, these voting rights are attributable to TIB Vermögens- und Beteiligungsholding GmbH, Grünwald, Germany, Stella Vermögensverwaltung GmbH, Grünwald, Germany, Mrs. Nadia Thiele, Munich, Germany and Mr. Robin Brühmüller (executor of the estate of the late Heinz Hermann Thiele), Munich, Germany. According to the voting rights notification published by the company on April 13, 2023, the Heinz Hermann Thiele Family Foundation has a claim arising from a legacy, as a result of the fulfillment of which the voting rights in the company held by KB Holding GmbH are attributable to it. To the company's knowledge, the bequest claim has not yet been fulfilled.

Shares with special rights or rights of control

There are no shares with special rights or rights of control.

Voting control of employee shareholdings

Employees who are shareholders in the company exercise their control rights like any other shareholder, directly in accordance with statutory requirements and the Articles of Incorporation.

Appointment/dismissal of Executive Board members; amendments to the Articles of Association

Vossloh AG's Executive Board members are appointed or dismissed in accordance with the provisions of Sections 84, 85 AktG in conjunction with Article 7 of the Articles of Incorporation. Pursuant to Section 84 (1) AktG, Executive Board members are appointed by the Supervisory Board. They are appointed for a maximum term of five years, whereby their reappointment or the renewal of their term of office is permitted. The appointment of an Executive Board member may be revoked in the cases set out in Section 84 (4) AktG.

According to Section 179 (1) AktG, the Articles of Incorporation may be amended by a resolution of the Annual General Meeting. Pursuant to Article 21 (2) of the Articles of Incorporation but subject to overriding statutory provisions to the contrary, the Annual General Meeting may pass its resolutions with the simple majority of votes cast. Where the law prescribes a capital majority in addition to a voting majority, the simple majority of the capital stock represented at the vote shall suffice unless the provisions of the law or Vossloh AG's Articles of Incorporation prescribe otherwise. Article 27 of the Articles of Incorporation authorizes the Supervisory Board to resolve on amendments to the Articles of Incorporation that only affect the wording. Article 4 (4) of the Articles of Incorporation further entitles the Supervisory Board to update the Articles of Incorporation accordingly after the capital stock has been increased by utilizing authorized or contingent capital.

Authority of the Executive Board to issue and buy back shares

The Executive Board's authority to issue shares is defined in Article 4 of the Articles of Incorporation.

Authorized capital

The Executive Board is authorized, subject to the consent of the Supervisory Board, to increase the share capital until May 26, 2025, by up to a total of €24,928,841.11 through one or more issuances of new, no-par-value shares against contributions in cash and/or in kind (Authorized Capital 2020).

The shareholders are entitled to subscription rights. The shares may also be taken over by one or more credit institutions with the obligation to offer them to the shareholders for subscription.

The Executive Board is authorized, however, subject to consent of the Supervisory Board, to exclude the subscription rights of shareholders in the following instances:

- (i) To exclude fractional amounts resulting from the subscription ratio from the subscription right;
- (ii) To grant the holders – or, in the case of registered securities, the creditors – of conversion and/or option rights in circulation at the time when the Authorized Capital 2020 is utilized, or of a conversion obligation from convertible bonds and/or bonds with warrants to be issued by the company or one of its wholly owned Group companies in the future, a subscription right for new shares to the extent to which they would be entitled after exercising their conversion and/or option rights or after fulfillment of a conversion obligation as shareholders;
- (iii) In the case of capital increases against cash contributions, if the issue price of the new shares is not significantly lower than the stock exchange price of the already listed shares of the same class at the time the issue price is finally fixed and the total number of shares issued does not exceed 10 % of the share capital neither at the time this authorization becomes effective nor at the time it is exercised. Counting toward this capital limit are: (1.) The sale of treasury shares, insofar as they are sold during the term of this authorization under exclusion of subscription rights pursuant to Section 186 (3) sentence 4 AktG; (2.) Those shares issued or to be issued to service bonds with conversion and/or option rights or a conversion obligation, if the bonds are issued during the term of this authorization under exclusion of subscription rights in analogous application of Section 186 (3) sentence 4 AktG; and (3.) Those shares that were issued during the term of this authorization on the basis of other capital measures under exclusion of shareholder subscription rights pursuant to or in analogous application of Section 186 (3) sentence 4 AktG;
- (iv) In the case of capital increases against contributions in kind.

The authorizations contained in the above paragraphs (i) to (iv) to exclude subscription rights in the case of capital increases against cash and/or contributions in kind are limited to an amount not exceeding 10 % of the share capital, either at the time this authorization becomes effective or at the time this authorization is exercised. The above-mentioned 10 % limit must also take into account: (1.) Own shares that are sold during the term of this authorization under exclusion of subscription rights; (2.) Those shares that are issued to service bonds if the bonds were issued during the term of this authorization under exclusion of shareholder subscription rights; and (3.) Those shares that were issued during the term of this authorization on the basis of other capital measures under exclusion of shareholder subscription rights.

The Executive Board is authorized, subject to the consent of the Supervisory Board, to determine the further details of capital increases as well as the conditions for the share issue.

Further details of the authorization can be found in Article 4 of the Articles of Incorporation.

Purchase of treasury shares

There is currently no authorization for the company to purchase treasury shares. As of December 31, 2023, the company did not hold any treasury shares.

Agreements upon a change of control

There are ten material company agreements that are subject to a change of control clause.

In the case of nine of these agreements, a change of control means that a person or a group of persons acting in concert – with the exception of descendants, spouses, heirs, foundations or other beneficiaries in the last will of Mr. Heinz Hermann Thiele – directly or indirectly obtains more than 50 % of the shares or voting rights in the company:

- A Schuldschein loan arranged by Landesbank Hessen-Thüringen Girozentrale and BNP Paribas: In the event of a change of control, the loan agreement contains the right of the loan issuers to demand payment of the outstanding balance, including accrued interest, within 30 days after becoming aware of the change of control;
- A syndicated loan agreement with Bayerische Landesbank, BNP Paribas Niederlassung Deutschland, Commerzbank AG, Deutsche Bank AG, Filiale Deutschlandgeschäft, HSBC Continental Europe S.A., Germany, Landesbank Baden-Württemberg, Landesbank Hessen-Thüringen Girozentrale and Skandinaviska Enskilda Banken AB (publ) Frankfurt Branch, including the sub-credit line agreements concluded on this basis: If there is a change of control, each individual bank has the right to cancel the loan contract for the amount of the loan attributable to it within 30 days after the announcement has been made. In the event of a cancellation, the outstanding balance, including accrued interest, are due and payable within a period of at least 15 days;
- A guarantee facility agreement with Skandinaviska Enskilda Banken AB's (publ) Frankfurt branch: If there is a change of control, the bank is entitled to an extraordinary cancellation right. In the event of a cancellation, the outstanding balance, including accrued interest, is immediately due and payable;
- A guarantee insurance policy with Tryg Deutschland, a branch of Tryg Forsikring A/S: If there is a change of control, the insurer has the right to cancel the policy without notice within 30 days after becoming aware of the change. If the policy is canceled, the insurer is entitled to demand collateral for outstanding guarantees in the form of a cash deposit;
- A hybrid note arranged by M.M. Warburg & Co. and Jefferies GmbH: In the event of a change of control, the bond grants the issuer the right to cancel the bond and demand payment of the outstanding balance, including accrued interest, by a date to be decided later. If the issuer does not exercise this right, the interest rate used to calculate the accrued interest is increased by 500 basis points;
- A loan agreement with DZ Bank AG: In the event of a change of control, the Parties must reach a mutually agreeable arrangement regarding how the loan should be continued, with different terms if necessary. If an agreement cannot be reached within one month, the bank is entitled to terminate the loan and any accrued interest without notice;

- A Schuldschein loan arranged by Landesbank Hessen-Thüringen Girozentrale: In the event of a change of control, the loan agreement contains the right of the loan issuers to demand payment of the outstanding balance, including accrued interest, within 30 days after becoming aware of the change of control;

- Two Schuldschein loans arranged by Bayerische Landesbank and Landesbank Baden-Württemberg: In the event of a change of control, the loan agreements contain the right of the loan issuers to demand payment of the outstanding balance, including accrued interest, within 30 days after becoming aware of the change of control.

In one other agreement, a change of control essentially means the purchase of more than 30 % of the voting rights by one or several trading individuals. In relation to the descendants, spouses, heirs, foundations or other beneficiaries in the last will of Mr. Heinz Hermann Thiele, a change of control occurs if 50 % of capital stock is exceeded:

- A guarantee facility agreement with Deutsche Bank AG: In the event of a change of control, negotiations to continue the framework loan are foreseen under amended terms and conditions, if applicable. After a change of control, the bank is not obliged to fund further utilizations.

Compensation agreements upon change of control

No compensation agreements have been made with any members of the Executive Board or employees of the company in the event of a takeover bid.

Workforce

As of December 31, 2023, the Vossloh Group had 4,017 employees¹ worldwide working towards the company's goals. This was 135 employees more than in the previous year (3,882 employees), which corresponds to an increase of 3.5 %.

Workforce-related performance indicators

€ thousand	2023	2022
Personnel expenses per employee	63.8	59.8
Sales revenues per employee	303.6	275.7

The average number of employees in the past fiscal year was 3,999 compared to 3,794 in the 2022 fiscal year. The increase of 5.4 % is attributable to all divisions and the holding company. The Core Components division in particular – especially the companies in Mexico and Australia in the Tie Technologies business unit – contributed to the increase. In addition, the employees of Vossloh RailWatch GmbH were included in the Group figures for the first time.

Of the average total number of employees, 73.1 % (previous year: 73.6 %) were employed at the European locations. Of the remaining 26.9 %, 49.3 % (previous year: 51.7 %) worked in Asia, 27.9 % (previous year: 26.4 %) in the Americas and 22.8 % (previous year: 21.9 %) in Australia.

Personnel expenses

€ mill.	2023	2022
Wages and salaries	206.4	182.3
Social security expenses and charges	42.6	38.5
Pension expenses	6.2	6.0
Total	255.2	226.8

Divisions

The average number of employees was distributed across the divisions as follows; in addition, sales revenues per employee increased in all divisions during the reporting period:

Division	Number Ø employees		Personnel expenses per employee in € thousand		Sales revenues per employee in € thousand	
	2023	2022	2023	2022	2023	2022
Core Components	1,017	937	69.3	65.8	537.5	514.6
Customized Modules	2,290	2,241	54.7	50.4	234.7	203.5
Lifecycle Solutions	609	549	73.4	71.1	268.7	247.7

In addition, Vossloh AG employed an average of 83 people² (previous year: 67).

For additional information, please refer to the "Occupational health and safety" and "Human resources and leadership" sections of the nonfinancial Group statement.

¹ The number of employees is stated in this section on the basis of full-time equivalents.

² This also includes 4 employees of Vossloh RailWatch GmbH, which has been included in the scope of consolidation since September 1, 2023, and whose employees were therefore not included in the average calculation for the entire year.

Research and development

Vossloh is a technological leader in the rail infrastructure segments in which it operates. Innovation plays a decisive role in ensuring that the company remains competitive from a technological standpoint. In the interest of safety, Vossloh's products and services are subject to detailed technical specifications and standards that must be met. Before products and services for rail infrastructure are ready for market, they usually undergo (further) development and testing for several years, as well as complex approval procedures by independent testing institutions. Research and development projects at Vossloh are therefore usually scheduled to run for several years.

To satisfy the specific expectations of customers in individual market regions over the long term and reinforce its own competitive position, Vossloh adopts a structured approach to managing innovation by continuously investing in the development and optimization of its products and services. Principles and procedures are defined in the Group-wide Innovation Playbook adopted in 2021, the implementation of which is ensured by a Group Innovation Committee. Vossloh intends to increase collaboration across business units to develop new products, services and business models and ensure that customers and suppliers – with their specific expertise – are involved more closely in research and development processes. After reviewing its production processes over recent years, the company is now implementing a range of measures which will provide ongoing efficiency gains, including modernization, increased automation and specialization.

One focus of innovation at Vossloh is digitalization as the link between hardware and services. The company uses specialized sensor systems to collect data about load levels and track condition and, since 2023, data on the condition of rail vehicles. Among other things, this data can be used to gain knowledge about the degree of wear and damage to track components. With this knowledge, statements can be made about which maintenance strategies should be applied and when. This can reduce the risk of component failure – and thus the unavailability of routes and infrastructure – during ongoing operations. Artificial intelligence also plays an important role in detecting wear patterns to predict the failure of track components and prevent these failures by planning maintenance measures ahead of time. Vossloh uses its in-depth knowledge of rail structure to meet its customers' main requirement "increasing track availability" and develop comprehensive solutions in partnership with all business units. Under the guiding principle of "enabling green mobility", these ensure that the rail infrastructure is more robust and resilient and that route availability is increased, even though the demands on the rail network are constantly increasing.

At the same time, sustainability criteria such as low material usage and energy consumption, the use of secondary raw materials and recycling or the avoidance of emissions play an important role in Vossloh's research and development activities. Based on life cycle analyses, all business units are working on solutions that reduce the ecological footprint of Vossloh products and services.

A significant proportion of Vossloh's research and development efforts relate to specific customer contracts. Accordingly, these expenses are reported under cost of sales in the income statement and not under research and development (R&D). Expenses for the development of market-ready products are only capitalized if they satisfy the relevant criteria defined in IAS 38. Development costs that cannot be capitalized are shown as research and development costs if they are not reported under cost of sales.

In 2023, expenses for research and development – including capitalized internally generated assets – came to a total of €12.0 million (previous year: €11.8 million). This represents a share of approximately 1.0 % of Group sales (previous year: 1.1 %). At €4.0 million (previous year: €4.1 million), R&D expenses in the Core Components division was largely attributable to the Fastening Systems business unit. R&D expenses in the Customized Modules division amounted to €4.6 million (previous year: €3.7 million). €3.0 million (previous year: €3.6 million) was attributable to the Lifecycle Solutions division, while €0.4 million (previous year: 0.7 million) were attributable to Vossloh AG.

Newly capitalized assets that were generated internally or as a result of third-party deliveries or service performance in the 2023 fiscal year came to €1.6 million (previous year: €3.5 million) and were largely attributable to the Lifecycle Solutions division.

Vossloh Group – Research and development costs

€ mill.	2023	2022
Research and development costs	12.0	11.8
of which capitalized	1.6	3.5
Research and development expenses (income statement)	10.4	8.3
Amortization (of capitalized development costs)	0.6	0.4

Maximizing track availability and reducing lifecycle costs

Vossloh’s research and development efforts in 2023 focused on creating new products and services that provide solutions to the major challenges currently facing the rail sector. This includes increasing the availability of rail tracks and developing solutions to deal with the consequences resulting from the increased load on tracks, such as wear and noise emissions. Vossloh also conducts research with a focus on extending the service life of infrastructure and infrastructure components in order to reduce lifecycle costs. Vossloh possesses comprehensive expertise on rail as a complex mode of transportation. The company is able to leverage this expertise to significantly improve the efficiency of rail network maintenance processes. Digitalization plays a key role in this. The focus is on intelligent rail systems and digital track monitoring. Vossloh’s solutions minimize disruption and lay the groundwork for increasing the amount of traffic on rail networks. Vossloh is therefore helping create more efficient rail infrastructure, which is essential for the environmentally friendly mobility of people and goods.

With the launch of the cloud-based Vossloh connect platform in October 2023, Vossloh once again lived up to its pioneering role in digitized applications in the rail infrastructure business. As a one-stop-shop platform for customers across the rail industry, Vossloh connect offers a range of state-of-the-art solutions that optimize the management and maintenance of rail infrastructure, contributing to higher safety, lower lifecycle costs and improved overall performance. All digital solutions – mainly in-house developments from Vossloh, with additional complementary products from selected external partners – are integrated into a user-friendly system. The platform provides a convenient, holistic overview of the rail infrastructure and operation. In addition, the platform includes advanced analysis and warning systems that reduce the risk of accidents and malfunctions. This is crucial for railbound traffic safety and helps to reduce the cost of emergency repairs and extend the service life of railroad systems.

Via Vossloh connect, customers have real-time access to the condition data of their rail infrastructure. In a protected area, they can view all measurement data, analyses, evaluations and recommendations for action for their lines. With this digital service, Vossloh enables its customers to significantly deepen their knowledge of their infrastructure and improve its availability through targeted, also preventive maintenance. Visualization in Vossloh applications makes this data intuitively usable and translates it into tailored recommendations for action. Highly developed algorithms for predictive maintenance enable rail operators to plan maintenance work more efficiently and thus reduce downtimes and costs.

The information about the condition of the rail infrastructure comes, among other things, from configurable IoT sensors directly in the track, which measure vibration conditions near switches to identify atypical track behavior. In addition, Vossloh's rail processing machines, which are equipped with a range of sensors such as laser or eddy current, serve as diagnostic vehicles. They measure the condition of the rails while the timetable is running. The collected data is transferred to an asset management system, for example the in-house developed applications mapl-e or MR.Pro. In doing so, mapl-e can not only visualize the condition, but also evaluate it and derive maintenance measures from it as well as carry out an economic assessment of the necessary work. On this basis, the asset manager can create a plan and determine a budget for maintenance.

The condition of the track over time is also significantly influenced by the so-called wheel-rail contact. With the acquisition of RailWatch technology in 2023, Vossloh has expanded its monitoring portfolio in this area and extended its digital expertise. The technology developed by RailWatch uses optical and acoustic sensors to identify the technical condition of freight and passenger wagons, multiple units and locomotives as they pass by. A supplementary measuring system, which is installed in the track, enables further data to be recorded, including various parameters of the wheel profile, weight information and the distribution of axle loads. This collected information is also processed in the cloud using artificial intelligence. This means that wear or damage can be detected at an early stage and maintenance measures can be planned and implemented with pinpoint accuracy.

Switches are the most critical elements of the rail track, and also the components which require the most maintenance. Switch disruptions are one of the main reasons for track unavailability and unplanned maintenance. Switches are also the ideal starting point for the continuous collection of condition data with sensors. In addition to tracks, a number of signaling and control systems cross each other at switches; as a result, the data collected at switches is particularly useful. A number of digital solutions are now available for switch management purposes. In urban regional transportation, for example, Vossloh's compact electro-hydraulic Easydrive point machine can be equipped with smart sensor technology for remote monitoring. The PM-DiagBox can be added to conventional analog point machines to make them smart. Vossloh offers the innovative Easyswitch MIM-H point machine for mainline routes – a modular plug-and-play solution with excellent reliability. The in-house development SMV is already being used to avoid switch failures and to anticipate necessary tamping work on the ballast in the switch area and check its effectiveness.

- Digitalization accelerates development work** Digitalization also offers direct opportunities for Vossloh’s R&D activities. Research and development work in all divisions is increasingly based on data-processing technologies – a trend that continued in 2023. The most recent example of successful development using digital means is Vossloh’s new M-generation of tension clamps: A team of employees with specialist knowledge from various areas was able to successfully complete the development of the new generation of tension clamps in just around twelve months – with many benefits for customers.
- Working towards “quiet rails”** All of Vossloh’s innovations also focus on quiet rails as noise and vibrations are a major inconvenience, particularly for people in dense urban areas. With dampening rail fasteners, whisper switches and acoustic rail grinding, Vossloh is playing its part in reducing noise emissions. A number of solutions in this area were improved in 2023. The company also provides maintenance measures that are proven to reduce noise emissions. By using sensor technology to monitor noise levels, Vossloh can target specific areas for grinding to guarantee long-term reductions in the amount of noise created by rail infrastructure. This is another example of how the company is using digitalization to improve the quality of life for people in urban areas by reducing noise.
- Cooperations and partnerships** Vossloh has long relied on the specific expertise of external specialists for some of its development work. The Group has access to an extensive network of experts. The company works closely with renowned universities and research institutions from all around the world – such as those in Germany, France, Sweden, China, Australia and the USA – as part of long-term partnerships on a variety of levels and in various forms. Vossloh focuses on partnerships with technology companies and startups working in digitalization and big data analysis. The joint venture established with Rhomberg Sersa represents a crucial partnership that offers a wide range of monitoring and maintenance services for switches and rails. The MR.pro software provides the joint venture with a set of open-system digital tools for evaluating and visualizing the condition and material of track infrastructure. In 2023, Vossloh entered into a strategic partnership with the Swedish digitalization specialist Predge. Predge’s extensive expertise in data analysis and artificial intelligence will be used to jointly develop a predictive model that provides precise fault forecasts and valuable insights into imminent failures, especially of point machines. In addition to Vossloh, several selected partners also offer innovative digital solutions on the Vossloh connect platform. The Swedish company Strainlabs, for example, is contributing its expertise in the field of intelligent screws. The Israel-based company Cervello specializes in cyber security solutions for the rail industry. The Vossloh RailWatch system monitors the condition and performance of rolling stock.
- R&D by divisions** In 2023, the R&D experts in the Fastening Systems business unit of the Core Components division focused, among other things, on further developing the tension clamps of the new M generation. One of the requirements was to increase the service life of the components in heavily used tracks. The potential of rail fastening systems with M clamps in ballasted track was also validated in complex measurement campaigns. As part of the new and further development of the plastic components, the focus was on sustainability aspects. Series production of the composite sleeper Engineered Polymer Sleeper (EPS), which was developed in-house, was optimized. Following successful approval for switches and bridge applications, EPS was used in the first orders for switches and in a pilot project for a bridge. The business unit Tie Technologies again focused its R&D activities in the reporting year on material and energy-saving changes to the composition of concrete for railroad sleepers. A product whose innovative cement mixture leads to a significantly improved CO₂ balance sheet while retaining the same properties was installed in various tracks for test purposes.

In 2023, the Customized Modules division worked together with the Lifecycle Solutions division to develop models for inspecting switches in the track that incorporate the ultrasonic testing of cast manganese steel frogs developed in the previous year. Designed for a very long service life, the Flexidrive-4M point machines for metro and mainline railroads went into test operation in Finland. Two product lines required special attention: After several years of successful testing, Vossloh customers worldwide can now be offered switches whose frogs and switch blades are made of the extremely hard rolled steel CogX and/or whose slide chairs are coated with COGSLIDE, which is why their switch rails can be moved friction-free and with low energy consumption even without lubrication. With Vossloh Open Gateway (VOG), the division's R&D experts have added another high-quality monitoring tool to the existing V-MON architecture. In combination with PM-DiagBox and the V-MON server, it becomes a complete solution for switch monitoring with data collection, transmission and analysis. An approach was developed for the V-Drone inspection tool to inspect the condition of rails on railroad bridges from the air at low cost and without interrupting train traffic.

In the Lifecycle Solutions division, (further) development work focuses on machines for rail processing on the one hand, and onboard measuring systems for even more comprehensive condition monitoring of rail lines and software for evaluating and displaying the overall data (keyword "smart maintenance") on the other. In 2023, control systems, sensors and measurement technology of various grinding and milling vehicles were also adapted to meet additional customer requirements. The VTM-performance rail milling machine for mainline railroads is now ready for operation. In terms of software, the division now has a revised version of the LRS (Laser Rail Scanning) system for measuring track and rail geometries, which was already used to measure transverse and longitudinal profiles on around 16,000 grinding kilometers in 2023. A stationary system was also derived from LRS, which measures and documents the quality of processed new rails in the welding plant. Major progress was made in the development of the RailTainer for efficient rail transport to construction sites on container wagons with a modular support plate.

Streamlined processes and digital data flows along the entire value chain are becoming an increasingly important part of Vossloh's internal processes. The cross-divisional exchange of knowledge as part of international development projects using modern communication and collaboration solutions is increasing. Accordingly, the IT structure was further expanded and standardized in 2023. One of the company's largest projects is "one.ERP". The Group-wide standardized enterprise resource planning (ERP) system provides a tool for limitless cooperation between all employees. The solution chosen by the Group can be adapted to the business models of different Vossloh units and can interface with other platforms, such as Customer Relationship Management (CRM) and Product Lifecycle Management (PLM). The project proceeded according to plan during the reporting period. Two Vossloh Switch Systems companies in Finland and Sweden were the first units to celebrate their go-live in November 2023.

Optimizing
production and
administration

Risk and opportunity report

Principles and organizational structure

Risks and opportunities for the company's net assets, financial position and results of operations are systematically identified, analyzed, evaluated, monitored, managed and reported to the relevant bodies at all levels within the Vossloh Group. For Vossloh, proper management of risks and opportunities is part of responsible corporate governance. Vossloh has established a Group-wide risk and opportunity management system for this purpose. This system serves to prevent or mitigate negative effects resulting from changes while also identifying and harnessing opportunities that arise. The risk and opportunity management system encompasses not only Vossloh AG itself but also all domestic and overseas subsidiaries in which Vossloh AG has a direct or indirect shareholding, irrespective of whether these are consolidated in the Group's financial statements. Vossloh AG's risk and reward situation is discussed separately at the end of the chapter. Acquired and newly established companies are immediately integrated into the system.

The risk and opportunity management system is a component of the business, planning and control processes. The organization of structures and processes is documented in a Group-wide policy, which was adapted in the 2023 financial year in light of the introduction of risk management software. The update mainly focused on procedural changes as a result of the system implementation. The review of the reported individual risks for interdependencies and the aggregation into an overall risk position (net view), which is then compared to the Group's risk-bearing capacity, will continue unchanged. The Group's risk-bearing capacity is systematically determined on the basis of key earnings and liquidity figures and reviewed on an ongoing basis by Group Controlling and the Executive Board. In addition, risks with a very high loss value and a very low probability of occurrence (less than 5 %, so-called tail events) are systematically recorded in the reporting system if relevant.

The structure of the risk and opportunity management system is based on the structure of the operating processes of the relative organizational units. There are appointed Risk Managers, Risk Officers and Risk Controllers at all levels of the Group. A permanent inventory identifies risks and opportunities on an ongoing basis and ensures that relevant risks and opportunities are recorded effectively, immediately and systematically.

Vossloh evaluates risks and opportunities in regard to their potential impact on the company's net assets, earnings and financial position. The possible impact of a risk is primarily calculated using the EBIT as a financial performance indicator. In addition, its influence on the liquidity situation is recorded. Interest and income tax risks as well as risks from discontinued operations are assessed with regard to their impact on net income. This evaluation determines not only the most likely outcome but also the worst-case and best-case scenarios. In line with the value-at-risk method, a minimum probability of 5 % is required for these. Additionally, an evaluation of the probability of occurrence is carried out. Tail events are reported separately. Besides, nonfinancial risks and opportunities are incorporated into risk reporting. These are assessed to determine their impact on nonfinancial issues, such as environmental and employee concerns.

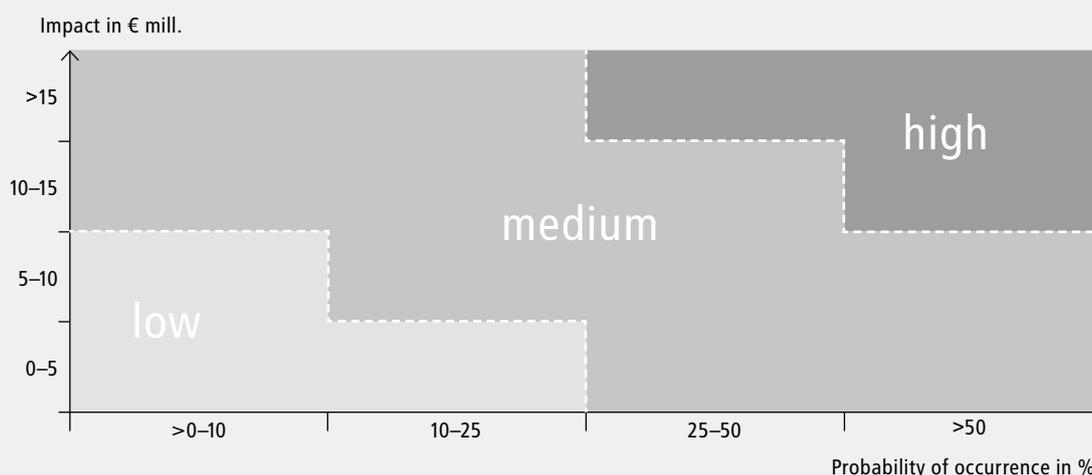
Vossloh records and documents risks and opportunities in standardized reports utilising the software used throughout the Group. They contain detailed information on risks and opportunities, the assessment parameters, possible measures to manage risks or exploit opportunities and the respective potential loss amounts before (gross) and after (net) measures. The risks and opportunities report is issued on a quarterly basis. It complements the current annual outlook and also includes predictable and adequately specific risks and opportunities for the following three years. Risks that are predominantly likely to occur are included in the current annual forecast. Ad hoc reports round out the regular reports and provide the means to assess the current situation at any time. The risk reports are addressing the Executive Board of Vossloh AG as well as the management of the Group companies and business units. These are responsible for managing and monitoring risks and opportunities.

The business units, Corporate Controlling and the Executive Board discuss the current risk situation on a regular basis. The tight-knit personnel structure enables information to flow quickly and reactions to be invoked at short notice.

The Executive Board has adopted suitable measures in order to promptly identify developments that may jeopardize the Group's standing as a going concern. In addition to the reporting system, Vossloh also uses the internal control system (ICS) to uncover and prevent risks in existing processes in order to avoid possible deficits. Internal Audit regularly checks whether the risk and opportunity management system is adequate and functional and whether it is in compliance with statutory requirements. In 2023, the introduction of the risk management software was audited by an external auditing company. In addition, the auditor regularly conducts an audit of the risk early warning system (RFS audit).

The significance that individual risk categories hold for the Vossloh Group is evaluated on the basis of their potential negative and positive impact on the forecast financial earnings indicators and on the probability of occurrence for the given risk category. The risk situation is analyzed following the implementation of risk mitigation measures (net effect) based on a worst-case assessment. Risks are categorized as high, moderate or low based on their possible negative impact and probability of occurrence.

This is shown in the figure below:



The following statements illustrate the risks and opportunities within the identified risk categories that were relevant as of the reporting date and are material to the development of the Vossloh Group. Individual risks and opportunities are highlighted separately if they have a worst case or best case of more than €2 million (net view) taking into account a minimum probability of occurrence.

General economic risks and opportunities as well as industry-specific risks and opportunities

General economic risks and opportunities arise as a result of economic fluctuations, social and political events, changes in exchange rates and interest rates, and changes to legislation and taxation. Industry-specific risks and opportunities arise from the competitive situation and the characteristics of the target markets as well as from global megatrends such as population growth, urbanization, globalization, sustainability and digitalization.

Regulatory measures, the state of deregulation of rail transport in the respective country and the financial scope of public budgets have a particular influence on Vossloh. The latter has a major impact on the investment capacity of public clients. Reduced availability of public funding can have a negative impact on the future business performance of Vossloh. Increased availability can conversely have a positive impact. To combat the significant rise in inflation rates in 2022 and over the course of the reporting year, both the US and European central banks have raised key interest rates further. This may burden the costs of refinancing public budgets and thus restrict available financing. The restrictive financial conditions will continue to weigh on economic growth in 2024. Particularly in China, a significant slowdown is expected in 2024 compared to the growth rates of previous years. The development of the geopolitical conflicts in Ukraine and the Middle East is adding to the uncertainty. However, these factors are increasingly being countered by the political will to shift a considerable amount of passengers and cargo onto the rail network, the most environmentally friendly means of transport, in order to reach climate targets. Numerous regions around the world have set up rail subsidy schemes as part of climate action initiatives. Many countries have announced economic recovery programs which are also aimed at additional investment in rail infrastructure. The first projects from these programs have already been implemented and have contributed to the Group's growth over the past three years.

In the 2023 reporting year, Vossloh was active in the rail infrastructure markets worldwide. In this area, the Group is one of the leading suppliers in selected markets. Vossloh generates more than 85 % of its sales revenues in Europe, the Americas and Asia.

The political and economic factors that have an impact on European rail infrastructure markets are largely stable. North American markets are significantly more volatile in terms of demand, as most of the rail and network operators there do not benefit from state funding. Vossloh's performance in Asia is characterized by projects related to the continued rapid growth of the Chinese high-speed network. Activities in these and other markets – particularly in the rest of Asia, Australia and Africa – present opportunities for Vossloh as well as additional risks. In these markets, risks may arise in particular as a result of political and social instability, protectionist tendencies, oil price changes or exchange rate volatility – mainly translation risks – and as a result of legal uncertainty.

In isolated cases, there are also risks that products may be substituted by new technical developments and that new competitors may enter the market. The intensity of competition in the field of rail infrastructure has grown noticeably and sustainably in recent years. Vossloh counters these risks by continuously enhancing its products and services and consistently focusing its activities on the needs of its customers and comprehensive cost reduction measures. Digitalization and the new business models resulting from it are playing an increasingly important role in Vossloh's ambitions to focus on the customer.

Vossloh continues to classify the macroeconomic risk and the industry risk for the forecast financial targets as low overall compared to the previous year. However, a slight increase in uncertainty due to the number of geopolitical conflicts can be assumed for 2024.

Operating risks and opportunities

Operating risks and opportunities can originate from various operational activities, particularly in procurement, production and order performance. In the procurement process, Vossloh seeks to limit price risks by means of long-term contractual agreements or sliding scale pricing clauses with suppliers and customers. However, sliding scale pricing clauses are frequently only possible to implement with a delay, and occasionally not possible at all. Vossloh primarily limits exchange rate risks in relation to procurement through the use of foreign currency forwards. The price changes assumed in medium-term planning for materials and components are largely based on information from suppliers and market analyses.

Vossloh continuously monitors changes in material, energy and freight prices. Should the development of prices, the materials used, the energy sources required for the production process and the freight costs for the delivery of products deviate from the assumptions made, risks or opportunities for the forecast earnings may arise from higher or lower procurement prices, particularly in the Core Components division. As a result of the dynamic but now extenuated inflation trend, collective agreements may lead to higher or lower earnings than forecast.

Risks can emerge in the course of the procurement process as a result of the loss of suppliers, a shortage of raw materials, quality problems affecting materials or delays in the supply process. Vossloh minimizes these risks by prioritizing arrangements with well-established partners and improving its vertical integration in selected areas. Even though suppliers are carefully selected, regularly contacted and alternative procurement sources are established, future risks relating to the procurement process can be limited, but never entirely eliminated.

Within the value creation process, the operating units are generally exposed to the risk of business interruptions, quality problems in production as well as occupational safety and environmental risks. These risks can increase if significant investments at a location have an impact on production processes. Vossloh avoids or reduces the resulting risks through comprehensive guidelines and procedural instructions on project and quality management, production and occupational safety and environmental protection. Certification in accordance with international quality, environmental and social standards such as ISO 9001, ISO 14001, ISO 50001 or ISO 45001 is well advanced in the Vossloh Group. If newly acquired units do not hold equivalent certifications, they are brought into compliance with these standards as quickly as possible.

Vossloh may be exposed to risks arising from the complexity of projects when handling orders, especially when a significant amount of factory capacity is used or if the products involved are particularly technically sophisticated. These scenarios can be caused by unexpected technical difficulties, unforeseeable developments at project sites, problems with partners or subcontractors and logistical challenges, as well as delays in approvals, acceptance and billing. This can lead to significant additional expenditure or contractual penalties in certain cases. These risks can be limited, but not fully eliminated, by formulating contracts appropriately and ensuring that capacity, project and quality management are thorough. On the other hand, there may be isolated indirect opportunities if the recognized risk provisions do not need to be fully utilized.

Risks may also materialize after acquisitions where it becomes necessary to impair goodwill if the medium and long-term operating performance of the respective units is weaker than expected and/or the valuation parameters (e.g. the general interest rate level) change significantly. In accordance with IFRS 3 in conjunction with IAS 36, goodwill arising on acquisitions is not subject to amortization. Instead, goodwill is tested for impairment annually on the balance sheet date (impairment test). In the event of extraordinary events, an impairment test is also carried out during the year.

The respective carrying amount of a group of cash-generating units (CGUs) to which goodwill from company acquisitions is allocated is offset against the value in use.

Vossloh has recognized risk provisions for existing operating risks in accordance with the relevant IFRS regulations. Despite the provisions for known risks with a predominant probability of occurrence, further burdens on earnings cannot be completely ruled out and may have a negative impact on the achievement of the forecast financial targets. The absolute level of risk arising from the execution of projects depends on the volume and level of development work on the respective order and the quality of the products produced.

Vossloh continues to assess the risk from the value-added process and the execution of projects as well as the risk from changes in material prices as medium. As in the previous year, the risk of any impairment of goodwill is classified as medium. The other operating risks are still considered to be low overall.

Financial risks and opportunities

The Corporate Treasury department monitors and limits financial risk within the Vossloh Group and optimizes Group financing on an ongoing basis. Targets, principles, duties and expertise are consistent with corresponding policies. The prime objective is to preserve the company's status as a going concern by ensuring solvency and liquidity at all times. Synergies and economies of scale are also harnessed within the Group where it seems appropriate to do so.

Vossloh only uses derivative financial instruments to hedge specific risks from existing or expected future underlying transactions. These economic hedges are normally also reported as hedge relationships in the balance sheet. These only make use of previously approved, market-standard financial instruments. The trade, performance and controlling functions are organizationally separated. Group Treasury continuously ensures and monitors the effectiveness of risk hedging. It manages the following specific financial risks: liquidity risks, interest rate risks (cash flow risks), price risks and credit risks.

Liquidity risks

Liquidity risks would arise if Vossloh was unable to settle liabilities in a timely and complete fashion. For this reason, the Group conducts ongoing liquidity management that incorporates reserves for potential special needs and the scope required to implement the company's strategy. Financial balancing measures within the Group – including cash pooling systems in individual countries and intercompany loans – facilitate the use of the excess liquidity of individual Group companies in order to cover the financing requirements of others.

Financing and the provision of liquidity typically take place centrally through Vossloh AG as the Group holding company. In February 2021, Vossloh AG issued a hybrid note of €150 million. The note has an indefinite term and can be called and repaid by Vossloh for the first time in February 2026. In addition, there are still loans of €90 million maturing in July 2024 from a Schuldschein loan issued in July 2017. In December 2021, a Schuldschein loan of €25 million maturing in December 2028 was also issued. In July 2023, two further Schuldschein loans were placed, each in the amount of €30 million and maturing in July 2028 and 2030. A syndicated loan concluded with eight banks for €150 million with a term until November 2024 has been in effect since November 2017. In April 2019, the volume of the loan was increased by €80 million to €230 million. If necessary, it can be increased by up to a further €70 million during the term of the loan. The funds are available to the company in the form of a revolving line of credit that can be flexibly accessed. The early refinancing of this syndicated loan took place in February 2024. In July 2021, a variable-interest loan agreement for €20 million with a term until July 2024 was concluded with another bank and utilized. At the end of 2023, the Group had unutilized credit lines of €244.4 million at its disposal in addition to cash and cash equivalents.

There are no financing or liquidity shortages. Overall, Vossloh considers the liquidity risk to be low.

Interest rate risks

Changes to the future interest rate may cause cash flow volatility where asset and debt positions are subject to variable interest rates. Vossloh hedges this risk as appropriate with the use of interest rate swaps and caps. The company regularly performs analyses to determine how changes to interest rates affect cash flows. For the purposes of active risk management, the variable-rate interest cash flows from a long-term loan concluded in 2018 were replaced with an interest rate swap for fixed cash flows at the same time. In August 2022, two forward payer interest rate swaps were also concluded in order to refinance the Schuldschein loans maturing in mid-2024. This fixed the reference interest rate for 2/3 of the maturing volume for the new maturities over five and seven years. At the end of November 2023, the two Schuldschein loans issued in July 2023 with variable interest rates were also hedged with two payer interest rate swaps. The positive or negative effects of a potential change in the ECB base rate on cash flows are therefore considered to be low. In contrast to the previous year, this risk is again classified as low overall.

Price risks

Price risks result from the value of a financial instrument changing due to increases or decreases in market interest rates or exchange rates. At Vossloh, existing and expected future liabilities and debts denominated in foreign currencies are usually hedged with foreign currency forwards as of the time the order is issued. Translation risks – arising from the translation of financial statements denominated in foreign currencies – are continuously monitored. Due to the high level of hedging of price risks, this risk is still deemed to be low overall.

Credit risks

Credit risks arise whenever a contract partner does not comply with its obligations in relation to a transaction (or only does so in a delayed fashion), thus causing Vossloh to incur financial losses. The Group minimizes credit risks by ensuring that contract partners mostly have good or excellent credit ratings. These ratings – where available – are mainly based on the statements of international rating agencies. As of the end of 2023, of the financial investments and derivative financial instruments with positive market values, 62 % were with contract partners with a rating of AA+ to AA-, 22 % were with contract partners with a rating of A+ to A-, 15 % were with contract partners with a rating of BBB+ to BBB- and 1 % were with contract partners with a rating of BB or no available rating. The Group also distributes its financial assets across a number of credit institutions, thus broadly diversifying its risk exposure. There were and are no dependencies on individual banks.

Credit risk is considered low due to the fact that the majority of Vossloh's customers are in the public sector. However, outstanding amounts owed are continuously monitored by Group companies. Some are also insured by means of credit insurance policies. Despite the precautionary measures taken, it is impossible to entirely eliminate the risk of financial losses from nonpayment of receivables. In the export business, orders are usually concluded with letters of credit to limit the credit risk. All contract partners must have good or excellent credit ratings. As a result, credit risk is still deemed to be low.

Legal risks and opportunities

Legal risks arise for Vossloh in particular on the basis of complaints, warranty claims, compensation claims and litigation. Identifiable risks are covered where possible and economically feasible by insurance and – if the relevant requirements are met – reflected in the balance sheet through provisions. However, it is impossible to eliminate the possibility that losses may arise that are not (adequately) insured or exceed the provisions made. On the other hand, there may be indirect opportunities if risk provisions are not utilized entirely.

Group companies of Deutsche Bahn AG have asserted compensation claims against the Group company Vossloh Rail Services Deutschland GmbH (previously Vossloh Rail Center GmbH), Hamburg. Even though the damages directly attributable to the company were settled in 2016 by a partial settlement with Deutsche Bahn AG, there remains a risk of joint and several liability for as yet unsettled damages. The claims were rejected by the court of first instance in 2022. For any outstanding entitlements, Vossloh Rail Services Deutschland GmbH has a right of recourse that is partially secured with bank guarantees. Various customers have also asserted compensation claims in relation to ongoing or concluded competition law procedures concerning rail switches. Provisions for compensation claims are recognized where the assertion of individual customer claims is deemed to be very likely and a reliable estimate of potential compensation amounts seems possible. This is a significant individual risk or opportunity.

As a result of company sales in recent years, the respective purchasers were granted certain guarantee rights and rights of recourse in the purchase agreements. Risk provisions have been recognized for these claims, where utilization of the guarantees and rights of recourse is deemed to be very likely. Opportunities may arise indirectly if the recognized risk provisions do not need to be fully utilized. These are significant individual risks and opportunities.

For the existing legal risks, risk provisions have been recognized in accordance with IFRS.

It is impossible to exclude the possibility of the forecast financial targets for Vossloh being reduced due to legal risks, and these risks are still deemed to be moderate.

Nonfinancial risks and opportunities¹

According to the HGB, it is necessary to report on the nonfinancial risks that are associated with the company's own business activities, business relationships, products and services, where these risks have had or are very likely to have severe negative repercussions on the reportable aspects relating to the environment, employment, social welfare, human rights, anti-corruption and anti-bribery activities. The nonfinancial risks are reflected in the Vossloh Group's risk reporting.

There are presently no material risks that meet the criteria described. Vossloh therefore still deems the risk situation in connection with nonfinancial matters to be low.

¹ Part of the nonfinancial Group statement audit for providing limited assurance carried out by Deloitte GmbH Wirtschaftsprüfungsgesellschaft – see page 112 et seq.

Other risks and opportunities

Other risks consist primarily of personnel and information technology risks.

Inadequate human resources, such as due to a lack of managers and specialist personnel, can negatively influence the economic situation of the Group. Personnel risks may also relate to high turnover figures of highly specialized personnel and inadequate training, as well as errors made or theft committed by employees. Vossloh applies a variety of measures to counteract these risks, including in particular the positioning of the company as an attractive employer to enable it to successfully compete for highly qualified specialist personnel. A range of training activities are used to improve the expertise of employees, while attractive pay structures increase the likelihood of retaining personnel within the company in the long term.

Complex and powerful information technology has a decisive effect on the management of operational and strategic business processes. Having high-performance information technology at your disposal is crucial as the digitalization trend continues. Vossloh monitors the ever-growing threats to cyber security worldwide and optimizes its IT infrastructure on an ongoing basis. Through the use of technical and organization precautions in particular, Vossloh minimizes risks related to the reliability, availability and confidentiality of the data stored in its information systems. A global IT security team consisting of internal and external experts secures Vossloh's infrastructure with modern applications and systems. Regular audits and employee training programs ensure a high standard of security.

Other risks had no significant impact on net income in 2023. Overall, the risk is classified as low, unchanged from the previous year.

Risks and opportunities of Vossloh AG

Vossloh AG prepares its annual financial statements in accordance with the provisions of the German Commercial Code and the German Stock Corporation Act. The following comments relate to opportunities and risks in Vossloh AG's separate financial statements for the net income under German commercial law, which is mainly influenced by administrative expenses and the net financial result.

As an operational management holding company, the net financial result of Vossloh AG is largely subject to the same opportunities and risks as those which apply to the Group. Opportunities and risks can have an effect in the form of changes to dividend payments, higher or lower amounts from profit transfers or losses absorbed, in addition to affecting the value of financial assets.

Changes in interest rates expose the net income figure to fluctuation in pension-related expenses recognized as administrative expenses. Higher interest rates can likewise have a negative impact on the value of financial assets included in the net financial result. Deviations in the utilization of risk provisions for divestment projects recognized by Vossloh AG can have a positive or a negative impact on net income.

Summarized assessment of the risk and opportunity situation

All of the described risks and opportunities that the Vossloh Group and Vossloh AG are exposed to are continuously monitored and managed in terms of their effects on the net assets, financial position and results of operations of the Group. The relevant IFRS risk provisions have been recognized for risks that are currently known and considered probable overall. Other current risks and opportunities are – if adequately specified – accounted for in the current annual outlooks. As in the previous year, Vossloh does not anticipate any significant deviations from its targets for the 2024 fiscal year on this basis at the time this annual report was prepared. Based on current information, there is no risk to the Vossloh Group as a going concern in terms of substance or liquidity based on individual risks or all of the currently known risks collectively. The available Group equity is adequate to cover potential risks. The risk and opportunity situation within the Vossloh Group is therefore considered satisfactory overall.

Internal control system

The internal control system is the entire system of defined controls and monitoring activities designed to ensure the security and efficiency of business processes, the reliability of financial reporting and the compliance of all activities with laws and guidelines. In terms of the accounting process, the internal control system encompasses all principles, processes and activities of the Vossloh Group that aim to ensure the effectiveness, cost-efficiency and legitimacy of the accounting system, and to ensure compliance with relevant legal requirements.

An effective and efficient internal control system has a crucial role to play in the successful management of risks in business processes. The risk of fraudulent actions can be reduced by segregating duties appropriately and applying the double-check principle. The compliance management system also helps to mitigate potential risks by providing an organizational and procedural structure within which all employees are made aware of possible violations of laws and guidelines and are given a variety of opportunities to draw attention to them.

Vossloh's internal control system is designed to cover all material business processes and extends beyond simply implementing controls in the accounting process. A number of monitoring measures and controls are implemented as part of the accounting process to ensure, for example, that the consolidated financial statements are prepared in accordance with regulations. Group-wide guidelines and policies are in place for monthly reporting, capital expenditure, offer submissions, compliance and risk management, for instance. The companies and business units of the Vossloh Group are also required to establish decentralized guidelines for key areas.

Vossloh regularly performs system backups for relevant IT systems to minimize data loss and system failures. The security concept includes customized authorizations, access restrictions and similar measures. Vossloh continuously adapts the requirements for the internal control system and makes adjustments to the control landscape to reflect changes to processes.

To ensure that risks are systematically identified early throughout the Group, an early-warning monitoring system for risks that may jeopardize the Vossloh Group as a going concern has been established in accordance with Section 91 (2) of the German Stock Corporation Act (AktG). In addition, a suitable and efficient internal control system and a risk management system have been established in accordance with Section 91 (3) AktG. These systems serve to quickly identify, manage and monitor risks that jeopardize the Group as a going concern as well as other risks. The Group auditor assesses the functional capacity of the early-warning risk control system in accordance with Section 317 (4) HGB.

At a business unit level, the respective management companies are responsible for implementing the internal control system on the basis of a large number of coordinated regulations and guidelines. At Group level, this is mainly the responsibility of the Controlling, Accounting, Treasury and Legal departments, as well as Internal Audit. An internal monitoring system encompasses monitoring activities that are both integrated into and independent from processes. Alongside manual process controls (such as peer reviews), IT processes are also a key element of the process-integrated activities. The Legal department also ensures that monitoring is integrated into processes.

The Supervisory Board, in particular the Audit Committee, Vossloh AG's Internal Audit and Legal departments and the locally appointed employees at the level of the management companies of the business units, are responsible for process-independent audits. The (Group) auditor also performs process-independent auditing activities.

Information technology

Accounting transactions are recorded locally in the respective accounting systems of the Group companies. When preparing the consolidated financial statements of Vossloh AG, the subsidiaries add additional information to the individual financial statements, which are prepared on the basis of standardized Group accounting methods, to form standardized reporting packages. These packages are then incorporated into the Group reporting and consolidation system used by all of the companies included in the consolidated financial statements. This system, Cognos Controller from IBM (current version in use: 10.4.0), is used to both consolidate and provide additional management information.

With a small number of exceptions, Group companies use a standardized accounting system from SAP. This IT system enables central access and centrally initiated controls in regard to the accounting process. The system is currently used within Vossloh AG and the overwhelming majority of companies in all divisions. A new SAP S/4 system is being introduced as part of a Group-wide process to standardize the ERP systems. This system was implemented in the first two companies in the 2023 fiscal year.

Vossloh attaches great importance to IT security and countering cyber risks. The measures put in place for this purpose are described on page 73.

Key activities to ensure that (Group) accounting is performed in a legally compliant and reliable manner

The Vossloh Group's "Group Accounting Manual" governs the standardized accounting, measurement and valuation principles applicable to the companies included in Vossloh's consolidated financial statements, in addition to detailed formal requirements for the consolidated financial statements. The formal requirements include the binding application of a standardized and complete set of forms.

The "Group Accounting Manual" is regularly revised and updated; the most recent update was carried out in fall 2023. New or revised versions are made available directly to anyone involved in the Group accounting process via the Group intranet.

Accounting transactions within the Group companies are recorded locally but the monthly and annual financial statements are reviewed by the managing company of the relevant business unit. Checks are carried out at random but are also triggered, most notably, by major or unusual transactions.

At the level of Vossloh AG, further plausibility checks are performed by the Accounting, Legal and Controlling departments using suitable validation rules to ensure correct compliance with the applicable IFRS and HGB regulations.

Further data is also prepared and aggregated at Group level for use in the notes and management report (including major events after the reporting period).

Based on the organizational, control and monitoring structures established within the Vossloh Group, the internal control and risk management system helps ensure that all of the company's transactions are recorded, processed and validated, and that they are presented correctly in the Group's accounting system.

Poor discretionary judgments, the circumvention of controls, criminal activities and other circumstances cannot be fully eliminated by their very nature, meaning that even Group-wide application of the utilized systems does not constitute an absolute guarantee that the consolidated financial statements are free of errors.

Qualifying statements

The statements made relate solely to Vossloh AG and to the companies that are included in the consolidated financial statements of Vossloh AG whose financial and business policies can be directly or indirectly influenced by Vossloh AG.

Adequacy and effectiveness of the risk management system and the internal control system¹

The internal control system and RMS are audited on a regular basis by Internal Audit. These audits are carried out either as part of the risk-based annual audit plan or as part of audits performed during the year. Critical vulnerabilities in the control system are reported to Vossloh AG's Executive Board and the Audit Committee of the Supervisory Board. Risks are also reported on a regular basis to the Audit Committee. The Executive Board is not aware of any circumstances based on its involvement with the internal control system and risk management system or from reports that would suggest that the internal control system or risk management system were not adequate or effective as of December 31, 2023, in their respective entirety.

Reference to the Declaration on Corporate Governance pursuant to Section 289f and Section 315d HGB

The Declaration on Corporate Governance is permanently available on Vossloh AG's website (see www.vossloh.com > Investor Relations > Corporate Governance).

¹ Statements in this section are not subject of the audit.

Outlook

This outlook contains forward-looking statements that are based on the expectations of Vossloh management in relation to the future development of the Group. These expectations are based on estimates made by management using all available information. Assumptions regarding the future development of the international rail technology market and the specific business expectations of Vossloh Group divisions in particular have been taken into account. The statements made are subject to opportunities and risks that Vossloh cannot entirely control or manage. For more information on this, please refer to the statements made regarding the Group's risk and opportunity report (starting on page 66). Actual results and developments may differ from these forecasts if the assumptions underlying the outlook prove to be inaccurate or the aforementioned risks or opportunities materialize. The Vossloh Group assumes no liability for updating the statements made in this outlook beyond statutory publication requirements.

Macroeconomic developments and outlook for the rail technology market

Global economic fluctuations only have a limited impact on Vossloh's short-term performance. Investments in rail infrastructure around the world are generally made on the basis of long-term decision-making processes. Current economic trends are therefore only reflected in the markets relevant to Vossloh to a limited degree. However over the long term, increased levels of debt in various countries, particularly in our home market in Europe, may negatively impact Vossloh's business activities. The vast majority of Vossloh's customers are publicly funded. Some countries may well implement cost-cutting measures in markets that are relevant to Vossloh if they are heavily indebted. However, there is a global trend towards sustainability, resulting in the increasing attractiveness of rail as a mode of transport and rail subsidy schemes, which is expected to lead to increased investment in the rail infrastructure products and services provided by Vossloh.

The Association of the European Rail Industry UNIFE publishes an extensive biannual analysis of developments in the global rail technology market in its "World Rail Market Study". UNIFE uses this analysis to make well-founded predictions for the coming years. The most recent study was published in September 2022. The annual global volume of the entire rail technology market is expected to grow from an average of €176 billion between 2019 and 2021 to an average of around €211 billion between 2025 and 2027 – an average growth rate of 3.0 % per year. UNIFE estimates the market accessible to European providers, such as Vossloh, to be worth approximately €127 billion between 2025 and 2027. "Accessible markets" refers to the markets that are available to European suppliers and non-European markets where demand is not exclusively met by domestic capacity. For markets that can only be addressed by European suppliers via joint venture structures, only half of the market volume is classified as accessible. For comparison, a market volume of around €107 billion per year on average was considered accessible for the 2019–2021 period. The expected increase to €127 billion represents a growth of 2.9 % per year.

The UNIFE study found that projected market growth varies significantly from region to region. The largest accessible rail technology market has been and continues to be Western Europe, with an annual volume of around €41 billion in the 2019–2021 period. Market growth of 3.9 % per year to approximately €52 billion is anticipated between 2025 and 2027. This is followed by the NAFTA region with a current annual market volume of approximately €26 billion and future annual market volume of around €31 billion (+3.2 %) and the Asia-Pacific region with a volume of just under €19 billion, expected to rise to around €21 billion (+2.1 %). These three regions account for more than three quarters of the total accessible rail technology market. For the remaining regions, UNIFE expects the following growth rates in the coming years: Africa/Middle East 7.7 %, Eastern Europe 6.7 %, Latin America 4.9 % and CIS (23.4) %.

The European Rail Industry Association breaks the rail technology market down into the following segments: infrastructure, rolling stock, rail control, services and turnkey projects. In view of its Core Components, Customized Modules and Lifecycle Solutions divisions, Vossloh therefore operates in the infrastructure segment as well as the infrastructure services sub-segment of the services segment. The volume of the globally accessible infrastructure market has been quantified by UNIFE at an average of €23 billion per year in the period between 2019 and 2021. An annual growth rate of 3.8 % is currently forecast for the 2025–2027 period. This will provide an annual market volume of approximately €29 billion. The growth forecast for the infrastructure services sub-segment until the 2025–2027 period is 1.8 %, meaning accessible market volume is expected to increase from the current €6.1 billion per year to €6.8 billion. In total, the accessible market relevant to Vossloh between 2019 and 2021 came to around €29 billion per year. We expect it to grow to roughly €35 billion by the 2025–2027 period (+3.4 %).

Outlook for 2024

The forecast for the Vossloh Group is based on the expected development of the three divisions Core Components, Customized Modules and Lifecycle Solutions as well as Vossloh AG. Vossloh's sales planning is primarily based on assumptions specific to the business units. These relate, for example, to product perspectives, the anticipated behavior of competitors, project probabilities as well as market opportunities and risks in individual regions. Vossloh's customers are publicly and privately-owned regional, long-distance and freight transport operators whose investments are based on predominantly long-term decision-making processes within the framework of longer-term funding. Vossloh supports its customers as a partner for many years, working with them closely to plan and develop solutions for individual product and service needs. This usually involves delivery and project lead times of several months and sometimes even several years.

Outlook for management-related performance indicators

		2023	2024 forecast
Sales revenues	€ mill.	1,214.3	1,160 to 1,260
EBIT	€ mill.	98.5	100 to 115
EBIT margin ¹	%	8.1	8.3 to 9.5
Value added ²	€ mill.	18.9	7.5 to 22.5

¹ The range for the EBIT margin relates to the midpoint of the sales revenue forecasts.

² Based on a weighted average cost of capital (WACC) of 8.5 % in 2023 and 9.5 % in 2024.

Sales expected to remain at a high level in 2024

For the 2024 fiscal year, the company forecasts sales revenues in the range of €1.160 billion to €1.260 billion (2023: €1.214 billion). Despite the completion of some major new construction projects, particularly in Mexico and Serbia, which contributed significantly to the exceptionally strong sales growth in 2023, Vossloh expects sales revenues to remain at around the previous year's level based on the midpoint of the corridor due to overall positive market demand. While a decline is expected in the Core Components division due to significantly lower overall sales in Mexico and China, among others, Vossloh is forecasting rising sales for the other two divisions. Slight increases in sales are expected in the Customized Modules division. The Lifecycle Solutions division should continue to record strong revenue growth, particularly in Germany.

The Vossloh Group expects a further increase in absolute EBIT for the 2024 fiscal year. From today's perspective, EBIT is forecast to be in the range of €100 million to €115 million (2023: €98.5 million). Based on the midpoint of this sales revenue forecast, this results in an EBIT margin of between 8.3 % and 9.5 % (2023: 8.1 %). While a lower EBIT and a reduced EBIT margin are expected in the Core Components division due to the sales trend and a change in the project mix, the other two divisions expect significantly higher EBIT and a considerably higher EBIT margin compared to 2023.

EBIT forecast to exceed €100 million

Average capital employed is expected to be slightly higher than the previous year in the 2024 fiscal year. The weighted average cost of capital before taxes (WACC) relevant for internal management purposes will be raised to 9.5 % in the 2024 fiscal year (previous year: 8.5 %) in line with changes in interest rates. Despite the increase in WACC, value added is expected to be between €7.5 million and €22.5 million in the 2024 fiscal year.

Value added between €7.5 million and €22.5 million expected

Vossloh AG prepares its annual financial statements in accordance with the regulations of the German Commercial Code and the German Stock Corporation Act. The statements below refer to the separate financial statements. The net profit of Vossloh AG as an operational management holding company is largely dictated by administration costs and the net financial result. As expected, the administrative expenses of Vossloh AG will increase slightly again in the 2024 fiscal year. This will be driven by anticipated higher wages in particular along with an increase in the size of the workforce. Vossloh expects the financial result to be significantly lower than in the previous year, as the 2023 fiscal year benefited significantly from a write-up on an investment. Overall, earnings after taxes for 2024 are therefore not expected to match the high figure from the 2023 fiscal year.

Vossloh is focused on continuing to implement its corporate strategy over the coming years. In addition to organic growth with increasing profitability, the focus is on forming specific partnerships and making specific acquisitions in order to strategically develop Vossloh's core business and sustainably increase the company's value. The forecasts presented for the 2024 fiscal year only reflect targeted organic growth.

Nonfinancial Group statement¹

The Group nonfinancial statement of Vossloh in accordance with Sections 315b and 315c HGB for 2023 is submitted to meet the requirements of commercial law. In preparing this statement, Vossloh used the standards of the GRI (Global Reporting Initiative) to select the nonfinancial performance indicators and was guided by the principles of the United Nations (UN) Global Compact. Vossloh is committed to sustainable corporate governance and climate action; sustainability is one of the company's five core values. The Executive Board's sustainability commitment is published on the www.vossloh.com corporate website („Investor Relations“ > „Sustainability“ > „Sustainability strategy and management“).

Vossloh's commitment to sustainability

enabling green mobility – for a sustainable future

Vossloh's corporate vision means "sustainable, safe and user-friendly rail mobility for a better world". As a globally successful supplier of integrated rail infrastructure solutions with a history stretching 140 years and a unique portfolio covering all aspects of rail transport, Vossloh is a major contributor to the mobility of people and transport of commodities. Rail is the safest, most efficient and most environmentally friendly mode of transport for both local and long-distance transit. Increasing rail transport is, therefore, a key prerequisite for achieving ambitious climate goals. In this context, the digital transformation happening in the rail industry opens up considerable new opportunities for rail as a mode of transport leveraging its ecological benefits further with the aim of finding a sustainable solution to the global challenges in the transport sector.

However, the company's responsibility is not limited to paving the way for sustainable mobility. Vossloh is convinced that companies have to include economic, social and ecological factors in their decisions and behavior. Long-term success requires contributing to the well-being of society and ensuring a safe future for the next generations. Vossloh has therefore consciously chosen sustainability as one of its corporate values: "We take responsibility and care for the world around us."

Sustainability strategy and management

Importance of sustainability for the Vossloh business model

Vossloh offers products and services that keep rail routes performing at a high level and facilitate more widespread rail use. The aim is to increase the availability of existing tracks, facilitate efficient and trouble-free operation, and reduce infrastructure lifecycle costs. For further information on the business model, please refer to page 38 et seq.

Group-wide sustainability strategy

In keeping with its guiding principle "enabling green mobility", Vossloh is a driving force behind customer-focused, innovative and sustainable products and services for rail transport. This motto is also reflected in Vossloh's sustainability strategy. Since the 2021 fiscal year, Vossloh has pursued a revised group-wide sustainability strategy in order to centrally align and focus sustainability activities within the Group, to further improve Vossloh's positive impact on the environment and society, and to improve the transparency of the Group's sustainability performance. It is intended to make Vossloh a reference in the area of sustainability in the rail infrastructure business. Vossloh AG's Executive Board adopted the sustainability strategy and the guideline supporting it in 2021. Vossloh's sustainability commitment, with which the Executive Board underlined and reaffirmed Vossloh's motto and focus, was published on the company's website.

¹ Not part of the financial statement audit, but part of an audit to obtain limited assurance. The independent auditor's report can be found on page 112 et seq.

The sustainability guideline provides the Group-wide organizational framework and sets out the principles for all Vossloh's sustainability measures and initiatives. The guideline defines in particular the scope of action, as well as organization, responsibility and processes. The direction and focus of sustainability measures were set by a materiality analysis in order to determine the sustainability topics relevant to Vossloh. They are adapted to changing conditions and requirements with the help of regular reviews by the Executive Board. Specific sustainability goals have been defined for the sustainability topics classified as material. These goals are pursued through sustainability initiatives and the integration of environmental and social aspects into the company's business and decision-making processes. Vossloh is using internal and external communication to make its sustainability performance transparent and also to further strengthen the commitment of its employees on the way to becoming a sustainable company.

Group-wide
sustainability
program

Vossloh has divided its sustainability activities into eight areas of action, which enable the topics identified as material to be pursued in a targeted and efficient manner:

- Sustainability strategy and management
- Environmental and climate protection
- Safe and sustainable mobility
- Occupational health and safety
- Human resources and leadership
- Good corporate citizenship
- Sustainable supply chains and operations
- Business ethics and human rights

The overarching area, "Sustainability strategy and management", provides the framework for the seven other areas as well as for the Group's future approach.

The Group's Executive Board bears overall responsibility for all sustainability topics and ensures that Vossloh lives up to its ecological, economic and social responsibilities and makes a positive contribution to the environment and society. In operational management, sustainability is the responsibility of the Chief Operating Officer (COO). In addition, Vossloh AG has the Corporate Sustainability department. Created in 2020, the role of head of Corporate Sustainability, who reports directly to the Executive Board, is responsible for the development and implementation of the sustainability strategy as well as for the management of Group-wide sustainability initiatives. In addition, the Executive Board has established a Group Sustainability Committee to centrally manage all sustainability measures within the Group. The committee is run by the head of Corporate Sustainability. Its members include the division heads of key central offices at Vossloh AG as well as the managing directors and sustainability officers of the business units. In addition, each business unit has appointed a sustainability, health and safety officer.

Sustainability
organization

EU taxonomy and external ratings

100 % of sales revenues taxonomy-eligible, 63 % taxonomy-aligned

Vossloh has implemented the EU Taxonomy Regulation reporting obligations since the 2021 fiscal year. The EU taxonomy provides a standardized classification system for defining environmentally sustainable economic activities. As in the previous year, 100 % of the sales revenues in the reporting year 2023 are classified as taxonomy-eligible. The share of environmentally sustainable and thus taxonomy-aligned sales revenues – the majority of which relate to electrified routes – amounted to 63 % (previous year: 64 %). Both of these figures are once again excellent and underline Vossloh's sustainable business model. Detailed information on the requirements of the EU taxonomy, a comprehensive and detailed description of the implementation of these requirements at Vossloh as well as the required key figures according to Annex II to the Commission Delegated Regulation can be found on page 102 et seq. of the annual report.

Ratings underline Vossloh's sustainability performance

For many years, rating agencies have assessed and recognized Vossloh's sustainability performance on a regular basis. Among other things, the company currently has a "prime status" according to Institutional Shareholder Services (ISS) ESG, which places Vossloh in the top 10 % of its sector. EcoVadis continues to list Vossloh with a Silver status; however, according to the improved score received in 2023, Vossloh is now among the top seven percent of all companies rated by EcoVadis. MSCI ESG Research continued to rank Vossloh at the second-best AA rating level (on a scale from AAA to CCC) in the 2023 reporting year. Such ratings play a special role for Vossloh: the Group was one of the first companies in Germany to place a sustainability-linked hybrid note at the beginning of 2021. The redemption amount of the note is linked to the company's sustainability performance as measured by ISS ESG and MSCI ESG Research ratings.

Another criterion for assessing Vossloh's sustainability performance is certification in accordance with internationally recognized norms and standards. Most Vossloh units are certified according to at least one of the international quality, environmental, energy efficiency or occupational health and safety standards such as ISO 9001, ISO 14001, ISO 50001, ISO 45001 or a comparable national standard and have corresponding management systems in place. As of December 31, 2023, 98 % of Vossloh employees were employed at a location with one or more of these certifications, as in the previous year. The proportion of operating companies with at least one of these certifications is 97 %.

The Vossloh Group received great public recognition for its commitment to green mobility in 2023 with its nomination as one of three finalists in the competition for the prestigious German Sustainability Award in the field of mobility and logistics. Europe's most important award for ecological and social commitment honors companies that have made an outstanding contribution to spreading the transformation towards greater sustainability.

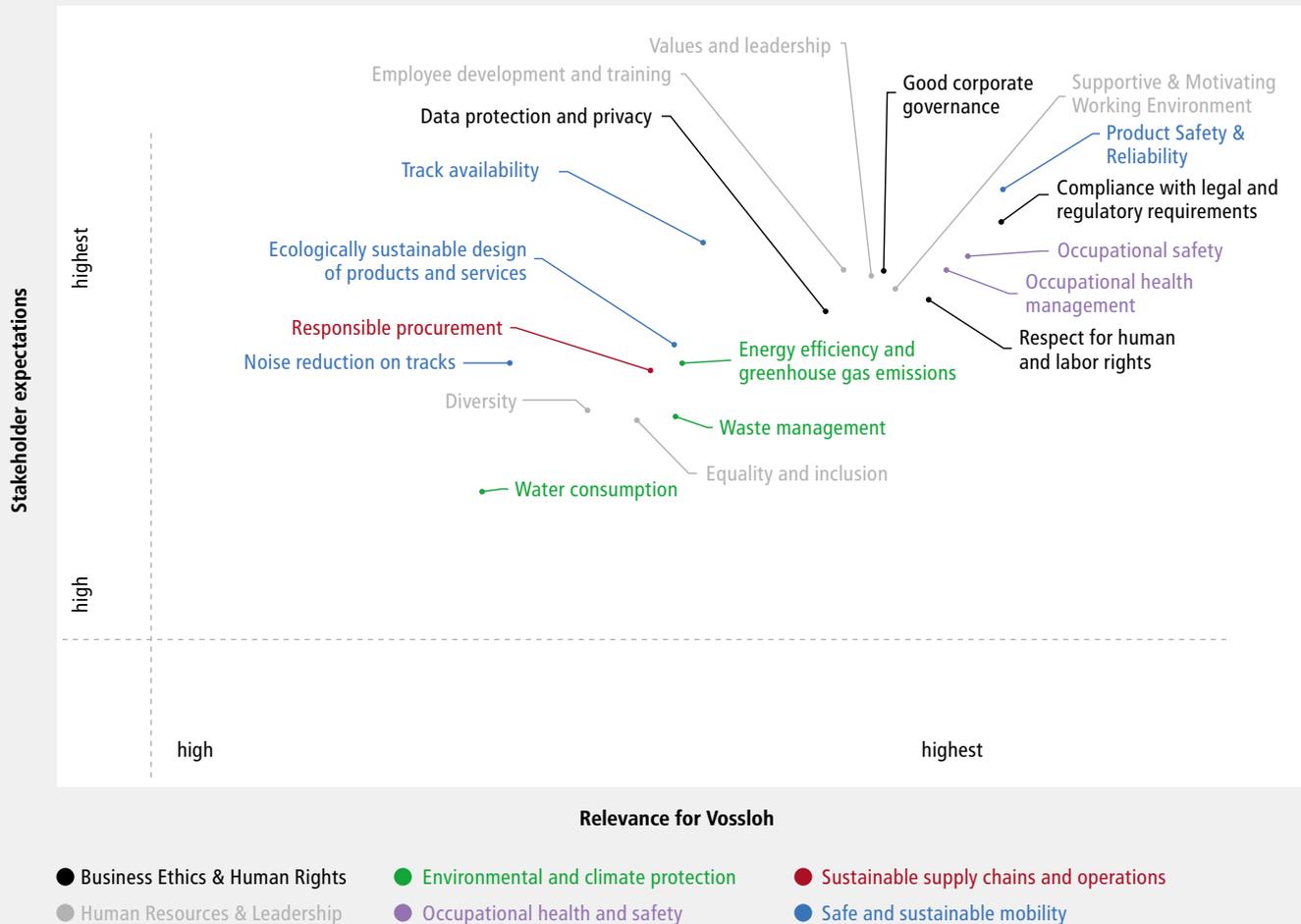
Sustainability topics, goals and initiatives

Reporting on nonfinancial Topics

In order to identify the sustainability topics, Vossloh conducted a materiality analysis in 2021 with the participation of representative external and internal stakeholders as well as the Group Sustainability Committee and the Executive Board. To this end, a total of 38 potentially relevant sustainability topics were divided into seven areas of action. As part of the materiality analysis, 198 representative stakeholders were surveyed, including 53 external participants. The ranking and prioritization of the sustainability topics were determined by linking stakeholders' expectations to the relevance for Vossloh in each focus area.

As part of its annual review, the Executive Board critically evaluated the sustainability issues identified as material. The previously relevant topics of "Operational noise, vibration and dust pollution", "Partnerships with customers and suppliers", "Occupational health and safety certifications" and "Social commitment" were no longer classified as material within the meaning of Section 289c HGB. For this reason, the report below covers 19 material individual topics.

Sustainability areas of action



The nonfinancial statement covers Vossloh’s global activities. The companies considered correspond to the scope of consolidation of the consolidated financial statements (see "Consolidation" section, page 126 et seq.). The management report contains supplementary and/or more detailed information regarding a number of the nonfinancial topics and these are cross-referenced accordingly. The company’s risk reporting covers all major risks associated with Vossloh’s business activities. It also includes the major nonfinancial risks to which Vossloh may be exposed (see "Nonfinancial risks and opportunities" on page 72).

Group-wide sustainability goals and initiatives

The table below indicates six areas of action with the relevant Group-wide sustainability goals assigned to sustainability factors in accordance with Section 289c HGB:

Sustainability aspects	Areas of action	Group-wide goals
Environmental matters	Environmental and climate protection	- CO _{2e} neutrality by 2030 (Scope 1 and Scope 2)
Employee matters	Occupational health and safety	- 20 % annual reduction in the frequency of workplace accidents
	Human resources and leadership	- Introduction and implementation of the new value-based Vossloh leadership principles
		- Implementation of a Group-wide diversity, equality and inclusion policy
Social matters	Safe and sustainable mobility	- Reducing the ecological footprint of Vossloh's products and services along the entire value chain
Respect for human rights	Business ethics and human rights	- 90 % sustainable strategic sourcing volume by 2025
Combating corruption and bribery	Sustainable supply chains and operations	

Key performance indicators are defined for all of the above goals, which can be used to measure the degree to which they have been achieved. At the end of 2021, the company also launched a Group-wide sustainability initiative for each goal. These initiatives were continued in 2023; the degree of target achievement is reported in the respective chapters. The Group Sustainability Committee and the Executive Board received regular updates on all activities.

In addition to the areas of action and sustainability goals, which apply to the entire Group, a wide range of other sustainability initiatives are being implemented in the various business units and at the company's sites. As of December 31, 2023, there were a total of 52 ongoing sustainability initiatives.

Environmental and climate protection

The Vossloh Group takes care to make efficient use of resources and minimize its environmental impact. The continuous optimization of the use of energy, materials and personnel as well as the constant improvement of processes are an integral part of day-to-day business for business management reasons alone. This applies to the manufacture of rail infrastructure products and components as well the provision of rail track services. In addition, environmental officers have been appointed to tackle relevant issues at the Group companies' sites and corresponding reporting systems have been installed. As of December 31, 2023, 84 % of employees were employed by an ISO 14001-certified unit, as in the previous year. The proportion of operating companies with corresponding certification was 68 % (previous year: 65 %).

In terms of “Environmental and climate protection”, Vossloh identified three topics as relevant as part of the materiality analysis:

- Energy efficiency and greenhouse gas emissions
- Water consumption
- Waste management

They are presented in more detail below. The Group-wide sustainability target defined for this area relates to the individual topic of “Energy efficiency and greenhouse gas emissions”; all related measures and progress are covered in that section

Vossloh is particularly focused on CO_{2e} (CO₂ equivalents) emissions due to their impact on climate change. The company has set itself the goal of achieving CO_{2e} neutrality (Scope 1 and Scope 2) in stages by 2030. The extent to which this aim is achieved is measured using the indicators for CO_{2e} emissions, CO_{2e} intensity (CO_{2e} tons /sales revenues in € million) and energy intensity (energy consumption in MWh/sales revenues in € million). Energy intensity and CO_{2e} intensity are the key indicators used by Vossloh to measure its progress in terms of energy efficiency and minimizing CO_{2e} emissions, while also taking the company’s growth targets into account.

Energy efficiency
and greenhouse gas
emissions

As part of the group-wide “Carbon Neutrality 2030 (Scope 1 & 2)” initiative, a cross-divisional team led by the Head of Corporate Sustainability drew up an action plan to reduce energy consumption and CO_{2e} emissions. The implementation, which began in 2022 and will continue in 2023, focused in particular on the most energy-intensive processes and plants as well as the most CO_{2e}-intensive energy sources. The project team first compiled data on the initial situation in all units, described the targets and defined the measurement tools. Subsequently, training courses were held in all business units. As at December 31, 2023, the relevant Vossloh employees had completed the respective training courses.

At the same time, packages of measures were developed at the level of the individual Group companies and sites for the years up to 2026, with the help of which a gradual reduction in CO_{2e} intensity of around 11 % per year is to be achieved. In the 2022 fiscal year, CO_{2e} intensity was already significantly reduced by 14.9 %. In 2023, it fell again by an impressive 18.7 %. Among the measures implemented in 2023 were photovoltaic systems on Vossloh Fastening Systems factory buildings in Germany, Poland and China (capacity: up to 6,300 MWh/year) and the conversion of all Vossloh locations in France to electricity from renewable sources. Based on the action plans, Vossloh intends to further reduce direct and indirect CO_{2e} emissions in relation to the Vossloh Group’s sales revenues in subsequent years.

The following tables present the consumption of significant energy sources within the Vossloh Group for the year under review and the comparative figures from 2022:

MWh (Vossloh Group)	2023	2022
Gas consumption	82,703.5	80,391.6
Electricity consumption	77,626.4	74,454.5
District heating consumption	4,298.7	3,887.7
Heating oil consumption	954.7	1,077.4
Fuel consumption	22,831.3	18,463.9
Energy consumption (total)	188,414.6	178,275.0

The amount of Vossloh's carbon and greenhouse gas (GHG) emissions was determined, as in previous years, on the basis of the Greenhouse Gas Protocol in the categories of scope 1 and scope 2. The results were as follows.

t CO ₂ equivalents Scope 1 (Vossloh Group)	2023	2022
Gas consumption	15,130.6	14,676.2
Heating oil consumption	228.8	258.2
Fuel consumption	5,325.9	4,384.4
Scope 1	20,685.3	19,318.8

t CO ₂ equivalents Scope 2 (Vossloh Group)	2023	2022
Electricity consumption	20,220.0	24,281.6
District heating consumption	1,426.8	1,252.2
Scope 2	21,646.8	25,533.8

The following table shows the energy and CO_{2e} intensity, each in relation to the Vossloh Group's total sales revenues:

Energy and CO ₂ -equivalent intensity (Vossloh Group)	2023	2022
Energy intensity (MWh/€ million)	155.2	170.4
CO _{2e} intensity (tons CO _{2e} /million €)	34.9	42.9

In the 2023 fiscal year, the Vossloh Group slightly reduced its overall CO_{2e} emissions (Scope 1 and 2) compared to the previous year despite a significant increase in sales of 16.1 %. This reduction was mainly achieved through noticeable savings in indirect emissions (Scope 2). The significant reduction of 18.7 % in CO_{2e} intensity, which represents CO_{2e} emissions in tons per million euros in sales revenues, is particularly pleasing. This positive development is mainly due to efficiency improvements in production and a steadily increasing proportion of green or low-CO₂ electricity. All divisions contributed significantly to this pleasing reduction.

Vossloh has not yet had sufficient data to determine greenhouse gas emissions relating to upstream and downstream areas (Scope 3). However, reporting on the entire value chain in accordance with the GHG Protocol is currently in preparation. Scope 3 emissions for the entire Group are to be reported for the first time in the 2024 fiscal year.

Water consumption In Vossloh factories, water is mainly used for surface treatment of products, as a coolant in various production processes and for the production of concrete ties. Vossloh units obtain the water from the respective local public water suppliers. The company is committed to using this basic resource as efficiently as possible. As such, used water is reprocessed in our own plants and returned to the operating process, particularly in production areas that require a substantial amount of water. In some cases, the production units work with closed water circuits. At all of its sites, Vossloh disposes of wastewater via the respective public sewage systems. Process water that is heavily contaminated during production is first treated in our own wastewater treatment plants in such a way that it (at least) meets the discharge standards of the public systems.

The following table shows water consumption in the Vossloh Group as determined by meters:

(Vossloh Group)	2023	2022
Water consumption (m ³)	182,987.9	177,797.6
Water intensity (water consumption in m ³ /million €)	150.7	170.0

Despite the significant increase in sales in 2023, the Vossloh Group's total water consumption rose by only 2.9 %. As a result, the Group's water intensity, calculated as water consumption in cubic meters per million in sales revenues, fell by 11.3 %. This positive development is the result of improved use of water resources and the introduction of processes to reduce water consumption in various divisions.

As part of the sustainability strategy, all Vossloh companies have set themselves the goal of using natural resources responsibly and sparingly. Material consumption and disposal volumes are recorded and monitored in the individual units. The Vossloh units use separate, safe disposal channels for each type of waste. The selected disposal companies are regularly audited. Where technically possible and sensible, closed cycles and reprocessing plants reduce the consumption of valuable new raw materials to a minimum.

Waste management

Recycling can reduce the need for raw materials and the amount of waste produced. Economically viable recycling programs and processes ensure that the amount of waste ultimately sent to landfill sites at Vossloh is steadily on the decline. Steel scrap and plastic are recycled at all sites. At several sites, Vossloh Fastening Systems is using reusable transport containers. Vossloh Tie Technologies recycles process water on a large scale. Customized Modules in France processes the packaging material from the raw materials delivered.

Downcycling, i.e. the reprocessing of materials without preserving their original quality, is another way to extend the lifecycle of a material. At Vossloh Rail Services, for example, nonreprocessible residue from grinding stones are used as an additive in slag production. This creates new raw materials for a wide range of applications.

Safe and sustainable mobility

The importance of rail as a mode of transport is growing enormously, especially against a backdrop of ambitious climate protection goals. Moving greater levels of traffic onto the rail network is a core part of sustainable, environmentally and climate-friendly mobility.

In the area of “Safe and sustainable mobility”, Vossloh’s materiality analysis identified the following four topics as part of the materiality analysis:

- Track availability
- Product safety
- Noise reduction on the tracks
- Ecologically sustainable design of products and services

They are presented in more detail below. The Group-wide sustainability target defined for this area relates to the individual topic of “Ecologically sustainable design of products and services”; all related measures and progress are covered in that section.

Track availability

In light of the limited amount of funds available for investment and in view of lengthy planning and approval times for the construction of new rail lines, more efficient use of existing rail lines is becoming increasingly important – through greater utilization, higher travel speeds or longer trains. However, the higher the load the longer the service life of the rail infrastructure, the greater the wear and tear and the more important its permanent monitoring and maintenance become in order to avoid breakdowns. Vossloh makes two contributions to increasing the availability of the rail track: On the one hand, by developing and manufacturing increasingly durable and low-maintenance products and, on the other, by maintaining the rail network more efficiently. Vossloh covers the entire range of requirements for corrective milling and preventive grinding in switches and rail maintenance. With High Speed Grinding (HSG), VTM performance, VTM compact and the Flexis system, the company offers tailor-made solutions for every type of railroad line to extend the service life and usability of the rail infrastructure. Vossloh also offers welding services and logistics expertise ranging from rail and switch replacement to the complete renewal of track sections.

The Group combines the use of its innovative maintenance machines with the diagnosis of the condition of the infrastructure. In this area in particular, Vossloh’s understanding of systems in conjunction with digitalization opens up considerable potential, especially for condition-based and, in the future, predictive maintenance. Trackside condition data from tracks and switches is supplemented by the diagnostic data provided by the grinding machines equipped with measuring technology. In this way, the mapl-e application combines measurement, analysis and maintenance in order to suggest suitable measures to prevent or rectify damage. The advantage is obvious: Smart maintenance is based on actual maintenance requirements instead of following fixed intervals as was previously the case. At the same time, Vossloh’s grinding machines are designed to be incorporated into scheduled traffic. This means that routes no longer have to be closed for maintenance.

By acquiring the monitoring technology of Bonn-based RailWatch GmbH in 2023, the Vossloh Group expanded its portfolio and built up its expertise in the areas of sensor technology, computer vision and cloud computing. Vossloh also put the cloud-based platform Vossloh connect into service. The tools available there enable real-time monitoring, providing immediate insights into the performance of the rail network and the condition of the assets as well as relevant information for predictive maintenance. The platform also includes analysis and warning systems to reduce the risk of accidents and disruptions. Some of the solutions developed by Vossloh itself, such as Smart Turnout or Smart Point Machine will focus on switches, one of the most technically complex and error-prone elements of the rail system, with the aim of preventing point machine failures. The new strategic partnership agreed in 2023 with Swedish digitalization specialist Predge, which focuses on the development of a predictive model for point machines, also serves this purpose.

Vossloh connect is also open to selected partners who offer complementary products and solutions. Strainlabs, for example, contributes its expertise in the field of smart screws, and Cervello specializes in cybersecurity solutions for the rail industry.

Rail infrastructure is highly relevant to safety. Vossloh's products and services are therefore subject to detailed technical specifications and standards that must be complied with. All major production sites have a quality management system in accordance with ISO 9001 or a comparable national standard such as the US AAR M1003. As of the reporting date December 31, 2023, 96 % of Vossloh employees were employed by a unit certified in this way, unchanged from the previous year. The proportion of operating companies with corresponding certification was 94 % as in the previous year.

Product safety

The products and services generally undergo thorough testing that often lasts for years before they are applied to the tracks. This is performed on the company's own test benches and in its own testing laboratories, with test usage by the customers and as part of the complex approval process of certified testing organizations. All of Vossloh's business units have their own Research and Development departments, which are staffed by highly specialized professionals (see the "Research & Development" section on page 61 et seq.).

Vossloh sometimes maintains business relationships with customers that last for decades. Satisfied customers are a prerequisite for such partnership-based cooperation, which is why the Vossloh units attach great importance to structured feedback – also in order to learn from any mistakes. In 2024, a tool from the standardized customer relationship management (CRM) software, which has now been rolled out across the Group, will be used for the first time for this purpose.

To minimize possible issues jeopardizing the safety of its products and services, Vossloh is very careful in its choice of suppliers. All of Vossloh's partners are repeatedly assessed on the basis of fixed aspects, in particular concerning quality. Contracts are only awarded to companies on the list of approved suppliers. Vossloh suppliers must generally be able to guarantee at all times that their goods and services meet the applicable regulatory and statutory requirements.

As in previous years, Vossloh's research and development work in 2023 focused on reducing noise in railbound traffic and improving rail acoustics (see also the "Research & development" chapter on page 61 et seq.). Because tackling noise at its source is a particularly effective approach, Vossloh is taking steps to optimize the contact between wheel and rail. The company offers suitable products and services in all divisions that can reduce rail noise on a sustainable basis. Examples are the cellentic components and rail fastening systems with a high plastic content that dampen structure-borne noise, the so-called whisper switches and rail machining technologies (grinding, milling) for restoring a smooth and, therefore, quiet surface. The rail and switch maintenance machinery can achieve noise reduction of up to 10 dB(A) by precisely removing material. The machines themselves also operate extremely quietly. For example, the milling machine VTM compact, generates noise measuring less than 78 dB(A) during operation, so that residents are not disturbed even during a night shift. For comparison, on a quiet residential street, the noise level is roughly 40 dB(A); a car going 50 km/h reaches a volume of around 70 dB(A).

Noise reduction on tracks

Ecologically sustainable design of products and services

For economic reasons alone, all Vossloh units strive to use resources as sparingly as possible. Sustainability criteria have been incorporated into the development and design of new products and services for years. Since 2021, a Group-wide innovation guideline (Innovation Playbook) has been in use, which harmonizes all innovation processes across business units and aligns the existing approaches and criteria for the sustainable design of products and services in the business units and links them to concrete recommendations for action. In particular, the sustainability aspects of low energy consumption (and emissions) or the non-use of problematic raw materials are of central importance. The entire life cycle of a product, including recycling and/or disposal, is also considered from the outset. The same applies to the long-term impact of a service in the form of life cycle assessments in accordance with international standards such as ISO 14040 or 14044.

The current Group-wide sustainability initiative aims to reduce the environmental footprint of products and services along the entire value chain. To this end, life cycle assessments (LCAs) are carried out for products and services in all three divisions, following the "cradle to grave" approach. The findings are integrated into the innovation and development process for products and services as EcoDesign principles in order to minimize their impact on the environment. In December 2023, Vossloh adopted a guideline for the ecological design of products and services. The regulations formulated therein supplement the existing environmental and sustainability-related standards as well as the innovation guideline. They are applied, for example, to research, development and innovation processes. The focus of the guideline is on the design and construction phase, as these have the greatest influence on the ecological footprint of a product. Initial findings from the life cycle analyses indicate that the following ecological design principles have the greatest impact on the ecological footprint of Vossloh's portfolio: Use of renewable and/or recycled materials, efficient use of materials, energy efficiency and efficient logistics/packaging. Special attention is therefore paid to these four principles. The views of customers and suppliers and their needs with regard to sustainability aspects are also incorporated into the development process at an early stage in order to achieve a high product-market fit.

In the previous LCA processes, for example for the HSG-city railgrinder, the W14 rail fastening system and products made from the synthetic rubber EPDM (ethylene propylene diene monomer), the focus was on the CO₂ emissions caused. In 2023, the results were used to calculate the factors where the greatest reduction in CO₂ emissions can be expected as a result of changes. Among other things, the materials used, transportation routes and energy consumption in the manufacture and use of the product or service were examined. This has already resulted in proposals for the further development of the EcoDesign principles. At the same time, Vossloh Fastening Systems began testing the modified principles in practice: In the development of the tension clamp and the intermediate layer for the M7 fastening system, attention is already being paid to minimizing the CO₂ footprint of the products.

Occupational health and safety

People are Vossloh's most valuable resource. They provide essential services for the company and are the basis for Vossloh's future success. For this reason, occupational health and safety is a high priority at Vossloh, alongside the duty of care and applies to all employees and all persons on the company premises. The corporate policy on occupational health and safety sets out Vossloh's commitment to continuous improvement in this area, the company's zero-accident target, the guiding principles and other binding requirements. In terms of a structured and sustainable management system for occupational health and safety, the company strives to ensure that as many areas as possible comply with the internationally recognized standard ISO 45001, which replaces the previously more common standard OHSAS 18001 (Occupational Health and Safety Management System and Safety Assessment Series). At the end of 2023, the proportion of operating companies with corresponding certification remained unchanged at 81%. These units employed around 89 % of Vossloh's workforce (previous year: 89 %). In principle, Vossloh pursues the goal of certifying new units that join the Group in accordance with ISO 45001 as quickly as possible.

The introduction of an ISO 45001 management system and its certification provide the company with suitable tools and measures to integrate occupational health and safety into its processes. The prescribed audits by independent external auditors ensure that the legal obligations and requirements are being complied with. For the managers of the operating units, attainment of the defined occupational safety performance indicators is an integral part of their pay-related target agreements. Since 2021, an occupational health and safety training module has been available to all employees via the Vossloh Learning Platform (VLP).

Vossloh's materiality analysis identified the following two issues of relevance in connection with "occupational health and safety":

- Occupational safety
- Company health management

They are explained in more detail below. The Group-wide sustainability target defined for this area relates to the individual topic of "occupational safety"; all related measures and progress are covered in that section.

The Covid-19 pandemic continued to have an impact in the past fiscal year. In order to protect the health of employees and prevent infection with the virus in the workplace, employees in production were instructed to stay at home and get tested if they suspected they were infected. Working time models with varying degrees of home office are in place for employees in the administrative areas. These are intended to contribute to a better work-life balance and create a motivating working environment.

There has been a permanent Group-wide occupational safety body within Vossloh since 2012 in the form of the Work Safety Committee (WSC). Together with the WSC, which is headed by the Head of Corporate Sustainability, important steps have been taken in recent years to improve and harmonize occupational safety conditions in the various divisions. For example, a uniform occupational health and safety policy has been developed that is binding for all companies worldwide. This policy defines the vision of a zero accident strategy. The Work Safety Committee also played a key role in the development of the Group's own accident prevention app SAFE+.

Occupational safety

One of the aims of the current Group-wide sustainability initiative is to reduce the frequency of workplace accidents by 20 % each year. Relevant key figures for goal achievement are the internationally used key figures Lost Time Accidents (LTA), Lost Time Accidents Frequency Rate (LTAFR) and Lost Time Accidents Severity Rate (LTASR) as well as the number of potential accident risks reported and minimized via the SAFE+ app.

The WSC, which works in close coordination with the Group Works Council, plays a central role in implementing the initiative. In addition to various measures and programs to improve occupational safety at Vossloh, the WSC focused on further raising employee awareness, prevention and communication in the 2023 fiscal year. To this end, the campaign "See something. Say something." was developed, a 45-minute interactive training consisting of ten activities to raise employees' risk awareness, to illustrate the link between risks and accidents and to explain why the more safety risks are reported and mitigated, the fewer accidents there are. Live exercises will also enable training participants to carry out constructive safety interactions and learn to accept feedback. It will be rolled out across the Group in 2024 in all languages spoken in the Group.

Workplace accidents have been documented at Vossloh on the basis of uniform criteria, over and above what is required by law. Accidents resulting in lost time due to an employee's ill health are reported directly to the Executive Board. The Executive Board as a whole discusses current developments in the area of occupational safety, the frequency, severity and causes of accidents at work as well as preventive and corrective measures taken with the heads of the business units on a quarterly basis.

Workplace accidents (Vossloh Group)	2023	2022
Lost Time Accidents (LTA) ¹	129	107
Lost Time Accidents Frequency Rate (LTAFR) ²	14.9	13.6
Lost Time Accidents Severity Rate (LTASR) ³	2.4	1.6

¹ Accidents resulting in injury-related absence of employees or temporary staff involving lost time of at least 1 hour.

² Frequency of accidents resulting in injury-related absence of employees or temporary staff involving lost time of at least 1 hour, measured in the number of workplace accidents in relation to the cumulative actual work time, based on 1 million working hours.

³ Severity of accidents resulting in injury-related absence of employees or temporary staff involving lost time of at least 1 hour, measured in the duration of lost time in relation to the cumulative actual work time, based on 1,000 working hours.

Following a significant improvement in occupational safety figures in the previous year, the trend in 2023 fell short of expectations. As a result, the target of reducing the frequency of accidents at work by 20 % per year was not achieved. Both the frequency and severity of accidents increased compared to the previous year. Nevertheless, they represent the second-best level in the last five years. All divisions have taken measures to achieve an improvement again in 2024.

As in previous years, there were no work-related fatalities in the Vossloh Group in 2023.

Both accidents with and without lost time and near accidents are analyzed at Vossloh in order to learn from them for the future and reduce the number of accidents at all the company's sites. Prevention is a matter of importance to the company in order to stop workplace accidents from happening in the first place. This includes regular behaviour-oriented safety inspections to raise employees' safety awareness, regular safety briefings and training for all employees, online training on safety-related topics, the provision of comprehensive protective equipment, safety signs at workstations and awareness campaigns. Impressive videos or safety flashes (anonymized summaries) of accidents are also frequently used. Many Vossloh locations celebrated World Day for Safety and Health at Work with specific campaigns.

The SAFE+ app plays an important role in minimizing potential risks and consequently achieving the goal of reducing the frequency of workplace accidents by 20 % annually across the Group. It was further improved in 2023; the new version was available in English, French, German, Dutch, Swedish, Serbian and Polish at the end of the year. Vossloh employees can and should use the app to report safety risks identified in their day-to-day work in order to systematically reduce hazards at all sites and in all areas. Over the course of 2023, employees reported a total of 2,184 potential accident risks, 1,433 of which were immediately eliminated or minimized.

If employees have to travel internationally for their work for Vossloh, they can make use of the Group's travel safety management system. They will then receive comprehensive support with regard to medical and safety aspects of their trip, as well as precautions for possible emergencies. The company's Travel Security Managers and worldwide Assistance Centers, in addition to a service provider's assistance app, are available for this purpose.

Vossloh's occupational health management aims to provide all employees with opportunities to prevent and promote health. This includes the aforementioned occupational safety measures, ergonomics in the workplace, driver safety training and company medical care, as well as a daily fruit offer, nutritional advice, company sports (including running and cycling groups, table tennis, badminton, various ball sports, yoga), support to quit smoking and preventive offers (including bowel cancer screening, flu vaccinations, vitality screenings, tips for staying healthy).

Occupational health
management

Human resources and leadership

A committed and inspired workforce is the bedrock of the company's long-term success. Vossloh, therefore, attaches great importance to fair labor conditions. Key topics in this regard are equal opportunity, continuing professional development opportunities in all areas, fair remuneration, additional company benefits (above and beyond the statutory and/or tariff-based arrangements), and a motivating working environment. Observance of local statutory regulations and standards forms part of the compliance obligation (see "Compliance with legal and regulatory requirements" on page 98 et seq.).

In terms of "Human resources and leadership", Vossloh's materiality analysis identified the following five topics as relevant to Vossloh:

- Values and leadership
- Employee development and training
- Motivating working environment
- Equality and inclusion
- Diversity

They are presented in more detail below. Two Group-wide sustainability goals have been defined for this focus topic. One goal relates to "Values and leadership", while the other relates to "Diversity". Information on measures and progress can be found in the relevant sections.

The "One Vossloh" guiding principle is gathering steam: After focusing on the rail track and incorporating the topic of sustainability into the corporate values and corporate strategy, Vossloh is working on a new self-image for internal and external communication. Three management principles were established at the end of 2021: "We create value for Vossloh", "We promote continuous improvement" and "We are close to people". These value-based guidelines apply not only to management, but to all employees at Vossloh. Defined indicators can be used to transparently check whether decisions are in line with these management principles. The Group-wide training on this topic, which began in the previous year, was systematically continued in 2023, so that by the end of the year all members of the top three management levels had received training on the leadership principles.

Values and
leadership principles

The training sessions for the top 100 managers in the Group on the new Group-wide standardized talent and succession process were also completed. Roundtables were held in all units in which the members of the top two management levels carried out evaluations of the workforce in accordance with the new requirements. A total of 93 managers were trained over the course of 2023.

Managers and employees are supported by a blended learning approach consisting of e-learning, training and case studies as part of an exchange of experiences. Annual follow-ups using the People Review Process (PRP) and roundtables are used to check whether both topics are having the intended effect. In the course of 2023, a total of 277 managers were trained on the PRP in a total of 138.5 hours.

The general “rules of the game” for working at Vossloh are summarized in a Code of Conduct, which each individual employee acknowledges by signing it upon joining the company. The principles of conduct set out in the Code of Conduct are a binding guideline and benchmark for the daily work of all company employees (see “Compliance with legal and regulatory requirements” on page 98 et seq.).

Employee development and training

One of Vossloh’s major advantages in terms of its attractiveness as an employer is the comprehensive array of development measures it offers its employees. The company specifically promotes talent by striving to offer attractive opportunities, including offering all junior staff the possibility of working in digital project-based international roles. In annual review meetings, various measures are agreed upon to provide employees with customized training while taking operational needs into account. Proper implementation of these measures is closely monitored and evaluated by the HR departments. In addition, managers and employees sit down for six-monthly reviews to discuss the level of attainment for the agreed goals and development operations and to make any necessary adjustments.

As part of the People Review Process for managers and non-tariff employees, not only individual targets and development measures are agreed, i.e. what, but also how these measures and targets are to be achieved in line with the corporate values and management principles. In the course of 2023, 91.0 % of all managers and non-tariff employees went through this process (previous year: 90.5 %).

The wide range of training measures for Vossloh employees in all areas of expertise includes external and internal training measures, such as workshops, participation in projects and coaching, and increasingly digital learning opportunities. Vossloh also promotes its own employee qualification initiatives, such as part-time studies. In addition, there are cross-divisional development programs that prepare high-potential employees and technical experts for more advanced tasks.

The Vossloh Learning Platform (VLP) is the digital environment for continuous learning (“Learn”), sharing (“Share”) and growing (“Grow”) within the company. The platform is designed to create an inspiring and motivating learning culture that all employees can contribute to and benefit from. The VLP is an example of how learning takes place every day and in many different ways. The learning opportunities are divided into the areas of “onsite”, “tailor-made” and “digital learning”, so that a suitable solution can be found quickly depending on learning needs. The VLP is available to all employees worldwide in German, English and French.

In 2023, a total of 2,585 employees took part in training events. The number of participants increased by 20.6 % compared to the previous year.

Ageing societies in industrialized countries, a shortage of skilled workers in many parts of the world, increasingly digital working environments, global competition for well-trained engineers, changing expectations of employers among the younger generation: These are just some of the challenges in the area of human resources that Vossloh has to face. The company therefore attaches great importance to offer employees a motivating working environment. Being a sustainably oriented company in a crisis-proof industry is an important component of employer branding activities

Modern IT equipment, daily fruit offerings, free mineral water, surprise gifts on special occasions (such as Christmas, Easter, in the USA also Thanksgiving), sports groups or joint activities for the workforce are natural incentives for employees at many Vossloh locations.

Vossloh practices a life-phase-oriented HR policy. The issue of work-life balance is discussed constructively between employee representatives and management. For example, all French companies in the Vossloh Group have a so-called social pact for a better balance between professional and private concerns, including privileges for parents and employees who care for their relatives at home. The German Vossloh companies are certified in accordance with the "Work and Family" audit. In 2023, Vossloh Germany received the "Top Employer" award from the renowned Top Employers Institute.

Topics that further strengthen Vossloh's sustainability approach are also incorporated into the company's bonus system. The uniform Group-wide Fit 4 Future ideas program has been in place since 2021. All employees can submit ideas via an app available in many languages and support their implementation across all business areas. In total, employees from all business units submitted over 900 new ideas in the 2023 reporting year. Over 400 ideas were implemented in 2023. The express aim is to reduce the use of materials, energy, manpower and working time in all areas of the company. The best projects resulting from the proposals submitted take part in an annual competition. Three projects selected by a jury are awarded the Eduard Vossloh Prize. The finalists present their ideas at the annual Leaders Lounge management meeting. The first prize of €15,000 in 2023 was awarded to a team from Vossloh Fastening Systems in Germany.

Vossloh Group companies assess employee satisfaction by means of regular surveys regarding various focal issues. The results are used to derive measures that contribute to the further development of the company. The last survey at the end of 2023 focused on the perception of Vossloh as a brand both inside and outside the organization. In addition to customers worldwide, 475 employees were also surveyed. 84 % of them stated that they can identify with Vossloh as an employer and that they work in a supportive, professional and experienced environment on an equal footing. In addition, 84 % of the survey participants rated the products and solutions as high quality and valued the experience (86 %), expertise (78 %) and reliability (71%) of the company they work for. 74 % emphasized the secure jobs and long-term prospects that the employer offers them. 69 % praised the responsibility shown in terms of sustainability and environmental awareness, and the same number of employees said they were proud to work for Vossloh. In addition, surveys were conducted among employees at Vossloh Fastening Systems in China (on working conditions) and in Poland (on the training courses organized) as well as at Vossloh Tie Technologies (on the health program). In the Customized Modules division, Vossloh Nordic Switch Systems is a pioneer in employee surveys and focuses on work motivation. The approach is to be adopted by the division's other units from 2024.

Equality and inclusion

Vossloh pays fundamental attention to gender equality. The Diversity, Equality and Inclusion Policy forms the Group-wide framework for various initiatives in this area, such as raising awareness among managers, selecting employees for high-potential programs, filling vacancies or as part of the life-phase-oriented HR policy. The "All on track" initiative launched in 2019 is having an impact in the Customized Modules division. The initiative was promoted by the fact that in France, companies with more than 50 employees are obliged to publish annual key figures relating to professional equality between men and women. In this Penicaud Index, Vossloh Cogifer SA, the lead company of the Customized Modules division, scored 86 out of a possible 100 points in 2023. Vossloh Cogifer is also a partner of the French organization Elles bougent, which encourages women to choose scientific and technical courses of study and to pursue a career in this field. In Germany, the Rail Services business unit is a corporate sponsor of protechnicale e.V., an association that specifically promotes young women in the technical field.

Diversity

Diversity officers have been appointed for each business unit since 2022. They not only act as a point of contact, but are also tasked with initiating or implementing corresponding projects such as training measures in their respective business units.

In 2023, Vossloh employed women and men from 51 countries with a wide range of qualification levels, education levels, vocational training paths, career experience and service years within all of its hierarchical levels. The diversity guideline does not stipulate any quotas. Applicants are always selected who are best suited to the advertised positions. Factors such as skin color, gender, religion or origin do not play a role.

The Vossloh locations in France are participating in the nationwide initiative TREMPLIN (translated: stepping stone; abbreviation for TRansport EMPLoi INnovation). It aims to reduce the shortage of skilled workers in the transport and logistics industry by encouraging and supporting people with disabilities to apply for jobs. Vossloh Rail Services offers internships and apprenticeships for socially disadvantaged young people as part of a young talent campus. There are also several refugees among the business unit's trainees.

The following table shows some HR indicators, which should be viewed in the context of Vossloh's status as a global industrial manufacturing Group:

Vossloh Group workforce structure ¹ (as of 12/31)	2023	2022
Proportion of women in the total workforce (in %)	15.6	15.2
Age structure of employees (in %)		
< 31 years	15.9	16.1
31–50 years	54.4	54.0
> 50 years	29.7	29.9
Length of service of employees (in %)		
0–10 years	62.3	60.8
11–20 years	19.2	21.0
> 20 years	18.5	18.2
Employees by region (in %)		
Germany	23.9	20.7
France	19.3	19.6
Rest of Europe	31.8	32.5
Asia	12.8	13.2
Americas	6.3	7.7
Australia	5.9	6.3

¹ Number of employees based on actual headcount.

Sustainable supply chains and operations

Sustainable management also means looking beyond one's own factory gate. It concerns managing the environmental, social and economic impacts of products and services throughout their entire life cycle – from the procurement of raw materials, through processing and manufacturing processes, and the use of products and services, through to their disposal or recycling.

Vossloh has made a voluntary commitment to responsible sourcing as part of its sustainability initiatives. The Executive Board of Vossloh AG is committed to the basic principle of the highest environmental, social and governance standards in procurement decisions and published the Responsible Sourcing Commitment on the website www.vossloh.com in December 2022 (see "Investor Relations" > "Sustainability" > "Sustainable Supply Chains and Operations").

As part of the comprehensive materiality analysis 2021, the area of "Sustainable Supply Chains and Operations" was identified as one of seven focus topics. The goal was defined as expanding sustainability in the supply chain and increasing the proportion of sustainably purchased strategic procurement volume to 90 % by 2025.

The Vossloh Group set up a corresponding management system in 2022 to manage sustainable procurement. In preparation for this, an ESG (environment, social, governance) criteria-based risk assessment of suppliers was carried out in 15 Vossloh units in cooperation with an independent auditing company. The Responsible Sourcing Management System implemented in 2023 is intended to ensure that sustainability criteria are given significant consideration when commissioning and working with strategic suppliers. Since 2023, Vossloh has been requesting information from the strategic suppliers addressed about their measures and processes for ensuring environmental, social and governance standards. The purchasing departments create sustainability profiles for these suppliers based on this self-disclosure and the corresponding evidence. A tool is available throughout the Group for this assessment process, which is used to query and document key measures relating to ESG criteria at suppliers. To this end, the employees responsible for strategic suppliers in the purchasing departments were trained in the past fiscal year.

Responsible
procurement

Vossloh expects its suppliers to give sustainability a high priority in their activities and to establish internal measures to ensure it. Furthermore, Vossloh's suppliers must meet a minimum level of sustainability. In its cooperation with suppliers, Vossloh also works towards the continuous improvement of environmental and social conditions, in particular labor standards, as well as good corporate governance. Strategic suppliers are required to recognize the Vossloh Code of Conduct for Business Partners, which has been available in a revised form since 2023 and also includes key obligations to protect human and employee rights. It defines essential and binding rules for sustainable action for Vossloh's business partners, to which the company itself is also aligned: Compliance with applicable laws, in particular respect for globally applicable human and employee rights, prohibition of child and forced labor, health and safety standards, environmental protection, transparency in the supply chain and responsible procurement of minerals as well as prohibition of corruption and bribery and compliance with laws to ensure fair competition.

One focus of sustainable procurement is the ban on the purchase of so-called conflict minerals (3TG, after the English names tin, tantalum, tungsten and gold). The company published a statement to this effect on its website www.vossloh.com in 2022 (see "Investor Relations" > "Sustainability" > "Sustainable supply chains and operations"). Vossloh itself does not knowingly use any 3TG minerals from conflict-affected and high-risk areas (CAHRAs) in the manufacture of its products or the provision of its services, the acquisition of which may directly or indirectly finance or otherwise facilitate armed conflicts. Ensuring that the procurement of such raw materials is prohibited is part of Vossloh's supplier selection process and part of the obligations of suppliers in the Code of Conduct for Business Partners.

Vossloh reviews compliance with obligations recognized by suppliers as part of regular audits on the basis of a risk profile that takes ESG criteria into account. In the future, country-specific risks of the supplying production site will be given increasingly greater weighting in the selection of suppliers to be audited. If a business partner does not meet the expectations placed on it, Vossloh intends to work towards improvements. In the event of serious violations of the obligations under the Vossloh Code of Conduct for Business Partners or repeated unwillingness to demonstrate appropriate remedial measures, the business relationship may be terminated.

Employees, business partners and third parties can report possible violations of the Code of Conduct for Business Partners to the responsible internal departments at Vossloh or (anonymously if desired) to the Compliance Ombudspersons (for further details on the whistleblower hotline, see below, page 100).

Business ethics and human rights

The nonfinancial aspects of corporate governance, compliance, particularly combating corruption and bribery, antitrust law and respect for human rights are outlined below. All of the aforementioned points have responsibility and risk minimization in common.

As a global enterprise with a 140-year history, Vossloh has a social responsibility toward its customers, employees, partners, investors and the public. From this responsibility, Vossloh derives the requirement that the company and its employees adhere to the laws as applicable, respect basic ethical values and act in an exemplary fashion at all times and in all scenarios. This requirement is set out in writing in the Vossloh Code of Conduct. The Code of Conduct, which all employees sign when they join the company, is designed to help them living up to this responsibility.

Good Corporate Governance

As a German stock corporation, Vossloh AG has a dual management and monitoring structure as reflected in the two bodies the Executive Board and the Supervisory Board. Both bodies have an obligation toward the company's well-being and the interests of the shareholders. The Annual General Meeting, as the third body, is responsible for the company's key fundamental decisions (see Corporate Governance Report on page 30 et seq. for this section).

Compliance with legal and regulatory requirements

Preventing violations of the law of any kind, in particular corruption and anticompetitive behavior, is a key concern of the Vossloh Executive Board for the entire Group. The Executive Board has also unequivocally summed this up in its Compliance Commitment, which states: "Compliance with the law has absolute priority over closing a deal or achieving internal goals. We would rather forgo a business opportunity than violate the law. We do not tolerate any violation of the law or of our internal guidelines and policies and will sanction any such behavior (zero tolerance policy)." (see www.vossloh.com > "Investor Relations" > "Corporate Governance" > "Compliance"). The area of Compliance is overseen within the Executive Board by the Chief Executive Officer (CEO).

To implement and monitor compliance regulations, the Executive Board has set up a compliance organization and defined its structure, the responsibilities and tasks of the individual compliance functions and their reporting channels in "Rules of Procedure for Compliance". The Vossloh Compliance organization consists of the Chief Compliance Officer (supported by a Compliance Office) and the Group Compliance Committee at Vossloh AG level, Compliance Officers and Compliance Committees in the business units as well as Local Compliance Officers in the operating companies. Vossloh's compliance management system is designed to identify risks arising from compliance violations and to minimize these risks through appropriate measures in order to prevent damage to Vossloh and its employees. The prevention of corruption and strict compliance with competition law regulations are a particular focus.

Since 2007, Vossloh's Compliance Management System has been based on the Vossloh Code of Conduct, which specifies the value of integrity and is binding for the entire Group and all company employees. It is currently available in 15 languages. There are also guidelines on the prevention of corruption, conduct in compliance with antitrust law and the involvement of intermediaries as well as a Data Protection Policy, an Export Control Policy and an Insider Trading Policy (for more information on compliance at Vossloh, see www.vossloh.com > "Investor Relations" > "Corporate Governance" > "Compliance").

Compliance as part of business activities constitutes part of regular classroom training held at all Vossloh companies. The teaching requirements and the participants are identified and selected by the Compliance Officers within the business units and the Local Compliance Officers on the basis of the Vossloh Compliance Training Concept. The Compliance Office headed by the Chief Compliance Officer keeps a record of the classroom training sessions held. In 2022, Vossloh conducted compliance training around the world with a total of 653 participants (2022: 1,283).

Compliance training is also given in the form of e-Learning, which was revised from the ground up in 2021. The "Code of Conduct – Compliance Basics" module is aimed at all employees who work at a computer workstation. In addition, there are two modules for all managerial staff and employees with external contact that focus on competition law and anticorruption measures. These are also the target audience of the "refresher" module on anticorruption, competition law and foreign trade law. All new employees are gradually taken through the e-Learning program. The Local Compliance Officers systematically record the employees' attendance and send them reminders to attend, if need be. The training rate was 97.1 % as of December 31, 2023 (2022: 96.3 %).

Compliance audits are performed – usually with the assistance of external audit firms – in order to verify that the Compliance Management System rules are being adhered to within the individual operating units. These audits are carried out on both an ad hoc and scheduled basis. In 2023, including a date planned for 2022 and made up for in 2023, four compliance audits were carried out regardless of cause. Compliance issues are also audited as part of the internal audit process. The company also has its Compliance Management System regularly reviewed by external experts and receives recommendations for further development and improvement. The last comprehensive effectiveness review to date took place in 2017; the audit report is published on the website www.vossloh.com > "Investor Relations" > "Corporate Governance" > "Compliance". Where findings and recommendations for compliance work were made, they have been and will be implemented as part of the continuous development and improvement of the Compliance Management System. A review of compliance risks carried out in the 2023 financial year with external support, including a survey on the effectiveness and acceptance of the Compliance Management System with 128 representatively selected managers and employees, primarily from management, sales and purchasing, once again confirmed the previous risk assessment and the high effectiveness and acceptance of the Compliance Management System. The subject of this risk inventory was the Group-wide determination of the Vossloh Group's compliance risks in the areas of antitrust law, anti-corruption and export control, taking into account existing compliance rules and measures (see also the section on "Legal risks and opportunities" on page 72). The appropriateness and high level of acceptance of the existing Compliance Management System continued to be confirmed overall.

The Compliance Office and Corporate Controlling also conduct annual risk dialogs with selected Vossloh Group companies to review the effectiveness of the Compliance Management System with a view to identifying material risks. One risk dialogue was held in 2023 (2022: two dialogues).

Vossloh has set up a whistle-blower hotline together with an international law firm. In addition to the option of contacting the Compliance Office directly, this allows company employees and external whistle-blowers to report possible misconduct to an independent external contact (ombudsperson) in their native language. The whistleblower hotline has so far been set up for 24 countries. As such, the main regions and the languages spoken within the Vossloh Group are essentially covered. The ombudspersons were contacted once in 2023 (2022: twice). All resulting investigations into possible compliance violations were completed.

Vossloh has also taken special precautions to ensure compliance with foreign trade regulations, notably export control and embargo legislation. Beyond the obvious need to comply with applicable legal provisions, Vossloh shares the security objectives pursued by foreign trade legislation, especially the strengthening of international peace efforts and the non-proliferation of weapons of mass destruction. An export control policy for the entire Group and which is based on applicable law creates a binding framework for the entire Vossloh Group and all its employees to ensure compliance with the respective legal requirements. The framework requirements of this policy are supplemented by more extensive regulations in the form of work and organizational instructions, process descriptions, etc. The policy states that each operational unit must appoint an Export Officer and a Trade Compliance Officer (TCO). In cooperation with the respective HR departments, they develop training concepts and ensure that all employees working in areas relevant to foreign trade receive the appropriate training. Vossloh's central compliance e-learning tool also includes the module "Foreign trade law."

The Vossloh Group also expects its suppliers and service providers to act in accordance with the rules and demonstrate lawful conduct. This is verified and controlled in specific cases as well as on an ad hoc basis. Group-wide "Guidelines on the Involvement of Intermediaries" apply to business dealings with commercial agents, agencies, distributors and consultants in the sales area. Their purpose is to prevent the risk of unfair practices on the part of contracted third parties and to minimize the risks for the company and its employees.

Vossloh has maintained a Group-wide register of associations as part of its Compliance Management System, in which all company and private memberships in industry associations are recorded. Vossloh AG's primary association memberships are as follows:

- The Railway Industry in Germany (VDB)
- Association of the European Rail Industry (UNIFE)
- Deutsches Verkehrsforum (DVF)
- Institut für Bahntechnik GmbH (IfB)
- Pro-Rail Alliance
- Association of German Transport Companies (VDV)

Vossloh does not make any donations to political parties or similar institutions.

Respect for human and labor rights

The Vossloh Group endeavors to respect internationally recognized human rights in its business activities and has codified this in the Vossloh Code of Conduct under point 10 ("Protection of human and employee rights"), which is binding for all employees. The Code of Conduct is publicly available on the website www.vossloh.com > "Investor Relations" > "Corporate Governance" > "Compliance".

To minimize the risk of child labor, Vossloh, as a rule, does not employ anyone under the age of 14 or 15 (depending on the legal provisions in the different countries). In addition, the majority of Vossloh's production facilities are located in Europe. Employees under the age of 18 are usually apprentices. The instructors responsible for them are duty-bound to observe all the relevant labor law and occupational safety rules and provisions. A whistle-blower hotline is available in order for possible misconduct to be reported. No human rights violations were reported in the 2023 fiscal year (2022: also no reports).

More recent major partnership contracts such as joint venture agreements generally already include the Vossloh Code of Conduct and, therefore, also its human rights aspects as mandatory conduct rules. The same applies to contracts with intermediaries (e.g. commercial agents and distributors). Strategic suppliers are required to recognize the Vossloh Code of Conduct for Business Partners, which has been available in revised form since 2023 and also includes significant obligations to protect human and employee rights.

The various Vossloh companies subject their suppliers and intermediaries to intensive preliminary checks before concluding a contract with them. Here the company has so far not had cause to check compliance with human rights. This result was confirmed in 2022 in a risk assessment of the supplier portfolio in 15 Vossloh units supervised by an independent auditing firm.

Adherence to local laws and standards (for example, minimum wage or fundamental labor law conditions) is an integral part of Vossloh's compliance obligations. The European Works Council, the Group Works Council, the Executive Board and Corporate Human Resources regularly communicate at Vossloh in order to guarantee the flow of information, discuss scope for improvements, address new issues together and tackle these in projects.

The protection of personal data is a matter of importance to Vossloh. The company revised its data protection management system to comply with the European General Data Protection Regulation (GDPR) and adjusted the organization in accordance with the new legal requirements. It is binding for all Vossloh companies and all staff worldwide, even outside the European Union. Compliance with the Vossloh Data Protection Policy is monitored by appointed data protection officers and data protection coordinators, as well as a data protection committee at the Vossloh AG level that meets regularly.

Data protection
and privacy

Good Corporate Citizenship

Vossloh is aware of its corporate responsibility and at the same time sees itself as a "good citizen". Both are expressed in the social commitment that the subsidiaries at the various locations make to the local community. A good example of this is the corporate volunteering program "Stronger Together – Responsible. Caring. Generous." During the reporting period, the concept was further developed together with the internationally renowned business school ESCP Berlin in order to promote volunteering locally. Once the joint preparations have been completed, the program will be introduced in the divisions. Vossloh supports the voluntary work of the respective employees with up to one paid working day per year.

As part of its annual materiality review, Vossloh has classified the topic of "social commitment" as no longer material within the meaning of Section 289c HGB. This decision reflects the limited impact and potential of this area compared to other sustainability topics and aspects of corporate activity. In addition, activities in this area have not yet been centrally coordinated and systematically recorded.

UN Global Compact

Vossloh has been an active participant in the United Nations (UN) Global Compact since 2020 and is making its contribution to achieving the global Sustainable Development Goals (SDGs). Since mid-2000, this United Nations initiative has been working to make globalization more socially and ecologically sustainable. Participants voluntarily commit to responsible business practices in the areas of human rights, labor standards, environmental protection and corruption. The Group's commitment focuses on 6 of the 17 SDGs. These include:

- SDG 5: Achieve gender equality and empower all women and girls
- SDG 6: Ensure availability and sustainable management of water and sanitation for all
- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 12: Ensure sustainable consumption and production patterns
- SDG 13: Take urgent action to combat climate change and its impacts

EU taxonomy and its implementation at Vossloh

As part of the European Green Deal climate action initiative, the EU Commission aims to achieve the transition to a modern, resource-efficient and competitive economy and climate neutrality by 2050. A central component of this is the EU Taxonomy Regulation, a classification system for defining environmentally sustainable economic activities. The regulation, which went into effect July 12, 2020, defines six environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

According to the EU taxonomy, economic activities are environmentally sustainable if they

- make a significant contribution to achieving one or more of the six environmental objectives listed (Substantial Contribution),
- do no significant harm (DNSH) to the achievement of the five other EU environmental objectives, and
- Comply with minimum requirements for occupational safety and human rights (minimum safeguards).

The regulations differentiate between taxonomy-eligible and taxonomy-aligned activities. If activities can be assigned to the taxonomy criteria, they are taxonomy-eligible, regardless of whether the technical evaluation criteria are met. Activities are taxonomy-aligned if the taxonomy-eligible activities also meet the criteria.

In accordance with the EU Taxonomy Regulation, Vossloh reports below on the share of sales revenues, capital expenditure (CapEx) and operating expenses (OpEx) of taxonomy-eligible and non-taxonomy-eligible economic activities.

Reporting for the 2023 financial year is carried out in accordance with the Taxonomy Regulation in the version dated June 18, 2020, the technical assessment criteria of the delegated act on the Taxonomy Regulation of June 4, 2021 for environmental objectives 1 (climate change mitigation) and 2 (climate change adaptation) and the delegated act of June 27, 2023. The latter adds further sectors and economic activities to the taxonomy that contribute significantly to environmental objectives 3 (sustainable use and protection of water and marine resources), 4 (transition to a circular economy), 5 (pollution prevention and control) and 6 (protection and restoration of biodiversity and ecosystems). When analyzing the activities, Vossloh focused primarily on their material contribution to the environmental goal of "climate protection". No activities were identified that have a significant impact on environmental goals 2 to 6.

The analysis of all activities of the Core Components, Customized Modules and Lifecycle Solutions divisions revealed that all of Vossloh's business activities can be assigned to category "6.14 Rail infrastructure" of the Delegated Regulation. According to the regulation, this category includes the construction, modernization, operation and maintenance of railroad lines as well as the manufacture and installation of track material.

For economic activities to be classified as environmentally sustainable, they must meet the technical assessment criteria for taxonomy conformity. The taxonomy-eligible activities were analyzed and the shares of taxonomy-aligned sales revenues, CapEx and OpEx were determined as follows:

- Substantial contribution: Compliance with the technical evaluation criteria was checked individually for the activities of each business unit.
- Do no significant harm (DNSH): The DNSH criteria mainly relate to compliance with legal requirements and, in the case of the "transition to a circular economy" objective, to fundamental aspects of business activity. Against this background, an assessment of DNSH compliance at business unit level was regularly appropriate.
- Minimum safeguards: A Group-wide approach to ensuring compliance with the minimum safeguards was implemented here, which enables these requirements to be tracked properly and seamlessly.

Vossloh's business activities are generally considered to make a substantial contribution to climate protection if they meet the technical assessment criteria set out in the "rail transport infrastructure" category. According to the regulation, Vossloh's activities are only considered to make a substantial contribution to climate protection if they are carried out on electrified rail lines or on lines for which there is a plan for electrification – even if the electrification of the rail infrastructure is not within Vossloh's sphere of influence. This does not include rail lines that are only intended for the transportation of fossil fuels.

Next, the activities classified as climate change mitigation had to be assessed to determine whether they had a significant negative impact on one or more of the above-mentioned environmental objectives (DNSH criteria). With regard to the DNSH criteria for the EU environmental objective "adaptation to climate change", there is no evidence that the physical impacts of climate change have a significant adverse effect on Vossloh's economic activities.

The criteria for the EU environmental goal "Sustainable use and protection of water and marine resources" essentially refer to legal and official requirements that Vossloh is obliged to comply with. Many of Vossloh's business activities do not use water as a resource at all, for example the milling of rails and switches, welding services, logistics activities or assembly work. Otherwise, the resource is used in Vossloh's factories primarily for the surface treatment of products, as a coolant in manufacturing processes and for the production of concrete ties. Contaminated wastewater is treated in the company's own wastewater treatment plants so that it at least meets the discharge standards of the public water supply (see also the explanations on page 86 et seq.).

With regard to the environmental goal of “transitioning to a circular economy”, Vossloh products meet the requirements for durability and longevity, as most components are designed for a very long service life and are recyclable and recoverable at the end of their useful life. In addition, the service portfolio of the Lifecycle Solutions division contributes to extending the service life of rails and switches.

Vossloh also meets the requirements relating to the EU environmental goal of “preventing and reducing pollution”. A large number of Vossloh products and services contribute to the reduction of noise and vibrations on the track (see also the “Track-related noise and vibrations” section on page 89).

Regarding the EU “Protect and restore biodiversity and ecosystems” environmental objective, environmental impact assessments (EIA) and comparable reviews are conducted by Vossloh where such a requirement exists. Vossloh is generally not subject to the EIA obligation when manufacturing products. Finally, by boosting track availability and enabling greater traffic through this land use, Vossloh is helping to minimize the land required for the construction of rail infrastructure, thereby contributing to the preservation of biodiversity.

Information on compliance with the minimum requirements regarding occupational safety and human rights can be found on pages 90 et seq. and 98 et seq. of this report.

Based on this approach and the above assumptions and estimates, the Vossloh Group’s taxonomy-eligible and taxonomy-aligned sales revenues, CapEx and OpEx are as follows:

	2023			2022		
	Absolute (in € million)	Taxonomy- eligible (in € million / as a %)	Taxonomy- aligned (in € million / as a %)	Absolute (in € million)	Taxonomy- eligible (in € million / as a %)	Taxonomy- aligned (in € million / as a %)
Sales revenues	1,214.3	1,214.3/100	762.8/63	1,046.1	1,046.1/100	672.3/64
CapEx	74.5	58.2/78	40.2/54	58.2	45.6/78	31.2/54
OpEx	68.2	65.9/97	43.9/65	50.1	48.1/96	32.8/65

Sales revenues from taxonomy-aligned business activities exceeded the previous year’s figure by 13.5 %. The increase is primarily attributable to the Switch Systems business unit. In addition, the Tie Technologies and Rail Services business units were also able to significantly increase their sales revenues. The share of taxonomy-aligned sales revenues fell marginally by 1 percentage point.

Capital expenditure (CapEx) for taxonomy-aligned activities was 28.8 % higher than in the previous year. The increase is primarily attributable to the Fastening Systems, Switch Systems and Rail Services business units. The share of taxonomy-aligned capital expenditure remained unchanged at 54 %.

Operating expenses (OpEx) for taxonomy-aligned activities increased by 33.8 % compared to the previous year. The increase is due in particular to higher maintenance and repair expenses. At 65 %, the share of taxonomy-aligned operating expenses remained at the previous year’s level.

Sales revenues are defined as net sales revenues in accordance with IFRS, as reported in the income statement, and therefore only relate to fully consolidated subsidiaries. The share of environmentally sustainable sales revenues is calculated by dividing the taxonomy-aligned net sales revenues by the total Group sales revenues. Further information on sales revenues can be found on page 129 et seq. of the annual report.

Further information on sales revenues, CapEx and OpEx

Breakdown of the sales revenues numerator

€ mill.	2023	2022
Sales revenues from contracts with customers	762.8	672.3
Total	762.8	672.3

Capital expenditure (CapEx) comprises investments in non-current intangible or tangible assets, including goods acquired as part of asset or share deals, as shown in the consolidated balance sheet. Capital expenditure (CapEx) is calculated on a gross basis, i.e. without taking into account revaluations or scheduled and unscheduled depreciation/amortization. Further information on CapEx can be found on pages 139 et seq. of the annual report.

The numerator used to determine the taxonomy-aligned CapEx is calculated as follows:

Breakdown of the CapEx numerator

€ mill.	2023	2022
Additions to property, plant and equipment	35.1	1.6
Additions to intangible assets	2.0	24.4
Additions to investment property	0.0	0.0
Additions to rights of use	3.1	5.2
Additions to assets acquired in business combinations	0.0	0.0
Total	40.2	31.2

Operating expenses (OpEx) take into account non-capitalizable expenses recognized in the income statement such as research and development, building renovation measures, short-term leasing, maintenance and repair and all other direct expenses from the maintenance of property, plant and equipment to ensure that the taxonomy-eligible assets are ready for operation.

The numerator used to determine the taxonomy-aligned OpEx is calculated as follows:

Breakdown of the OpEx numerator

€ mill.	2023	2022
Research and development	7.8	6.1
Maintenance and repair expenses	32.8	23.9
Lease expenses	2.3	2.0
Training expenses	1.0	0.8
Total	43.9	32.8

EU taxonomy indicators according to Annex II to the Commission Delegated Regulation

Sales revenues

Economic activities	Code(s)	Absolute sales revenues	Proportion of sales revenues	Substantial contribution criteria					
				Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)
		in € mill.	%	%	%	%	%	%	%
A. Taxonomy-eligible activities									
A.1. Environmentally sustainable activities (Taxonomy-aligned)									
6.14. Infrastructure for rail transport	6.14	762.8	63	63					
Sales revenues from environmentally sustainable activities (taxonomy-aligned) (A.1)		762.8	63	63					
Of which enabling			63	63					
Of which transitional									
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)									
6.14. Infrastructure for rail transport	6.14	451.5	37						
Sales revenues of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		451.5	37						
Total (A.1 + A.2)		1,214.3	100						
B. Taxonomy-non-eligible activities									
Sales revenues of Taxonomy-non-eligible (B)		0.0	0						
Total (A + B)		1,214.3	100						

*Y - Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective

N - No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective

DNSH criteria ("Does Not Significantly Harm")							Minimum Safeguards (17)	Taxonomy-aligned proportion of sales revenues, 2023	Taxonomy-aligned proportion of sales revenues, 2022	Category enabling activity	Category transitional activity
Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Y/N					
Y/N	Y/N*	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
		Y	Y	Y	Y	Y	Y	63	64	E	/
								63	64		
		Y	Y	Y	Y	Y	Y	63	64	E	
											/
								63	64		

CapEx

Economic activities	Code(s)	Absolute CapEx	Proportion of CapEx	Substantial contribution criteria					
				Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)
		in € mill.	%	%	%	%	%	%	%
A. Taxonomy-eligible activities									
A.1. Environmentally sustainable activities (taxonomy-aligned)									
6.14. Infrastructure for rail transport	6.14	39.0	52	52					
6.5 Transportation with motorcycles, passenger cars and light commercial vehicles	6.5	0.6	1	1					
7.3 Installation, maintenance and repair of energy-efficient appliances	7.3	0.4	1	1					
7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking lots belonging to buildings)	7.4	0.0	0	0					
7.5 Installation, maintenance and repair of devices for measuring, regulating and controlling the overall energy efficiency of buildings	7.5	0.2	0	0					
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	0.0	0	0					
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		40.2	54	54					
Of which enabling			54	54					
Of which transitional									
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)									
6.14 Infrastructure for rail transport	6.14	16.3	22						
6.5 Transportation with motorcycles, passenger cars and light commercial vehicles	6.5	1.7	2						
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)(A.2)		18.0	24						
Total (A.1 + A.2)		58.2	78						
B. Taxonomy-non-eligible activities									
CapEx of Taxonomy-non-eligible activities (B)		16.3	22						
Total (A + B)		74.5	100						

OpEx

Economic activities	Code(s)	Absolute OpEx in € mill.	Proportion of OpEx %	Substantial contribution criteria					
				Climate Change Mitigation (5) %	Climate Change Adaptation (6) %	Water (7) %	Pollution (8) %	Circular Economy (9) %	Biodiversity (10) %
A. Taxonomy-eligible activities									
A.1. Environmentally sustainable activities (Taxonomy-aligned)									
6.14. Infrastructure for rail transport	6.14	43.8	65	65					
6.5 Transportation with motorcycles, passenger cars and light commercial vehicles	6.5	0.0	0	0					
7.3 Installation, maintenance and repair of energy-efficient appliances	7.3	0.1	0	0					
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking lots belonging to buildings)	7.4	0.0	0	0					
7.5 Installation, maintenance and repair of devices for measuring, regulating and controlling the overall energy efficiency of buildings	7.5	0.0	0	0					
7.6 Installation, maintenance and repair of renewable energy technologies	7.6	0.0	0	0					
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		43.9	65	65					
Of which enabling			65	65					
Of which transitional									
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)									
6.14 Infrastructure for rail transport	6.14	21.9	32						
6.5 Transportation with motorcycles, passenger cars and light commercial vehicles	6.5	0.1	0						
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		22.0	32						
Total (A.1 + A.2)		65.9	97						
B. Taxonomy-non-eligible activities									
OpEx of Taxonomy-non-eligible activities (B)		2.3	3						
Total (A + B)		68.2	100						

Limited assurance report of the Independent Practitioner regarding the consolidated non-financial statement for the financial year from 1 January to 31 December 2023

To Vossloh Aktiengesellschaft, Werdohl/Germany

Our Engagement

We have performed a limited assurance engagement on the consolidated nonfinancial statement, which is included in the combined management report for the parent and the group, of Vossloh Aktiengesellschaft, Werdohl/Germany, (hereafter referred to as "the Company") for the financial year from 1 January to 31 December 2023 (hereafter referred to as "consolidated nonfinancial statement").

Our assurance engagement does not cover the references to external sources of documentation and websites mentioned in the consolidated nonfinancial statement.

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the consolidated nonfinancial statement in accordance with the requirements of Section 315c in conjunction with Sections 289c to 289e German Commercial Code (HGB) and Article 8 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 investment, and amending Regulation (EU) 2019/2088 (hereafter referred to as "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 and external ratings" of the consolidated nonfinancial statement.

These responsibilities of the executive directors of the Company include the selection and application of appropriate methods to prepare the consolidated nonfinancial statement and the use of assumptions and estimates for individual nonfinancial disclosures which are reasonable under the given circumstances. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of a consolidated nonfinancial statement that is free from material misstatement, whether due to fraud (i.e. fraudulent nonfinancial reporting) or error.

The EU Taxonomy Regulation and the Delegated Acts adopted 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 and external ratings" of the consolidated nonfinancial statement. They are responsible for the reasonableness of this interpretation. As there is the inherent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation is prone to uncertainty.

The preciseness and completeness of the environmental data in the consolidated nonfinancial statement is subject to inherent existing limitations associated with the manner in which the data was collected and calculated as well as assumptions made.

Independence and Quality Assurance of the Audit Firm

We have complied with the German professional requirements on independence and other professional rules of conduct.

Our audit firm applies the national legal requirements and professional pronouncements – in particular the Professional Charter for German Public Auditors and German Sworn Auditors (BS WP/vBP) and the IDW Quality Management Standards promulgated by the Institut der Wirtschaftsprüfer (IDW), and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional rules of conduct, professional standards, as well as relevant statutory and other legal requirements.

Responsibilities of the Independent Practitioner

Our responsibility is to express a conclusion on the consolidated nonfinancial statement based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the 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 perform the assurance engagement so that we can conclude with limited assurance whether matters have come to our attention to cause us to believe that the consolidated nonfinancial statement, other than the included references to external sources of documentation and websites including their contents, has not been prepared, in all material respects, in accordance with Section 315c in conjunction with Sections 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as the interpretation by the executive directors disclosed in section "EU Taxonomy and external ratings" of the consolidated nonfinancial statement.

The procedures performed in a limited assurance engagement are less in extent than in a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner's professional judgement.

Within the scope of our limited assurance engagement, which we performed between December 2023 and March 2024, we notably performed the following assurance procedures and other activities:

- Obtaining an understanding of the structure of the Group's sustainability organisation and of the stakeholder engagement,
- Inquiries of the executive directors and relevant employees at the headquarters in Werdohl (Germany) involved in the preparation process about the preparation process, about the system of internal control relating to this process, as well as about the disclosures contained in the consolidated nonfinancial statement,
- Identification of probable risks of material misstatements in the consolidated nonfinancial statement,
- Analytical evaluation of selected disclosures contained in the consolidated nonfinancial statement,
- Cross validation of selected disclosures and the corresponding data in the consolidated and annual financial statements as well as in the combined management report,
- Evaluation of the presentation of the consolidated nonfinancial statement,
- Evaluation of the process to identify taxonomy-eligible and taxonomy-aligned economic activities and the corresponding disclosures in the consolidated nonfinancial statement.

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

Practitioner's Conclusion

Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that the consolidated nonfinancial statement for the financial year from 1 January to 31 December 2023 has not been prepared, in all material respects, in accordance with Sections 289c to 289e HGB, Section 315c in conjunction with Sections 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as with the interpretation by the executive directors as disclosed in section "EU Taxonomy and external ratings" of the consolidated nonfinancial statement.

We do not express a conclusion on the references to external sources of documentation and websites including their contents included in the consolidated nonfinancial statement.

Restriction of Use

We issue this report as stipulated in the engagement letter agreed with the Company (including the "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" as of 1 January 2017 of the Institute of Public Auditors in Germany (IDW)). 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.

We are liable solely to the Company. We do not accept or assume liability to any third parties. Our conclusion was not modified in this respect.

Werdohl/Germany, 7 March 2024

Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

Signed:
Sebastian Dingel
Partner

Signed:
Eike Bernhard Hellmann
Senior Manager



Consolidated financial statements of Vossloh AG as of December 31, 2023

118 Income statement

118 Statement of comprehensive income

119 Cash flow statement

120 Balance sheet

121 Statement of changes in equity

122 Notes to the consolidated financial statements of Vossloh AG as of December 31, 2023

Segment information by division and business unit

Income statement

€ mill.	Notes	2023	2022
Sales revenues	(1)	1,214.3	1,046.1
Cost of sales	(2.1)	(898.3)	(809.3)
General administrative and selling expenses	(2.2)	(214.4)	(163.7)
Allowances and write-ups of financial assets		(2.3)	0.9
Research and development costs	(2.3)	(10.4)	(8.3)
Other operating income	(3.1)	17.7	20.9
Other operating expense	(3.2)	(10.9)	(11.3)
Operating result		95.7	75.3
Result from investments in companies accounted for using the equity method		8.1	4.6
Other financial income	(4.1)	0.6	0.3
Other financial expense	(4.2)	(5.9)	(2.1)
Earnings before interest and taxes (EBIT)		98.5	78.1
Interest income	(5.1)	4.7	7.5
Interest and similar expense	(5.2)	(20.7)	(18.1)
Earnings before taxes (EBT)		82.5	67.5
Income taxes	(6)	(28.2)	(12.5)
Result from continuing operations		54.3	55.0
Result from discontinued operations	(7)	1.0	1.0
Net income		55.3	56.0
thereof attributable to shareholders of Vossloh AG		38.7	41.7
thereof attributable to hybrid capital investors		6.0	6.0
thereof attributable to noncontrolling interests	(8)	10.6	8.3
Earnings per share			
Basic/diluted Earnings per share (in €)	(9)	2.21	2.38
thereof attributable to continuing operations		2.15	2.32
thereof attributable to discontinued operations		0.06	0.06

Statement of comprehensive income

€ mill.	Notes	2023	2022
Net income		55.3	56.0
Changes in fair value of hedging instruments (cash flow hedges)		(4.2)	4.3
Currency translation differences	(23)	(6.0)	0.0
Income taxes		1.2	(1.4)
Amounts that will potentially be transferred to profit or loss in future periods		(9.0)	2.9
Remeasurement of defined benefit plans	(24)	(1.7)	12.0
Income taxes	(16)	0.5	(3.1)
Amounts that will not be transferred to profit or loss in future periods		(1.2)	8.9
Income and expenses recognized directly in equity		(10.2)	11.8
Total comprehensive income		45.1	67.8
thereof attributable to shareholders of Vossloh AG		30.5	54.3
thereof attributable to hybrid capital investors		6.0	6.0
thereof attributable to noncontrolling interests		8.6	7.5

Cash flow statement

€ mill.	2023	2022
Cash flow from operating activities		
Earnings before interest and taxes (EBIT)	98.5	78.1
EBIT from discontinued operations	1.0	1.0
Depreciation/amortization/impairment losses/reversal of impairment losses of noncurrent assets	59.0	53.1
Change in noncurrent provisions	4.9	(1.7)
Gross cash flow	163.4	130.5
Noncash change in investments in companies accounted for using the equity method	(8.1)	(4.6)
Other noncash expenses and income	2.6	(4.1)
Result from the disposal of noncurrent assets	0.6	0.0
Income taxes paid	(26.4)	(23.4)
Change in working capital	(5.5)	(21.4)
Changes in other assets and liabilities	10.7	(5.4)
Cash flow from operating activities	137.3	71.6
Cash flow from investing activities		
Investments in intangible assets and property, plant and equipment	(67.4)	(44.9)
Proceeds from profit distributions from companies accounted for using the equity method	1.0	1.2
Free cash flow	70.9	27.9
Investments in noncurrent financial instruments	(0.5)	(0.4)
Proceeds from the disposal of intangible assets and property, plant and equipment	1.6	0.6
Disbursements/proceeds from the purchase/sale of short-term securities	1.3	(1.4)
Proceeds from the disposal of noncurrent financial instruments	0.2	0.0
Payments from the acquisition of consolidated companies	(1.6)	–
Cash flow from investing activities	(65.4)	(44.9)
Cash flow from financing activities		
Disbursements to company owners and minority shareholders	(25.3)	(26.5)
Payments to hybrid capital investors	(6.0)	(6.0)
Net financing from short-term loans	(39.2)	(20.4)
Net financing from medium and long-term loans	55.8	45.1
Repayments from leasing	(12.2)	(12.4)
Interest received and payments from hedges of Group financing	4.7	7.6
Interest paid and similar expenses	(17.2)	(16.7)
Cash flow from financing activities	(39.4)	(29.3)
Net cash inflow/outflow	32.5	(2.6)
Change in cash and cash equivalents from first-time consolidation	0.0	1.5
Exchange rate effects	1.0	0.4
Cash and cash equivalents at the beginning of the period	28.9	29.6
Cash and cash equivalents at the end of the period	62.4	28.9

For further information on the cash flow statement, see page 135 et seq.

Balance sheet

Assets in € mill.	Notes	12/31/2023	12/31/2022
Intangible assets	(10)	347.5	345.0
Property, plant and equipment	(11)	339.8	326.4
Investment properties	(12)	1.0	1.3
Investments in companies accounted for using the equity method	(13)	51.1	49.4
Other noncurrent financial instruments	(14)	8.6	13.7
Other noncurrent assets	(15)	1.7	1.5
Deferred tax assets	(16)	12.4	17.1
Noncurrent assets		762.1	754.4
Inventories	(17)	262.9	236.5
Trade receivables	(18)	201.0	228.0
Contract assets	(18)	0.5	1.4
Income tax assets	(19)	8.2	8.9
Other current financial instruments	(20)	11.1	15.5
Other current assets	(20)	31.8	28.9
Short-term securities	(21)	1.1	2.3
Cash and cash equivalents	(22)	99.4	76.8
Current assets		616.0	598.3
Assets held for sale	(7)	14.6	16.1
Assets		1,392.7	1,368.8

Equity and liabilities in € mill.	Notes	12/31/2023	12/31/2022
Capital stock	(23.1)	49.9	49.9
Additional paid-in capital	(23.2)	190.4	190.4
Retained earnings and net income	(23.3)	228.4	199.0
Hybrid capital	(23.4)	148.3	148.3
Accumulated other comprehensive income	(23.5)	(6.6)	10.3
Equity excluding noncontrolling interests		610.4	597.9
Noncontrolling interests	(23.6)	28.1	27.2
Equity		638.5	625.1
Pension provisions/provisions for other post-employment benefits	(24)	22.9	21.9
Other noncurrent provisions	(25)	21.3	17.5
Noncurrent financial liabilities	(26.1)	121.6	267.4
Noncurrent trade payables	(26.2)	0.5	1.7
Other noncurrent liabilities	(26.4)	5.9	10.4
Deferred tax liabilities	(16)	2.1	9.4
Noncurrent liabilities		174.3	328.3
Other current provisions	(25)	67.4	52.7
Current financial liabilities	(26.1)	198.4	49.2
Current trade payables	(26.2)	171.4	167.3
Current income tax liabilities	(26.3)	12.0	9.8
Other current liabilities	(26.4)	122.9	126.6
Current liabilities		572.1	405.6
Liabilities related to assets held for sale	(7)	7.8	9.8
Equity and liabilities		1,392.7	1,368.8

Statement of changes in equity

€ mill.	Capital stock	Additional paid-in capital	Retained earnings and net income	Hybrid capital	Accumulated other comprehensive income			Equity excluding noncontrolling interests	Noncontrolling interests	Total
					Reserves for currency translation	Reserves for hedging transactions	Reserves for the remeasurement of defined benefit plans			
As of 12/31/2021	49.9	190.4	172.0	148.3	(2.2)	(0.3)	1.2	559.3	28.6	587.9
Transfer to retained earnings			1.2				(1.2)	–		–
Change in the scope of consolidation			1.7		0.2			1.9		1.9
Net income			41.7	6.0				47.7	8.3	56.0
Income and expenses recognized directly in equity after taxes					0.9	2.9	8.8	12.6	(0.8)	11.8
Dividend payments			(17.6)					(17.6)	(8.9)	(26.5)
Compensation to hybrid capital investors				(6.0)				(6.0)		(6.0)
As of 12/31/2022	49.9	190.4	199.0	148.3	–1.1	2.6	8.8	597.9	27.2	625.1
Transfer to retained earnings			8.8				(8.8)	–		–
Other effects*			(0.5)			0.0		(0.5)	0.0	(0.5)
Net income			38.7	6.0				44.7	10.6	55.3
Income and expenses recognized directly in equity after taxes					(4.1)	(2.9)	(1.1)	(8.1)	(2.1)	(10.2)
Dividend payments			(17.6)					(17.6)	(7.6)	(25.2)
Compensation to hybrid capital investors				(6.0)				(6.0)		(6.0)
As of 12/31/2023	49.9	190.4	228.4	148.3	(5.2)	(0.3)	(1.1)	610.4	28.1	638.5

*The other effects result from prior-year effects in connection with the recognition of two leases at two Group companies.

For further information on changes in equity items, see the explanations in notes 23.1 to 23.5 in the notes to the consolidated financial statements on page 149 et seq.

Notes to the consolidated financial statements of Vossloh AG as of December 31, 2023

Segment information by division and business unit

€ mill.		Vossloh Fastening Systems	Vossloh Tie Technologies	Consolidation	
Value added	2023	43.8	(1.5)	(0.5)	
	2022	18.5	(0.2)	(0.3)	
Information from the income statement/flow figures					
External sales revenues	2023	304.1	222.7	–	
	2022	308.5	154.5	–	
Internal sales revenues	2023	45.3	1.4	(26.8)	
	2022	32.8	1.8	(15.5)	
Depreciation/amortization	2023	10.4	11.6	–	
	2022	10.2	12.2	–	
Investments in noncurrent assets	2023	17.3	7.5	–	
	2022	12.6	6.3	–	
Result from investments in companies accounted for using the equity method	2023	0.5	–	–	
	2022	0.9	–	–	
Result from discontinued operations	2023	–	–	–	
	2022	–	–	–	
Other material noncash segment expenses	2023	3.7	7.3	–	
	2022	8.3	0.0	–	
Impairment losses	2023	1.7	1.8	–	
	2022	2.2	0.0	–	
Information from the balance sheet					
Total assets	2023	322.8	212.8	(3.7)	
	2022	325.1	213.3	(9.9)	
Liabilities	2023	185.1	59.6	(3.0)	
	2022	184.9	55.2	(9.7)	
Investments in companies accounted for using the equity method	2023	1.5	–	–	
	2022	3.9	–	–	
Annual average headcount ¹	2023	586	431	–	
	2022	560	377	–	

¹The average number of employees is calculated on the basis of quarterly figures.

	Core Components	Customized Modules (Vossloh Switch Systems)	Lifecycle Solutions (Vossloh Rail Services)	Holding companies	Consolidation	Group
	41.8	10.4	(7.1)	15.0	(41.2)	18.9
	18.0	10.8	(2.9)	6.7	(21.1)	11.5
	526.8	530.7	156.6	0.1	–	1,214.2
	463.0	453.0	130.1	0.0	–	1,046.1
	19.9	6.7	6.9	0.0	(33.4)	0.1
	19.1	3.1	5.9	0.0	(28.1)	0.0
	22.0	15.7	14.2	0.6	–	52.5
	22.4	15.1	12.7	0.7	–	50.9
	24.8	25.3	19.5	8.0	(3.1)	74.5
	18.9	16.3	16.7	7.1	(0.8)	58.2
	0.5	5.8	1.8	–	–	8.1
	0.9	2.2	1.5	–	–	4.6
	–	–	–	1.0	–	1.0
	–	–	–	1.0	–	1.0
	11.0	23.6	1.3	1.3	0.0	37.2
	8.3	15.5	0.7	(5.8)	(1.3)	17.4
	3.5	3.5	–	–	–	7.0
	2.2	0.0	–	9.5	(9.5)	2.2
	531.9	639.3	272.7	1,294.8	(1,346.0)	1,392.7
	528.5	601.1	268.5	1,213.6	(1,242.9)	1,368.8
	241.7	391.7	240.1	418.0	(545.1)	746.4
	230.4	336.6	232.7	412.3	(478.1)	733.9
	1.5	34.8	14.8	–	–	51.1
	3.9	32.4	13.1	–	–	49.4
	1,017	2,290	609	83	–	3,999
	937	2,241	549	67	–	3,794

General principles

Vossloh AG is a listed company based in Werdohl, Germany. The company is registered under HRB 5292 in the commercial register of the Iserlohn Local Court, the place of business is Vosslohstrasse 4, 58791 Werdohl, Germany. The development, manufacturing and sale of products, as well as the provision of services of all kinds in the field of rail technology, particularly in rail infrastructure, are the Vossloh Group's primary activities.

These consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU), and the supplementary regulations of Section 315e (1) of the German Commercial Code (HGB). All binding standards as of the balance sheet date have been considered.

On February 27, 2024, Vossloh AG's Executive Board released the consolidated financial statements for transmittal to the Supervisory Board's Audit Committee.

New accounting rules

The following standards and interpretations were issued by the International Accounting Standards Board (IASB) but were not yet binding for the 2023 fiscal year according to the EU's adoption regulations or were not yet adopted into European law. In the case of standards and interpretations that have not yet been adopted by the EU, the first-time application in accordance with the IASB is indicated. Early application of these standards is not planned.

New or amended standards	Issued	Applied for the first time in fiscal year	Endorsed by the EU	Key content and expected impact on the consolidated financial statements of Vossloh AG
Lease liability in a Sale and Leaseback transaction (Amendments to IFRS 16)	September 2022	2024	2023	No materials effects are expected.
Classification of Liabilities as Current or Noncurrent and noncurrent liabilities with covenants (Amendments to IAS 1)	January resp. July 2020 and October 2022	2024	2023	No materials effects are expected.
Supplier Finance Arrangements (Amendments to IAS 7 and IFRS 7)	May 2023	2024	./.	In the case of so-called reverse factoring additional disclosure requirements must be taken into account. Corresponding contracts are not currently available.
Lack of Exchangeability (Amendments to IAS 21)	August 2023	2025	./.	No materials effects are expected.

First-time application of standards and interpretations

In the 2023 fiscal year, the changes to standards and interpretations listed in the following table were applied for the first time:

Standard/Interpretation	Issued	Endorsed by the EU
IFRS 17: Insurance Contracts and Initial Application of IFRS 17 and IFRS 9 - Comparative Information (Amendment to IFRS 17)	May 2020	July 2021
Disclosure of Accounting policies (Amendments to IAS 1 and IFRS Practice Statement 2)	May 2020	July 2021
Definition of Accounting Estimates (Amendments to IAS 8)	February 2021	March 2022
Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12)	May 2020	July 2021
International Tax Reform - Pillar Two Model Rules (Amendments to IAS 12)	May 2020	July 2021

The standards and interpretations applied for the first time had no material impact on the consolidated financial statements. The amendment to IAS 12 due to the provisions of the minimum tax legislation (Pillar 2) led to additional disclosures in the notes to the income statement (Note 6 in the notes to the consolidated financial statements).

Principles of preparation of the consolidated financial statements

The financial statements of all companies included in the consolidated financial statements are prepared as of Vossloh AG's closing date (December 31) in accordance with uniform accounting and measurement policies; the majority are audited or reviewed by independent auditors.

The consolidated financial statements are prepared in Euro, the functional currency of Vossloh AG. Figures are mostly presented in millions of euros.

The income statement is structured according to the cost-of-sales method. The consolidated financial statements were prepared on a going concern basis.

The preparation of the consolidated financial statements requires management to make certain discretionary decisions, assumptions and estimates. These estimates involve a certain level of uncertainty. They affect the valuation of recognized assets, liabilities and contingent liabilities as of the balance sheet date, as well as the recognition of income and expenses in the reporting period. Due to the uncertainties, the actual values subsequently determined may differ from those estimates and hence from the amounts disclosed in the consolidated financial statements. The estimates and underlying assumptions are subject to ongoing review. Adjustments are made in the period of the change or in future periods, for example, in the case of changes to the useful lives of property, plant and equipment.

Estimation uncertainty with a significant impact on the consolidated financial statements is particularly prevalent when accounting for goodwill (see Note 10 to the consolidated financial statements), recognizing deferred taxes (see Note 16 to the consolidated financial statements) and recognizing and measuring other provisions (see Note 25 to the consolidated financial statements).

Discretionary decisions with a significant impact on the consolidated financial statements are particularly common when determining the duration of leases in the event of extension or termination options (see "Information on leases").

The recognition and measurement principles applied in Vossloh AG's consolidated financial statements are detailed in the notes.

Consolidation

Vossloh's consolidated financial statements comprise the financial statements of Vossloh AG and in principle all of its subsidiaries. Subsidiaries, over which Vossloh AG generally exercises control due to directly or indirectly holding the majority of voting rights are fully consolidated.

The financial statements of the subsidiaries are included in the consolidated financial statements from the date on which control is obtained until such control ceases to exist. The acquisition method is used for capital consolidation purposes. This involves offsetting the cost of the acquired shares against the Group's holding in the equity of the subsidiaries.

To determine the equity of the acquired subsidiaries on initial consolidation, all identifiable assets, liabilities and contingent liabilities of the acquired subsidiary are recognized at their respective fair value at the acquisition date.

Any remaining positive differences between the purchase price and the market value of the acquired assets and liabilities are recognized as goodwill in accordance with IFRS 3 and are tested for impairment annually at the level of the relevant business unit. Negative goodwill is directly recognized in the income statement after the fair values of assets and liabilities have been reassessed.

At the acquisition date, noncontrolling interests are measured with their corresponding share in the identifiable net assets of the respective company acquired.

Changes in the Group's interest in subsidiaries that do not lead to an acquisition or loss of control over these subsidiaries are treated as equity transactions.

Receivables and payables, and income and expenses, between consolidated Group companies are eliminated. Where write-downs have been recognized in the separate financial statements of consolidated subsidiaries on shares in consolidated subsidiaries or intragroup receivables, such write-downs are reversed in consolidation. Interim profits and losses from intragroup transactions are eliminated.

In accordance with IFRS 11, joint ventures are generally accounted for using the equity method insofar as the Group company holding the interest has typical shareholder rights applicable to the net assets of the joint venture.

As far as the rights of the Group company holding the interest apply to individual assets or liabilities, or the companies participating in the joint venture have entered into specific agreements regarding the division of the goods produced or services rendered by the joint venture, such a joint venture is deemed jointly operated and assets and liabilities, or expense and income, are accounted for using proportionate consolidation.

Where material, other companies in which Vossloh owns an equity interest of between 20 % and 50 % and where Vossloh can exercise a significant influence on their business and financial policies (associated companies) are accounted for using the equity method.

All other equity interests are measured at fair value and recognized in other noncurrent financial instruments.

There were minor changes to the scope of consolidation in the 2023 fiscal year:

On September 1, 2023, a business was acquired by Vossloh RailWatch GmbH and included in the consolidated financial statements from this date. The acquiring company had previously been acquired as a shelf company and renamed. The business activities of the new group company consist of the collection and processing of information on the impact of train traffic on railroad lines using optical methods. Its expertise in the digital processing of large volumes of data will also be used in development projects in the digitalization of business units. The purchase price for the acquired assets amounted to €0.5 million and was paid in cash. Intangible assets accounted for €0.1 million and property, plant and equipment for €0.4 million. These market values are not expected to be adjusted.

The company generated sales revenues of €0.1 million in the 2023 fiscal year; the contribution to net income amounted to €(0.5) million. As the company was previously a pure shelf company, it is not possible to state the sales revenues and earnings contribution in the case of a hypothetical acquisition at the beginning of the fiscal year. Only insignificant transaction costs were associated with the acquisition, which are reported under general administrative expenses.

In addition, a company was founded in Australia, but has not yet been included in the consolidated financial statements for reasons of materiality.

As a result, 53 companies (previous year: 52) were fully included in the consolidated financial statements at the end of the fiscal year, ten of which (previous year: nine) were based in Germany.

Six companies based abroad and one company in Germany were accounted for using the equity method, both unchanged from the previous year.

Ten companies (previous year: nine) in which Vossloh AG directly or indirectly held the majority of voting rights at the balance sheet date or which it otherwise controlled were not included in the consolidated financial statements due to their minor significance for the net assets, financial position and results of operations.

Currency translation

Noneuro financial statements of subsidiaries are translated into euros as the Group currency according to the concept of functional currency. Since these subsidiaries are nearly all economically independent entities, their functional currencies correspond to their local currencies.

For balance sheet items, the current rate (mean exchange rate as of the reporting date) is used, while for the translation of income statement items, the annual average exchange rate is applied, which serves as an approximation of the respective rates on the transaction dates. Compared with the translation of the previous year, currency translation differences in assets and liabilities, and between income statement and balance sheet, are recognized directly in the equity and presented in the line item "Accumulated other comprehensive income".

Since the beginning of the 2022 fiscal year, the functional currency of one foreign company has been changed from the local currency to the euro due to a changed economic environment. The financial statements of the company in question, which is prepared in the local currency, are converted using the temporal method. Accordingly, so-called non-monetary items (essentially property, plant and equipment in the case of the company concerned) and the corresponding depreciation/amortization are translated at the historical exchange rate at the date of the change in functional currency. The other items in the balance sheet are translated at the current rate, and expenses and income – with the exception of depreciation/amortization – are translated at the average exchange rate for the year.

In the separate financial statements, foreign currency transactions are translated using the exchange rate at the time of the recognition of the transaction. Gains or losses arising up to the end of the reporting period from the remeasurement of financial instruments or cash and cash equivalents are recognized in profit or loss.

The exchange rates of countries outside of the eurozone in which Vossloh transacts major business through consolidated subsidiaries are listed below:

Exchange rates						
Country	Currency	€	2023	2022	2023	2022
			Current rate		Annual average exchange rate	
Australia	AUD	1 €	1.62	1.57	1.63	1.52
China	CNY	1 €	7.84	7.42	7.67	7.09
United Kingdom	GBP	1 €	0.87	0.89	0.87	0.85
India	INR	1 €	91.89	88.33	89.34	82.74
Canada	CAD	1 €	1.46	1.45	1.46	1.37
Malaysia	MYR	1 €	5.07	4.70	4.89	4.63
Mexico	MXN	1 €	18.69	20.80	19.20	21.21
Poland	PLN	1 €	4.34	4.68	4.54	4.69
Sweden	SEK	1 €	11.10	11.13	11.47	10.63
Serbia	RSD	1 €	117.13	117.30	117.25	117.46
Turkey	TRY	1 €	32.65	19.97	25.75	17.39
USA	USD	1 €	1.11	1.07	1.08	1.05

Notes to the income statement

Breakdown of sales revenues

(1) Sales revenues

€ mill.	2023	2022
Sales of products		
Vossloh Fastening Systems	349.4	341.3
Vossloh Tie Technologies	224.1	156.3
Consolidation	(26.8)	(15.5)
Core Components	546.7	482.1
Customized Modules	537.4	454.7
Lifecycle Solutions	59.0	22.0
Consolidation	(33.4)	(28.1)
Group	1,109.7	930.7
Sales revenues from rendering services		
Lifecycle Solutions	100.9	106.2
Consolidation	0.1	0.0
Group	101.0	106.2
Sales revenues from customer-specific manufacturing		
Customized Modules	0.0	1.4
Lifecycle Solutions	3.6	7.8
Group	3.6	9.2
Total Group sales across all activities	1,214.3	1,046.1
Sales revenues by division and business unit		
Vossloh Fastening Systems	349.4	341.3
Vossloh Tie Technologies	224.1	156.3
Consolidation	(26.8)	(15.5)
Core Components	546.7	482.1
Customized Modules	537.4	456.1
Lifecycle Solutions	163.5	136.0
Consolidation	(33.3)	(28.1)
Group	1,214.3	1,046.1

The performance obligations of Group companies consist primarily of the delivery of typical products or the rendering of services, which are listed in the description of the business activities of the divisions and business units in the Notes to the segment report on page 157. The "Consolidation" line item also includes the sales revenues of Vossloh RailWatch GmbH, which is not allocated to any business unit.

Sales revenues are recognized net of sales deductions and price allowances in the form of rebates, bonuses or discounts as well as refunded charges or returns credited.

As a general rule, in accordance with IFRS 15, recognition takes place upon transfer of control of the products to be delivered on the basis of the respective contractually agreed incoterms. In most cases, this is covered by the transfer of ownership and risks to the buyer or when the customer takes physical possession. At several Group companies, "bill-and-hold" arrangements have been agreed upon because the customers manage the delivery of products on the basis of their own planning of construction projects in cases of new or overhauled rail routes. In such cases, the products have already been accepted by the customer in advance and are also stored separately as the property of the customer. Where partial invoices have been contractually agreed upon in advance, sales are recognized after the customer has finally and formally accepted the partial delivery. The payment terms for the majority of customer contracts do not include any financing components. Some orders include de facto redemption obligations for individual components in the event that due to specific effects components need to be replaced with more suitable versions. Contractual guarantees are also concluded at arm's length basis.

In the case of individual orders for the delivery of products and services in general, the performance owed and therefore the revenue is recognized over a period of time. In this context, the proportional earnings contribution realized as of the reporting date is also recognized along with the sales revenue in the income statement. The percentage of completion method (PoC) establishes the percentage of the contracts that have been fulfilled based on the ratio of costs already incurred to the estimated total contract costs (cost to cost method). Costs due to inefficiencies or similar causes are deducted in the calculation of the percentage of completion. The proportional profit from the PoC method is recognized only where the results of the customer contracts can be determined reliably. If this condition is not met, sales are recognized without including the proportional profit. Where a loss from a customer contract is imminent this is recognized in full.

The segment report presented on page 122 et seq. and explained on page 157 et seq. includes breakdowns of external sales revenues by division, business unit and region. A further overview of overall sales by region can also be found in the combined management report on page 42 of this annual report.

(2) Functional expenses According to the cost-of-sales format of the income statement presentation, expenses are allocated to functional categories. The following expense types and their amounts are included in cost of sales, selling, general administrative, and research and development expenses:

Breakdown of expense types		
€ mill.	2023	2022
Cost of raw materials, consumables and supplies	504.2	464.1
Cost of services purchased	84.3	71.8
Cost of materials	588.5	535.9
Wages and salaries	206.4	182.3
Social security expenses and charges	42.6	38.5
Pension expenses	6.2	6.0
Personnel expenses	255.2	226.8
Depreciation/amortization	59.5	53.1

Based on the quarterly numbers, the average annual workforce structure was as follows:

	2023	2022
Executive Board/Management Board	28	22
Other managers/executives	98	94
Nontariff employees	959	884
Tariff employees	2,984	2,868
Apprentices/trainees	55	50
Interns and working students	21	16
Total	4,145	3,934

The number of employees in the Vossloh Group in accordance with Section 314 (1) no. 4 HGB amounted to 4,041 (previous year: 3,846). The figures reflect the number of people employed; the figures for the average number of employees in the segment information on pages 122 f. are based on a conversion to full-time equivalents.

(2.1) Cost of sales Cost of sales covers the cost of goods sold and services rendered in the period. Besides such direct costs as materials, labor and energy, cost of sales comprises indirect costs, primarily depreciation on plant, property and equipment, in addition to amortization of intangible assets. Cost of sales also includes any write-downs of inventories in the period.

Breakdown of general administrative and selling expenses

€ mill.	2023	2022
Selling expenses	87.4	68.6
General administrative expenses	127.0	95.1
General administrative and selling expenses	214.4	163.7

(2.2) General administrative and selling expenses

In addition to personnel expenses, selling expenses primarily include outgoing freights and commissions, insofar as logistics and freight costs are not incurred within the overall performance process and are reported in the cost of sales, and commissions.

General administrative expenses comprise the personnel and material costs of administration, including amortization and depreciation on corresponding assets.

All research costs are recognized directly in expenses and reported under research and development costs in the income statement.

(2.3) Research and development costs

Costs for the development of a marketable product are capitalized if the criteria set out in IAS 38 are met. Development costs that cannot be capitalized are also reported under this line item in the income statement.

Research and development expenses before own work capitalized amounted to €11.6 million in the past financial year (previous year: €10.3 million). Of these expenses, which were incurred in development departments, €1.2 million (previous year: €2.0 million) were capitalized in the balance sheet.

Breakdown of other operating income

€ mill.	2023	2022
Currency exchange gains	8.3	6.9
Income from government grants	2.3	1.5
Rental income	0.6	0.8
Insurance reimbursements	0.4	0.5
Income from the disposal of intangible assets and property, plant and equipment	0.2	0.3
Other income	5.9	10.9
Other operating income	17.7	20.9

(3.1) Other operating income

Currency exchange gains and losses also include changes in the market value of stand-alone derivatives for the economic hedging of currency risks.

Income from government grants mainly relates to grants for research and development projects.

Payments received to subsidize expenses are recorded as deferred income under other liabilities and amortized pro rata temporis under other operating income.

Investment/capex-related grants or incentives are offset from the acquisition costs of the property, plant and equipment concerned. Conditions yet to be met and where the failure to meet such conditions would entail the repayment of grants do not exist, nor do other contingent liabilities in this regard.

Other income includes, among other things, subsidies of €0.5 million (previous year: €3.8 million) as part of an infrastructure project of Deutsche Bahn. The income was offset by expenses over the duration of this project.

(3.2) Other operating expense	Breakdown of other operating expense		
	€ mill.	2023	2022
	Currency exchange losses	(8.1)	(9.7)
	Losses from the disposal of intangible assets and property, plant and equipment	(0.8)	(0.4)
	Impairment of intangible assets and property, plant and equipment	(0.7)	(0.1)
	Expenses for buildings	(0.4)	(0.4)
	Other expenses	(0.9)	(0.7)
	Other operating expense	(10.9)	(11.3)

(4.1) Other financial income	Breakdown of other financial income		
	€ mill.	2023	2022
	Income from investments	0.6	0.3
	Other financial income	0.6	0.3

The income from investments is largely attributable to the Fastening Systems business unit.

(4.2) Other financial expense	Breakdown of other financial expense		
	€ mill.	2023	2022
	Write-down of financial instruments	(5.9)	(2.1)
	Other financial expense	(5.9)	(2.1)

The expense mainly resulted from the impairment of two joint ventures accounted for using the equity method in the Fastening Systems and Switch Systems business units (previous year: Fastening Systems business unit). Furthermore, an impairment loss was recognized on a Brazilian investment in the Tie Technologies business unit.

(5.1) Interest income Currency exchange gains from intragroup financing totaling €3.7 million (previous year: €6.8 million) make up the majority of the €4.7 million in interest income reported in the income statement (previous year: €7.5 million).

(5.2) Interest and similar expense	Breakdown of interest and similar expense		
	€ mill.	2023	2022
	Interest from bank debt	(9.0)	(4.9)
	Interest from leasing	(1.2)	(1.1)
	Guarantee commissions	(0.8)	(0.6)
	Other interest expenses	(9.7)	(11.5)
	Interest and similar expense	(20.7)	(18.1)

The majority of other interest expense relates to currency exchange losses from intragroup financing.

(6) Income taxes	Breakdown of income taxes		
	€ mill.	2023	2022
	Current income taxes	29.1	24.7
	Deferred taxes	(0.9)	(12.2)
	Income taxes	28.2	12.5

Of the current income taxes, €0.6 million (previous year: €0.8 million) related to items from previous years. In the case of deferred taxes, this applied to €2.1 million (previous year: €(1.9) million). Deferred tax income of €0.9 million resulted from the reversal of temporary differences and from tax loss and interest carryforwards (previous year: tax income of €10.1 million). The remeasurement of temporary differences resulted in a deferred tax expense of €0.7 million (previous year: €0.7 million).

In Germany, the statutory corporate income tax rate of 15 % and the solidarity surcharge (5.5 % of corporate income) are applied. Municipal trade tax is also collected at rates defined by the respective local municipalities. An average tax rate of 32.10 % is expected for Vossloh AG as the parent company (previous year: 32.18 %).

The Vossloh Group's actual tax expense of €28.2 million (previous year: €12.5 million) was €1.7 million higher than the anticipated tax expense (previous year: €9.2 million lower actual tax expense) that would have resulted from applying a Group holding-wide tax rate to EBT.

The reconciliation of the expected income tax expense to the actual income tax shown in the consolidated income statement is presented below:

Reconciliation to the recognized tax expense			
		2023	2022
Earnings before taxes	€ mill.	82.5	67.5
Income tax rate including trade taxes	%	32.10	32.18
Expected tax expense when applying a uniform tax rate	€ mill.	26.5	21.7
Tax reduction/increase due to divergent foreign income tax rates	€ mill.	(7.4)	(7.8)
Tax reduction due to tax-exempt income	€ mill.	(2.1)	(1.6)
Tax increase due to nondeductible expenses	€ mill.	7.1	3.4
Taxes for previous years	€ mill.	3.8	(1.1)
Tax effect from write-ups/write-downs of deferred tax assets	€ mill.	0.6	(3.7)
Withholding tax effects and double-taxation	€ mill.	1.5	1.3
Effect from the remeasurement of deferred taxes	€ mill.	0.7	0.7
Effects from the valuation of investments in companies accounted for using the equity method	€ mill.	(2.5)	(0.6)
Other differences	€ mill.	0.0	0.2
Recognized income tax expense	€ mill.	28.2	12.5
Effective income tax rate	%	34.1	18.5

The total amount of deferred taxes recognized in other comprehensive income was €1.7 million (previous year: €(4.5) million). Deferred taxes resulted from the remeasurement of defined benefit pension plans in the financial year amounting to €0.5 million (previous year: €(3.1) million), as well as from changes in the measurement of hedging instruments from cash flow hedges recognized directly in equity amounting to €1.2 million (previous year: €(1.4) million).

The valuation of investments results in valuation differences between the tax values in the respective parent companies and the net assets in the consolidated balance sheet (so-called outside basis differences) in the amount of €222.1 million (previous year: €173.7 million). The resulting deferred tax liabilities would amount to €2.9 million (previous year: €2.3 million). As the Group can control the reversal of the temporary differences and this reversal is not likely in the foreseeable future, no deferred tax liabilities are recognized.

In connection with the law to ensure global minimum taxation for corporate groups (Minimum Tax Act - MinStG), which came into force on December 28, 2023, and will apply from 2024, the Group has applied the exemption rules in IAS 12 adopted by the IASB in the reporting year and enacted by the EU with regard to the possible effects of minimum taxation on deferred taxes. The Minimum Tax Act transposed the directive introduced by the EU in 2022 to implement the OECD's Pillar 2 model rules into national law. The global minimum tax is intended to ensure that an effective tax rate of at least 15 % applies per country. If the effective tax rate according to the rules of the MinStG is in certain countries below 15%, an additional minimum tax is levied at the level of the ultimate parent company. An initial assessment of possible effects as part of the implementation project showed that the Group operates in 31 jurisdictions, the main countries being Germany, France, China, and the USA, in each of which the expected effective tax rate is over 15 %. As things stand at present, we cannot rule out the possibility that an additional minimum tax could arise in Turkey outside the aforementioned countries, although this would not be significant given the very small share of earnings of the Group company there. The Group is continuing to examine the impact of the Pillar 2 legislation on the Group's future earnings power.

(7) Result from discontinued operations/assets and liabilities held for sale

As in the previous year, the result from discontinued operations in the reporting year resulted from the subsequent effects of earlier disposals of business units.

The following table shows a breakdown of the result from discontinued operations included in the Income statement data:

Breakdown of the result from discontinued operations		
€ mill.	2023	2022
Subsequent effects from former business units	1.0	1.0
Result from discontinued operations	1.0	1.0
thereof attributable to shareholders of Vossloh AG	1.0	1.0
thereof attributable to noncontrolling interests	–	–

The assets and liabilities held for sale reported on the balance sheet are almost entirely attributable to an activity in the Switch Systems business unit, which is the subject of a sales project that began in fiscal year 2022 and still existed as at the balance sheet date. As of the 2023 reporting date, the Executive Board of Vossloh AG expected the sale to take place within the next twelve months. This line item also includes a noncurrent asset held for sale from the Tie Technologies business unit.

The following table shows the main groups of assets held for sale and the related liabilities:

Assets and liabilities related to disposal groups		
€ mill.	12/31/2023	12/31/2022
Goodwill	2.9	3.6
Intangible assets (excluding goodwill)	1.7	1.4
Property, plant and equipment	0.6	0.5
Other noncurrent assets	0.0	0.0
Noncurrent assets	5.2	5.5
Inventories	4.7	4.4
Trade receivables	1.2	2.2
Receivables from construction contracts	3.2	3.3
Other current assets	0.1	0.3
Cash and cash equivalents	0.2	0.4
Current assets	9.4	10.6
Assets	14.6	16.1
Provisions	0.7	2.0
Trade payables	2.0	2.5
Liabilities from leases	0.2	0.2
Other liabilities	4.9	5.1
Liabilities	7.8	9.8

(8) Noncontrolling interests

Earnings after income taxes include profit shares attributable to minority interests in the amount of €10.8 million (previous year: €8.4 million) and shares in losses of €0.2 million (previous year: €0.1 million).

(9) Earnings per share

		2023	2022
Weighted average of shares outstanding	Number	17,564,180	17,564,180
Net income attributable to the shareholders of Vossloh AG	€ mill.	38.7	41.7
Basic/diluted earnings per share	€	2.21	2.38
thereof attributable to continuing operations	€	2.15	2.32
thereof attributable to discontinued operations	€	0.06	0.06

Notes to the cash flow statement

The cash flow statement shows the changes in cash and cash equivalents as well as bank overdrafts within the Vossloh Group. Cash pertains to cash on hand and in the bank. Cash equivalents comprise any financial instruments with a maximum residual term of three months from the time of acquisition that can be readily converted into cash. Bank overdrafts result from credit balances of bank balances due in the near future, as well as from sub-lines in the context of the credit agreement that is due in principle by November, 2024, and are included in cash and cash equivalents. In the balance sheet, these sub-lines are recognized under the noncurrent financial liabilities as a part of the drawdowns from the aforementioned credit agreement as at the 2023 balance sheet date due to the stated maturity.

Therefore, in addition to the cash and cash equivalents of €99.4 million (previous year: €76.8 million) reported in the balance sheet, cash also includes bank overdrafts of €37.1 million (previous year: €48.3 million). In addition, at the end of the period, €0.2 million is held in a disposal group and reported under "Assets held for sale" in accordance with IFRS 5.

The cash flow statement is prepared in conformity with IAS 7 and classifies changes in cash and cash equivalents and those of bank overdrafts into cash flows from operating, investing and financing activities. The cash flow from operating activities is presented according to the indirect method.

Other noncash expenses and income mainly include currency translation effects, changes in deferred taxes and write-downs on inventories and trade receivables. In the cash receipts and payments arising from the purchase or sale of consolidated companies and other units, the cash inflows and outflows are offset against each other. In the 2023 financial year, an earn-out payment of €1.1 million was made from the acquisition of a consolidated company.

The line item „Net financing from short-term loans“ includes the repayment of drawings under the syndicated loan in the amount of €40.0 million for the reporting year.

The line item „Net financing from medium and long-term loans“ for the reporting year includes new Schuldschein loans of €60.0 million and individual repayments at various subsidiaries totaling €9.0 million. For further information, please refer to our comments on financial liabilities in Note 26.1 to the consolidated financial statements.

The reclassification of a Schuldschein loan of €90.0 million, the loan from DZ Bank of €20.0 million and the drawdowns under the syndicated loan at the end of 2023 in the amount of €60.0 million to current loans was not taken into account for the purposes of presentation in the cash flow statement, as this did not trigger any cash movement.

The figures in the cash flow statement on page 119 relate to the entire Group, including effects from discontinued operations. Of the total values, €1.0 million (previous year: €1.0 million) of the gross cash flow was attributable to discontinued operations. In the reporting year and the previous year, the figures in cash flow from operating activities and free cash flow are fully attributable to continuing operations.

The following table shows the breakdown of changes in financial liabilities (excluding bank overdrafts), as well as the derivatives from hedging relationships included in the cash flow from financing activities, between cash and noncash items:

€ mill.	Long-term and medium-term credit liabilities	Short-term credit liabilities	Lease liabilities	Derivatives in hedging relationships	Total
As of 12/31/2021	164.3	40.2	41.6	3.9	250.0
Payments for the period	45.1	(21.2)	(12.4)	0.0	11.5
Noncash changes					
Change due to disposal groups which have been sold and those which are held for sale	0.0	0.0	0.2	0.0	0.2
New leasing contracts	0.0	0.0	9.9	0.0	9.9
Changes in fair value	0.0	0.0	(0.3)	(9.4)	(9.7)
Currency effects	0.0	0.0	(0.2)	0.0	(0.2)
Other	0.0	0.0	1.1	0.0	1.1
As of 12/31/2022	209.4	19.0	39.9	(5.5)	262.8
Payments for the period	55.8	(39.2)	(12.2)	0.0	4.4
Noncash changes					
Reclassification	(170.0)	170.0	0.0	0.0	0.0
Change due to disposal groups which have been sold and those which are held for sale	0.0	0.0	(0.1)	0.0	(0.1)
New lease agreements	0.0	0.0	9.0	0.0	9.0
Changes in fair value	0.0	0.0	(0.6)	3.7	3.1
Currency effects	(0.1)	1.3	(0.6)	(0.1)	0.5
Other	0.0	0.0	1.2	0.0	1.2
As of 12/31/2023	95.1	151.1	36.6	(1.9)	280.9

Notes to the balance sheet

The balance sheet is structured into noncurrent and current assets and liabilities. Assets and liabilities maturing or due within one year are deemed current.

Balance sheet structure

Regardless of their maturity, trade receivables and trade payables are always considered current, even if due after one year but within the normal business cycle.

Deferred taxes are recognized as noncurrent assets or liabilities.

Breakdown of intangible assets

€ mill.	2023	2022
Goodwill	294.2	295.8
Development costs	6.2	5.9
Concessions, licenses and property rights	29.9	28.6
Advance payments	17.2	14.7
Intangible assets	347.5	345.0

(10) Intangible assets

Except for goodwill, all intangible assets have a finite useful life and are therefore carried at amortized cost.

Goodwill is carried in the respective functional currency of the Group company whose acquisition gave rise to the goodwill.

Pursuant to IFRS 3 in conjunction with IAS 36, goodwill from business combinations is not amortized but is tested annually for impairment as of the balance sheet date or upon the occurrence of triggering events. This involves comparing the recoverable amount, calculated as value in use, to the respective carrying amount of a group of cash-generating units (CGUs). Within the Vossloh Group, goodwill is assigned to the business units, which represent groups of CGUs. The impairment test is performed at this level. The value in use is calculated based on the medium-term budget for the respective units and is derived from the expected discounted cash flows. In this respect, key assumptions are the anticipated orders resulting from sales planning, the corresponding expected sales revenues and the full earnings and balance sheet planning based on this.

When measuring the value in use by discounting anticipated cash flows (after taxes), a discount rate after taxes specific to the business unit is applied. When determining the respective discount rate, weighted specific country risks, inflation/currency adjustments and tax rates are taken into account, while the weightings for the country risks as well as the inflation effects were derived from the regional distribution of sales from both the year under review and over the budget periods. In contrast, the tax rates are determined based on the relative earnings contributions of the companies within the business units. The regional distribution of sales as a weight in determining the discount rate for the terminal value is based solely on sales revenues in the last planning year. Especially for the purpose of differentiated consideration of the current and long-term inflation/currency adjustment of the cost of capital, various after-tax discount rates are determined for the planning period and the terminal value, which primarily differ with regard to the inflation/currency adjustment they include. Furthermore, uniform pre-tax discount rates specific to the business units are calculated whereby the same value in use arises based on the pre-tax cash flows that results from discounting the after-tax cash flows with the differentiated after-tax discount rates. The pre-tax discount rates for the individual business units are indicated in the table below.

The planning is based on empirical data and expected future market trends and encompasses a detailed planning period of three years. The expected sales growth of the business units is based on the planned projects and projects which are already included in the order backlog to various extents. The business units' average annual sales growth rate, which is anticipated for this period in line with the medium-term budget, is reported in the table below. The growth rate of the terminal value is set at 50 % of the business unit-specific inflation rate resulting from the discount factor calculation for the terminal value described above.

For periods further in the future, the terminal value is accounted for by using extrapolated cash flows and the growth rate described above to determine the value in use. This takes into account the financing of working capital and property, plant and equipment to the same extent in the cash flow. As the business units' values in use (including assigned goodwill) exceed their carrying amounts, no goodwill impairment loss had to be recognized. For sensitivity analyses, various scenarios are examined: an increase in the after-tax discount rates of 50 basis points and a general reduction in cash flows by 7.5 %. It was not necessary to impair goodwill under any scenario.

Breakdown of goodwill by business unit

€ mill.	2023	2022	2023	2022	2023	2022	2023	2022
	Discount rate (in %)		Growth rate of the perpetual annuity (in %)		Average sales growth p.a. (in %)		Total value*	
Vossloh Switch Systems	12.79	12.33	1.37	1.24	2.0	5.2	180.3	184.5
Vossloh Rail Services	10.48	9.87	1.02	1.03	12.4	12.4	64.0	64.0
Vossloh Tie Technologies	10.90	10.11	1.10	1.11	2.6	11.4	58.7	59.8
Vossloh Fastening Systems	14.76	14.77	1.35	1.40	4.2	5.1	24.9	26.3
							327.9	334.6

* Carrying amount plus calculated noncontrolling interests

For the purposes of the impairment test, the goodwill of the Switch Systems business unit includes €22.1 million (previous year: €26.5 million) in calculated noncontrolling interests, and the goodwill of the Fastening Systems business unit includes €11.6 million (previous year: €12.2 million) in calculated noncontrolling interests.

The changes in goodwill during the fiscal year resulted entirely from changes in exchange rates.

Development costs are recognized at cost wherever it can be clearly assigned, the technical feasibility and future marketability can be expected with sufficient certainty, and the development work is reasonably certain to produce future cash inflows.

Manufacturing costs include all costs directly or indirectly assignable to the development process. Intangible assets are amortized on a straight-line basis over useful lives ranging from 1 year to a maximum of 20 years.

The amortization of intangible assets in the amount of €2.0 million (previous year: €2.0 million) is included in the income statement under cost of sales, €3.1 million (previous year: €3.3 million) under general administrative and selling expenses and €0.8 million (previous year: €0.4 million) under research and development costs.

Impairments were recorded in the year under review in the amount of €0.6 million (previous year: €0.1 million), most of which were attributable to a disposal group in the Switch Systems business unit.

Development of intangible assets

€ mill.	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
	Goodwill		Development costs		Concessions, licenses and property rights		Advance payments		Intangible assets	
Net carrying amount as of December 31	294.2	295.8	6.2	5.9	29.9	28.6	17.2	14.7	347.5	345.0
Cost										
As of January 1	349.6	351.2	12.9	10.8	73.7	71.2	15.1	10.7	451.3	443.9
Changes from first-time consolidation/acquisition of companies	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Additions/ongoing investments	0.0	0.0	1.0	0.2	1.8	1.0	7.7	8.0	10.5	9.2
Disposals	0.0	0.0	0.0	0.0	(0.6)	(0.2)	0.0	(0.1)	(0.6)	(0.3)
Transfers	0.0	0.0	0.0	1.9	5.3	1.6	(5.2)	(2.2)	0.1	1.3
Reclassifications in accordance with IFRS 5	0.2	(3.6)	0.0	0.0	0.4	(0.6)	0.0	(1.3)	0.6	(5.5)
Currency translation differences	(1.8)	2.0	0.0	0.0	(0.9)	0.7	0.0	0.0	(2.7)	2.7
As of December 31	348.0	349.6	13.9	12.9	79.8	73.7	17.6	15.1	459.3	451.3
Accumulated amortization and impairment losses										
As of January 1	53.8	53.8	7.0	6.6	45.1	39.9	0.4	0.4	106.3	100.7
Amortization and impairment losses in the fiscal year	0.0	0.0	0.6	0.4	5.4	5.4	0.0	0.0	6.0	5.8
Disposals	0.0	0.0	0.0	0.0	(0.6)	(0.2)	0.0	0.0	(0.6)	(0.2)
Transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reclassifications in accordance with IFRS 5	0.0	0.0	0.0	0.0	0.4	(0.6)	0.0	0.0	0.4	(0.6)
Currency translation differences	0.0	0.0	0.1	0.0	(0.4)	0.6	0.0	0.0	(0.3)	0.6
As of December 31	53.8	53.8	7.7	7.0	49.9	45.1	0.4	0.4	111.8	106.3

The multiyear project dedicated to introducing a Group-wide standardized enterprise resource planning system (one.ERP) accounted for €7.1 million (previous year: €6.5 million) of the rise in advance payments on intangible assets. This includes €0.2 million in capitalized interest incurred for the financing of this qualifying asset.

Breakdown of property, plant and equipment

€ mill.	2023	2022
Land, land rights and buildings, including buildings on nonowned land	100.5	105.1
Rights of use to land, land rights and buildings, including buildings on nonowned land	19.6	23.4
Technical equipment and machinery	130.7	128.1
Rights of use to technical equipment and machinery	12.4	11.8
Other plant, factory and office equipment	18.5	16.2
Rights of use to other plant, factory and office equipment	7.3	6.1
Advance payments and assets under construction	50.8	35.7
Property, plant and equipment	339.8	326.4

(11) Property, plant and equipment

Property, plant and equipment is recognized at cost and depreciated on a straight-line basis over the expected useful life. In addition to the purchase price, acquisition costs include incidentals. Acquisition costs are reduced by purchase price reductions.

In the case of qualifying assets as defined by IAS 23, the borrowing costs allocable to the production period are also recognized. This matter was immaterial in the previous year. In the reporting year, interest on borrowed capital of €0.3 million was capitalized for technical equipment and machinery in the Fastening Systems business unit.

In accordance with IFRS 16, rights of use from leased property, plant and equipment is recognized at the time of addition using the total of the lease liability, payments before and at the beginning of use, ancillary costs in connection with entering into the contract and the estimated cost of restoration or similar liabilities at the end of the period of use. The initial valuation of the lease liability is derived from the present value of the expected lease payments. The interest rate used for the calculation of the present value is usually the marginal financing rate used in the monetary area with a similar maturity for the financing of an asset. The term of the agreements in question and by extension the total of expected lease payments is determined on the basis of the conditions of the agreement, in addition to the expectations of the relevant management team if extension or termination options are in place. Contracts are remeasured in response to changes in their expected term and other estimates. The resulting changes in value are shown in a line item "Remeasurements and modifications" in the table showing changes in carrying amounts. The relevant management has discretionary scope, which is documented for material lease agreements. Fixed payments are agreed in the majority of cases. Contractual residual value guarantees are recognized at their anticipated value. Hire-purchase agreements exist for a variety of assets in the Rail Services business unit. The purchase price at the end of the basic lease term was taken into account accordingly for the purposes of the measurement.

The recognized rights of use are predominantly depreciated over the assumed term of the lease.

In the event of a subsequent transfer of ownership, depreciation is based on the expected total useful life of the asset concerned.

Development of property, plant and equipment including right-of-use assets capitalized in accordance with IFRS 16

€ mill.	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
	Land, land rights and buildings, including buildings on nonowned land		Technical equipment and machinery		Other plant, factory and office equipment		Advance payments and assets under construction		Property, plant and equipment	
Net carrying amount as of December 31	120.1	128.5	143.1	139.9	25.8	22.3	50.8	35.7	339.8	326.4
Cost										
As of January 1	226.0	220.3	418.4	394.8	70.3	65.3	42.0	39.4	756.7	719.8
Changes from first-time consolidation/ acquisition of companies	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.4	0.0
Additions/ongoing investments	6.9	6.9	15.4	13.7	11.0	7.7	30.7	20.6	64.0	48.9
Disposals	(2.9)	(2.3)	(4.9)	(4.1)	(3.1)	(2.7)	(0.1)	0.0	(11.0)	(9.1)
Transfers	1.7	3.0	13.9	13.1	0.5	0.7	(16.2)	(17.9)	(0.1)	(1.1)
Reclassifications in accordance with IFRS 5	2.9	(3.1)	0.0	(0.1)	0.1	(0.6)	0.0	0.0	3.0	(3.8)
Currency translation differences	(1.5)	1.2	(1.6)	1.0	(0.7)	(0.1)	0.8	(0.1)	(3.0)	2.0
As of December 31	233.1	226.0	441.5	418.4	78.2	70.3	57.2	42.0	810.0	756.7
Accumulated depreciation and impairment losses										
As of January 1	97.5	87.6	278.5	258.4	48.0	43.8	6.3	6.2	430.3	396.0
Depreciation and impairment losses in the fiscal year	14.7	14.5	24.4	23.3	7.4	7.2	0.0	0.0	46.5	45.0
Disposals	(1.1)	(2.1)	(3.5)	(3.6)	(2.7)	(2.6)	0.0	0.0	(7.3)	(8.3)
Transfers	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2
Reclassifications in accordance with IFRS 5	2.6	(2.7)	0.0	(0.1)	0.1	(0.5)	0.0	0.0	2.7	(3.3)
Currency translation differences	(0.7)	0.2	(1.0)	0.5	(0.4)	0.0	0.1	0.0	(2.0)	0.7
As of December 31	113.0	97.5	298.4	278.5	52.4	48.0	6.4	6.3	470.2	430.3

The following rights of use are capitalized under property, plant and equipment:

Development of capitalized right-of-use assets in accordance with IFRS 16

€ mill.	2023	2022	2023	2022	2023	2022
	Land, land rights and buildings, including buildings on nonowned land		Technical equipment and machinery		Other plant, factory and office equipment	
Net carrying amount as of December 31	19.6	23.4	12.4	11.8	7.3	6.1
Cost						
As of January 1	49.3	47.2	15.8	13.6	12.1	10.2
Additions/ongoing investments	4.7	2.8	0.4	3.6	3.8	3.5
Disposals	(2.3)	(0.8)	0.0	(1.1)	(0.7)	(1.3)
Transfers	0.0	0.0	1.8	(0.2)	0.0	0.0
Reclassifications in accordance with IFRS 5	0.0	(0.2)	0.0	0.0	0.0	(0.1)
Currency translation differences	(0.4)	0.3	0.1	(0.1)	0.0	(0.2)
As of December 31	51.3	49.3	18.1	15.8	15.2	12.1
Accumulated depreciation and impairment losses						
As of January 1	25.9	19.5	4.0	3.8	6.0	5.0
Depreciation and impairment losses in the financial year	7.2	7.2	1.7	1.4	2.6	2.4
Disposals	(1.0)	(0.7)	0.0	(1.0)	(0.7)	(1.2)
Transfers	0.0	0.0	0.0	(0.1)	0.0	0.0
Reclassifications in accordance with IFRS 5	0.0	(0.1)	0.0	0.0	0.0	(0.1)
Currency translation differences	(0.4)	0.0	0.0	(0.1)	0.0	(0.1)
As of December 31	31.7	25.9	5.7	4.0	7.9	6.0

Depreciation is primarily based on the following useful lives:

Useful lives of property, plant and equipment

Buildings	5 to 50 years
Technical equipment and machinery	2 to 30 years
Other plant, factory and office equipment	2 to 30 years

Changes from first-time consolidation in the reporting year related to additions from the acquisition of the assets of Vossloh RailWatch GmbH.

Significant additions to land, technical equipment and machinery as well as other plant, factory and office equipment were made in the reporting year at companies in the Fastening Systems and the Rail Services business units. The additions to advance payments and assets under construction related in particular to expenditure for the construction of a production facility for engineered polymer sleepers in the Fastening Systems business unit, expanding production capacity at the Australian sites of the Tie Technologies and Switch Systems business units and additional high-performance milling work in the Rail Services business unit.

In the reporting year, impairment losses of €0.1 million (previous year: -) were recognized on property, plant and equipment in excess of the scheduled allocation of acquisition costs.

Depreciation of property, plant and equipment is included in the income statement in the amount of €39.6 million (previous year: €39.1 million) under cost of sales, €6.7 million (previous year: €5.8 million) under general administrative and selling expenses and €0.1 million (previous year: €0.1 million) under research and development costs.

(12) Investment properties

Development of investment properties			
€ mill.	2023	2022	
Net carrying amounts	1.0	1.3	
Cost			
As of January 1	5.1	11.5	
Additions	0.0	0.0	
Transfers	0.0	(6.4)	
Currency translation differences	(0.2)	0.0	
As of December 31	4.9	5.1	
Accumulated depreciation and impairment losses			
As of January 1	3.8	4.1	
Depreciation in the fiscal year	0.2	0.2	
Transfers	0.0	(0.4)	
Currency translation differences	(0.1)	(0.1)	
As of December 31	3.9	3.8	

Investment properties include land and buildings not used for operations and fully or partly leased to nongroup lessees.

In accordance with IAS 40, buildings owned for investment purposes are carried at depreciated cost. Straight-line depreciation is based on useful lives of between 15 and 20 years.

Rental income in the reporting year amounted to €0.5 million (previous year: €0.7 million). Expenses of €0.4 million (previous year: €0.4 million) were incurred for rented properties, including depreciation, maintenance and ancillary costs; as in the previous year, there were no unrented properties.

As in the previous year, expenses for leased properties do not include any impairment losses.

The fair value of land not used for operational purposes, including buildings, amounted to €2.4 million (previous year: €7.8 million). The fair values were determined by recognized experts.

(13) Investments in companies accounted for using the equity method

Information on investments in companies accounted for using the equity method			
€ mill.	2023	2022	
Profit or loss from continuing operations	8.1	4.6	
Income and expenses recognized directly in equity	(2.6)	(0.7)	
Total comprehensive income	5.5	3.9	

Significant financial information on Wuhu China Railway Cogifer Track Co., Ltd., Wuhu/China, on Amurrio Ferrocarril y Equipos SA, Amurrio/Spain and on Beijing CRM-Vossloh Track Maintenance Technology Co., Ltd., Beijing/China, which are accounted for using the equity method

€ mill.	2023			2022		
	Wuhu	Amurrio	Beijing	Wuhu	Amurrio	Beijing
Noncurrent assets	11.0	11.1	5.0	11.9	11.0	6.3
Current assets	32.1	47.4	22.4	32.6	39.6	19.5
thereof cash and cash equivalents	11.9	7.0	6.8	6.8	6.2	5.0
Noncurrent liabilities	0.0	12.8	0.0	0.0	0.9	0.0
thereof noncurrent financial liabilities	0.0	0.2	0.0	0.0	0.6	0.0
Current liabilities	10.8	10.3	0.7	15.6	20.5	0.8
thereof current financial liabilities	2.0	0.4	0.0	1.9	0.4	0.0
Sales revenues	26.6	69.8	14.3	27.1	34.8	12.9
Result from continuing operations	5.1	7.0	3.1	3.5	1.2	2.5
Depreciation/amortization	1.1	1.4	0.8	1.9	1.4	0.9
Interest income	0.1	0.5	0.0	0.1	0.2	0.0
Interest expenses	0.0	0.1	0.0	0.0	0.3	0.0
Tax expense	0.6	2.2	0.1	0.5	0.0	0.3
Total comprehensive income	3.5	7.0	1.7	2.8	1.2	1.9

Reconciliation of the financial information to the at-equity carrying amount

€ mill.	2023			2022		
	Wuhu	Amurrio	Beijing	Wuhu	Amurrio	Beijing
Net assets January 1	28.9	29.2	25.0	26.1	28.4	23.1
Profit or loss	5.1	6.9	3.1	3.5	1.2	2.5
Income and expenses recognized directly in equity	(1.7)	0.0	(1.4)	(0.7)	0.0	(0.6)
Dividends	–	(0.7)	0.0	–	(0.4)	0.0
Net assets December 31	32.3	35.4	26.7	28.9	29.2	25.0
Proportional equity	16.2	17.7	12.5	14.5	14.6	11.8
Consolidations	0.1	0.1	0.4	0.1	0.1	(0.4)
Carrying amount	16.3	17.8	12.9	14.6	14.7	11.4

The investments in these companies are accounted for using the equity method. In this connection, the carrying amounts of associated companies are adjusted for proportional profits or losses after taxes, dividends distributed or any other changes in equity.

As in the previous year, these investments relate to six foreign companies and one domestic company, which in most cases are jointly controlled by a Group company and generally one external partner or over which significant influence is exercised. Apart from the three joint ventures explained in the tables above, the carrying amounts of the remaining joint ventures and associated companies are not material for the Group. Detailed information about the scope of consolidation is provided in the notes on page 172 et seq. of this annual report.

Breakdown of other noncurrent financial instruments

€ mill.	2023	2022
Derivative financial instruments from hedging relationships	1.8	4.0
Other investments	1.7	3.5
Shares in nonconsolidated affiliated companies	0.3	0.6
Securities	0.1	0.1
Loans	0.0	0.2
Other noncurrent financial assets	4.7	5.3
Other noncurrent financial instruments	8.6	13.7

(14) Other noncurrent financial instruments

Shares in unconsolidated affiliated companies where the criterion of control is fulfilled but which are not included in the scope of consolidation due to insignificance are generally recognized at fair value. They do not play a material role in the net asset and earnings position of the Group. The related assessment is made on the basis of the primary financial indicators of the companies, such as EBIT, sales revenues, total assets and equity. No further information is provided for these equity instruments in accordance with IFRS 9 due to lacking materiality.

Loans not quoted in an active market, as well as other noncurrent financial assets are initially measured on addition at fair value, which generally equals the nominal amount of the receivable or the loan amount, on the basis of the business model in place for such financial instruments (payment flows arise exclusively from interest payments and the repayment amount upon maturity). Non- and low-interest-bearing long-term loans and receivables are recognized at present value. For their subsequent measurement at amortized cost, the effective interest rate method is used.

Noncurrent securities with fixed or quantifiable payments and fixed maturities that are quoted in an active market and for which the business model described above applies are measured at amortized cost using the effective interest rate method.

Other noncurrent securities are recognized at fair value. Any fair value changes upon remeasurement are recognized directly in equity (OCI) and, upon disposal of such securities, the respective amount included in accumulated other comprehensive income is recycled to the income statement.

Other financial instruments are measured according to their IFRS 9 classification. For the reconciliation of the IFRS 9 measurement categories, see the section "Additional information on financial instruments" on page 158 et seq.

The value for derivative financial instruments from hedging relationships is primarily attributable to two new interest rate swaps concluded in the reporting year to hedge the variable interest rate level for the Schuldschein loans taken out in 2023 in the amount of €60 million.

Other noncurrent financial assets mainly include a financial receivable that was reported in the investment property line in previous periods and had already been reclassified to this balance sheet line in the previous year.

(15) Other noncurrent assets Other noncurrent assets mainly comprise prepaid expenses and deferred charges.

(16) Deferred taxes Deferred taxes are recognized in accordance with IAS 12 on temporary differences between the tax base and the carrying amounts in the IFRS balance sheet, on tax loss carryforwards and interest carryforwards and on consolidation transactions affecting profit or loss. Deferred taxes are calculated using the tax rates that are expected to apply at the time of realization in accordance with the statutory regulations in force on the balance sheet date.

Deferred taxes due to recognition or measurement differences and tax loss and interest carryforwards arose for the following balance sheet items:

Deferred taxes				
€ mill.	2023		2022	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Intangible assets and property, plant and equipment	2.7	30.9	3.6	27.6
Inventories	8.8	0.0	3.8	0.0
Receivables	0.8	2.1	0.6	2.0
Other assets	4.6	0.4	3.9	0.3
Pension provisions	4.6	0.0	4.9	0.0
Other provisions	7.4	0.0	6.2	0.0
Liabilities	3.0	0.8	3.6	0.6
Other liabilities	2.4	4.0	1.4	4.3
Loss and interest carryforwards	14.2	–	14.5	–
Total	48.5	38.2	42.5	34.8
Netting	(36.1)	(36.1)	(25.4)	(25.4)
Deferred taxes according to balance sheet	12.4	2.1	17.1	9.4

As in the previous year, the changes in deferred tax assets and liabilities were mainly recognized in the income statement in the reporting year, and to a lesser extent in the statement of comprehensive income.

As at December 31, 2023, there were corporate income tax loss carryforwards in Germany amounting to €410.2 million (previous year: €417.4 million) and trade tax loss carryforwards amounting to €382.6 million (previous year: €387.7 million). €394.9 million were recognized for corporate income tax losses (previous year: €383.7 million) and no deferred taxes were recognized for trade tax losses of €366.8 million (previous year: €354.1 million). To determine the deferred taxes on loss or interest carryforwards that can be capitalized, two additional years are considered beyond the three-year period of detailed planning, as in previous periods, and the expected taxable income is estimated over this five-year period.

In addition, foreign companies had loss carryforwards relating to comparable income taxes totaling €76.2 million (previous year: €93.3 million), of which €17.0 million (previous year: €25.6 million) resulted in deferred tax assets. In the reporting year, deferred tax assets in the amount of €2.3 million (previous year: €11.0 million) were impaired or not recognized due to unfulfilled conditions. At the same time, deferred tax assets of €1.7 million (previous year: €14.7 million) were recognized, that had been impaired or could not be recognized to date. According to the current legal situation, tax loss carryforwards in Germany and predominantly abroad can be carried forward without restriction. Loss carryforwards of €13.8 million for foreign income taxes (previous year: €15.8 million) will expire in the future, of which €13.8 million (previous year: €15.4 million) will expire after more than five years.

Breakdown of inventories		
€ mill.	2023	2022
Raw materials and supplies	130.7	120.3
Work in progress	49.2	47.7
Merchandise	26.7	24.0
Finished products	53.1	41.9
Advance payments made	3.2	2.6
Inventories	262.9	236.5

(17) Inventories

Inventories are stated at the lower of cost or net realizable value. Manufacturing costs comprise all production-related costs. This includes directly attributable direct costs as well as all fixed and variable manufacturing overheads systematically allocable to the production process and special direct manufacturing costs.

Borrowing costs are capitalized as part of cost wherever qualifying assets, according to IAS 23, exist.

To the extent that a group valuation is made, inventories are valued at the moving average price. Inventory risks from obsolescence or slow-moving items are taken into account by appropriate allowances.

Allowances on inventories amounted to €22.2 million as of the balance sheet date (previous year: €19.5 million), which primarily resulted from excessive inventories.

Of this amount, €3.1 million was recognized in profit or loss in the year under review (previous year: €0.9 million).

The carrying amount of inventories recognized at net realizable value totaled €24.1 million (previous year: €16.6 million). As the reasons for previous write-downs no longer existed, inventories were written up in 2023 by €0.2 million (previous year: €0.6 million).

(18) Trade receivables and contract assets Given their short remaining term, trade receivables are carried at their nominal value. The simplified method for calculating the expected credit loss (ECL) is applied for valuation allowances. Possible changes in credit risk are taken into account at each reporting date by analyzing the risk on the basis of the entire term of the receivables by means of a provision matrix based on the actual receivables defaults per business unit. Prior experiences are then supplemented with future-oriented information such as macroeconomic circumstances and expectations for the business units. Depending on the age of the trade receivables, valuation allowances are recognized at a loss rate based on the number of days of arrears. Trade receivables from certain customers are treated as a special category based on past experiences and thus impaired to a lesser extent, despite being past due by more than 360 days. The provision matrix is presented in table format below:

Risk class	2023				2022			
	Gross carrying amounts (€ mill.)	Net carrying amounts (after factoring in individual risks without refundable VAT) (€ mill.)	Allowance (€ mill.)	Average loss rate Vossloh Group (in %)	Gross carrying amounts (€ mill.)	Net carrying amounts (after factoring in individual risks without refundable VAT) (€ mill.)	Allowance (€ mill.)	Average loss rate Vossloh Group (in %)
Assets not due	161.7	129.1	0.1	0.03	167.3	140.3	0.1	0.03
Overdue by 1 to 30 days	22.7	20.0	0.0	0.04	22.2	19.6	0.0	0.07
Overdue by 31 to 90 days	12.6	11.1	0.0	0.05	14.8	13.2	0.0	0.29
Overdue by 91 to 180 days	5.1	4.6	0.0	0.17	8.1	7.2	0.0	0.53
Overdue by 181 to 360 days	5.5	4.8	0.0	0.17	6.5	5.8	0.2	3.06
Overdue by more than 360 days	2.1	1.9	0.0	0.82	1.7	1.5	0.1	4.77
Overdue by more than 360 days with individual allowance	5.7	5.1	0.1	1.44	14.8	13.2	0.1	0.91
	215.4	176.6	0.2		235.4	200.8	0.5	

Specific risks are taken into account by appropriate allowances. If there are indications of probable impairment, such as a declaration of insolvency, an appropriate valuation allowance is recognized. Derecognition only occurs if the recovery of the respective receivable is virtually impossible for legal or practical reasons (e.g. after the end of insolvency proceedings).

The balance and changes in the allowances for trade receivables are presented below:

Development of allowances (including consideration of individual risks) on trade receivables		
€ mill.	2023	2022
Balance as of January 1	9.6	10.9
Additions	7.9	1.0
Releases	(1.5)	(1.7)
Utilization	0.0	(0.6)
Currency translation differences	0.0	0.0
Balance as of December 31	16.0	9.6

Contract assets and liabilities result from the recognition of customer contracts for which revenue is realized over the course of the fulfillment of the performance obligation. For each pertinent contract, the contract costs – including a proportion of profit corresponding to the percentage of completion less any loss recognized in full – are recognized as a contract asset or contract liability. Where total progress under construction contracts exceeds the total of all advance payments received from customers or arranged partial billings, construction contracts are presented under assets as a contract asset. Where the situation is reversed, after advance payments are credited toward total progress, they are recognized on the balance sheet under liabilities as contract liabilities. Prepayments as a rule only take place to a limited extent, with the result that the orders relevant in this context typically result in a debit balance during the period of fulfillment of performance obligations.

Contract assets and liabilities				
€ mill.	2023		2022	
	Contract assets	Contract liabilities	Contract assets	Contract liabilities
Contract costs	0.2	–	1.0	0.0
Proportional profits	0.3	–	0.4	0.0
Cumulative output from construction contracts	0.5	–	1.4	0.0
Balance sheet presentation	0.5	–	1.4	0.0

Income tax assets include €0.1 million of income taxes (previous year: €0.3 million) reimbursable to companies of the Fastening Systems business unit, €7.1 million (previous year: €7.7 million) to Vossloh Switch Systems, €0.4 million (previous year: €0.4 million) to the companies of the Rail Services business unit, €0.3 million (previous year: €0.5 million) to the Tie Technologies business unit and €0.3 million (previous year: €0.0 million) to companies at Group level.

(19) Income tax assets

(20) Other current financial instruments and other current assets

Breakdown of other current financial instruments and other current assets

€ mill.	2023	2022
Receivables from reimbursements	6.1	9.1
Derivative financial instruments	2.4	1.8
Security and similar deposits	1.5	1.6
Creditors with debit balances	0.7	0.4
Receivables from employees	0.2	0.2
Other financial receivables	0.1	2.3
Receivables from affiliated companies	0.1	0.1
Interest receivable	0.0	0.0
Receivables from investees	0.0	0.0
Other current financial instruments	11.1	15.5
Other tax receivables (excluding income taxes)	11.8	11.9
Sundry current assets	10.9	11.1
Deferred income	9.1	5.9
Other current assets	31.8	28.9

The receivables shown under other current financial instruments are measured at fair value through profit or loss. Specific risks are taken into account by appropriate allowances. The receivables from reimbursements are not reimbursements made by shareholders. The majority of other financial receivables relate to retained amounts in connection with factoring contracts in the Switch Systems business unit totaling €0.1 million (previous year: €0.6 million) and in the Rail Services business unit amounting to €0.0 million (previous year: €1.7 million). The receivables represent claims against factoring banks. The nominal value of these receivables is equivalent to their fair value because they are due in the near future. Other financial receivables were not the subject of any impairment.

The balances and development of allowances are presented below:

Development of allowances

€ mill.	2023	2022
Balance as of January 1	0.0	0.0
Additions	0.4	0.0
Releases	0.0	0.0
Currency translation differences	0.0	0.0
Balance as of December 31	0.4	0.0

For the reconciliation of the IFRS 9 measurement categories, see page 158 et seq., section "Additional information on financial instruments".

Other tax receivables and sundry current assets are measured at amortized cost.

(21) Short-term securities

This line item presents funds invested in short-term fixed-income securities for which both interest payments and disposals come into account.

These are reported at fair value; changes in value are recognized directly in other equity. For the reconciliation of the IFRS 9 measurement categories, see section "Additional information on financial instruments" on page 158 et seq.

(22) Cash and cash equivalents

Cash comprises cash on hand and in the bank. Cash equivalents comprise any financial instruments, including checks, with a maximum residual term of three months from the time of acquisition that can be readily converted into cash. Cash and cash equivalents are carried at their nominal value.

For the statement of changes in equity, see page 121. Vossloh's capital management strategy is primarily geared towards raising enterprise value on a sustainable basis by making a positive contribution to its value added.

(23) Equity/capital management

Secondary to this, the aim is also to safeguard liquidity at all times as well as to ensure that the Vossloh Group's equity ratio is adequate in order to ensure the ability of the company to operate as a going concern.

The optimization of the capital structure contributes as much to this as the efficient management of cash inflows and outflows from financing activities and effective risk management.

Vossloh AG observes all statutory regulations within the scope of its capital management activities. It is not subject to any capital requirements imposed by the Articles of Incorporation. No special capital terms are used. Through its dividend policy, the Vossloh Group aims to pay out dividends on a sustainable basis if so permitted by the economic situation. The decision on the amount of the annual dividend is made on a year-by-year basis.

As in the previous year, Vossloh AG's capital stock amounts to €49,857,682.23 and is also divided into 17,564,180 no-par-value shares, unchanged from the previous year. Only shares of common stock are issued. One no-par-value share represents a notional interest of €2.84 in the capital stock.

(23.1) Capital stock

The additional paid-in capital includes the stock premium from shares issued by Vossloh AG. Furthermore, any differences arising from the purchase and selling prices for treasury shares from previous share buyback programs are recognized in the additional paid-in capital.

(23.2) Additional paid-in capital

Under the 2023 employee stock option program, employees of the Vossloh Group employed in Germany were given the option of either receiving three shares in Vossloh AG free of charge or acquiring twelve shares at a preferential price of 50 % of the issue price of €38.75 per share – determined on the basis of the stock market price at the time of transfer. The conditions were basically identical in the previous year, with an issue price of €37.45. In the year under review, a total of 2,868 shares (previous year: 2,457 shares) were granted free of charge to employees of the Vossloh Group from both implementation alternatives under this program. The expense from granting the shares amounted to €113.3 thousand (previous year: €76.7 thousand) and was calculated on the basis of the price of €39.50 (previous year: €31.20) per share on the last trading day of the participation period.

Employee stock option program

The shares granted are each subject to a three-year holding period. The shares granted were acquired via the capital market; there are no other obligations from the program.

The retained earnings contain the earnings of the companies included in the consolidated financial statements realized in the past which have not been distributed from the Group's perspective.

(23.3) Retained earnings and net income

As in the previous year, a dividend of €1.00 per share was distributed in the year under review.

A hybrid note with an issue volume of €150 million was placed in February 2021. Due to the terms of the note, this financial instrument is classified as equity in accordance with IAS 32 and presented accordingly. This note can only be canceled by Vossloh AG, not before February 23, 2026. The transaction costs incurred in connection with the issuance were recognized directly as a reduction in equity. The hybrid note has an interest rate of 4.0 %. Interest payments may be suspended and delayed into the future in certain circumstances as decided by the company.

(23.4) Hybrid capital

Change in other comprehensive income

	Reserve for currency translation	Reserve for hedging transactions (cash flow hedges)	Reserve for the remeasurement of defined benefit plans	Other comprehensive income not including noncontrolling interests	Noncontrol- ling interests	Other compre- hensive income
€ mill.	2023					
Reclassification of actuarial gains/losses from the previous year from defined benefit plans to retained earnings			(8.8)	(8.8)		(8.8)
Foreign subsidiaries – Currency translation differences	(4.1)			(4.1)	(2.0)	(6.1)
Cash flow hedges		(2.9)		(2.9)		(2.9)
Actuarial gains/losses from defined benefit plans			(1.1)	(1.1)	(0.1)	(1.2)
Total	(4.1)	(2.9)	(9.9)	(16.9)	(2.1)	(19.0)
€ mill.	2022					
Reclassification of actuarial gains/losses from the previous year from defined benefit plans to retained earnings			(1.2)	(1.2)		(1.2)
Foreign subsidiaries – Currency translation differences	0.9			0.9	(0.9)	0.0
Cash flow hedges		2.9		2.9		2.9
Actuarial gains/losses from defined benefit plans			8.8	8.8	0.1	8.9
Effects from initial consolidation	0.2			0.2		0.2
Total	1.1	2.9	7.6	11.6	(0.8)	10.8

(23.5) Accumulated other comprehensive income Accumulated other comprehensive income contains the changes in equity without effect on profit or loss from the translation of financial statements of foreign subsidiaries, from the measurement of derivative financial instruments in connection with hedging transactions (cash flow hedges) and financial instruments classified at fair value through other comprehensive income as well as actuarial gains and losses relating to employee benefits recognized in the fiscal year.

In the reporting year, actuarial gains of €8.8 million (previous year: €1.2 million) were reclassified from the reserve for the remeasurement of defined benefit plans to retained earnings.

(23.6) Noncontrolling interests Noncontrolling interests were mainly attributable to minority shareholders in the Fastening Systems business unit in the amount of €22.0 million (previous year: €21.1 million) and those in the Switch Systems business unit in the amount of €6.1 million (previous year: €6.1 million).

Development of pension provisions/provisions for other post-employment benefits

€ mill.	Present value of the obligation	Fair value of plan assets	Total
As of January 1, 2022	45.6	(11.1)	34.5
Service cost	1.1		1.1
Net interest expense/income	0.5	(0.1)	0.4
Remeasurements			
Return on plan assets excluding the portion included in net interest expense		(0.3)	(0.3)
Gains/losses from changes in actuarial assumptions	(11.0)		(11.0)
Experience-related assumptions	(0.9)		(0.9)
Benefits paid	(1.8)	0.6	(1.2)
Other changes	(0.6)		(0.6)
Currency translation differences	0.0	(0.1)	(0.1)
As of December 31, 2022	32.9	(11.0)	21.9
Service cost	0.7		0.7
Net interest expense/income	1.3	(0.4)	0.9
Remeasurements			
Return on plan assets excluding the portion included in net interest expense		0.0	0.0
Gains/losses from changes in actuarial assumptions	1.1		1.1
Experience-related assumptions	0.3		0.3
Benefits paid	(1.6)	0.8	(0.8)
Allocation to plan assets		(1.2)	(1.2)
Currency translation differences	0.0		0.0
As of December 31, 2023	34.7	(11.8)	22.9

(24) Pension provisions/provisions for other post-employment benefits

Vossloh AG and some subsidiaries have entered into pension obligations to former as well as current employees. Pension payments are subject to the relevant conditions and are made until the death of the beneficiary. These defined benefit obligations vary according to the economic situation and are, as a rule, based on service years, pensionable pay and position within Vossloh. The future pension payment obligations must be met by the subsidiaries in question (defined benefit plan).

Provisions for pensions are formed using the projected unit credit method in accordance with IAS 19. This method takes into account current capital market interest rates, likely increases to salaries and pensions in the future and expected employee turnover. Accounting risks of the defined benefit plans result in particular from the development of the current capital market interest rates, as fluctuations in the interest rate level cause volatility of the present values of the obligations and thus also subject the Group equity to corresponding adjustments.

At the same time, there is also the risk that the market values of the plan assets do not increase at the same rate. Both effects could lead to a decrease in equity due to actuarial losses.

The plan assets, which are offset against the present value of the pension benefits, pertain primarily to pension liability insurance policies, which cover the major portion of the personal claims from the pension commitments. Each of these insurance contracts has been pledged to the individual beneficiary concerned, with the present value of the obligations being offset at fair value. In the year under review, an allocation was made to plan assets in the amount of €1.2 million.

The pension provisions recognized are based on actuarial reports of independent actuaries using the mortality tables 2018 G from Klaus Heubeck.

The recognized pension provisions and the provisions for other post-employment benefits are derived as follows:

Calculation of the recognized pension provisions/provisions for other post-employment benefits

€ mill.	2023		2022	
	Pension provision	Provision for other post-employment benefits	Pension provision	Provision for other post-employment benefits
Present value of pension commitments covered by plan assets	12.4	6.5	12.0	6.0
Fair value of plan assets	(10.8)	(1.0)	(9.8)	(1.2)
Provision for pension benefits covered by plan assets	1.6	5.5	2.2	4.8
Present value of pension commitments not covered by plan assets	14.6	1.2	13.8	1.1
Provision for pension benefits not covered by plan assets	14.6	1.2	13.8	1.1
Recognized provision	16.2	6.7	16.0	5.9

The current service cost represents a portion of the personnel expense that is included in the functional costs. Interest expense is shown in the other interest expense.

The actual interest rate on plan assets amounted to 3.1 % in the reporting year (previous year: 3.4 %). A value of 3.3 % (previous year: 3.7 %) was predominantly used as the discount rate in the reporting year. This parameter is considered to be significant, meaning that a sensitivity analysis was carried out based on possible changes. A decrease or increase in the discount rate by 25 basis points would have increased or decreased the defined benefit obligation (DBO) and thus the provision by €1.0 million (previous year: €1.0 million) or €1.1 million (previous year: €1.0 million) respectively. The average duration of the defined benefit pension plans is twelve years (previous year: 15.5 years). Other parameters relate to the expected fluctuation of 6.0 %, the income trend of 3.0 % and the pension trend of 2.2 % (all values p.a. and unchanged from the previous year).

Due to the recognition of an activity as a disposal group, the DBO was reduced by €0.6 million in the previous year.

In addition, voluntary or statutory defined contribution plans are in place at a number of Group companies. These Group companies are not normally under any obligation to make pensions-related payments other than their contractual contributions to an outside fund, which totaled €9.8 million in the fiscal year (previous year: €8.0 million).

The pension provisions include provisions for nonrecurring payments which are a legal requirement for a number of Group companies for employees who leave the company (both in the case of retirement as well as other situations). In accordance with IAS 19, such provisions are required to be treated as employee benefits and, due to their arrangement, classified as a defined benefit plan.

Assets have partially been set up in an external benefit fund ("plan assets") in order to finance the expected payments. The provisions recognized in the balance sheet result from the balance of the present value of the defined benefit obligation and the fair value of these plan assets.

When calculating the provision, a discount rate of 3.25 % to 3.84 % (previous year: 3.7 %) and – unchanged from the previous year – an expected increase in wage and salary payments of 3.0 % or 4.0 % were assumed.

Breakdown of other provisions

€ mill.	2023	2022
Personnel-related provisions	2.0	1.7
Warranty obligations and follow-up costs	3.5	2.7
Litigation risks and impending losses	2.9	3.8
Risks from M&A transactions	–	1.3
Sundry provisions	12.9	8.0
Other noncurrent provisions	21.3	17.5
Warranty obligations and follow-up costs	26.3	19.1
Litigation risks and impending losses	12.5	10.1
Risks from M&A transactions	2.9	2.9
Sundry provisions	25.7	20.6
Other current provisions	67.4	52.7
Other provisions	88.7	70.2

(25) Other provisions

For all provisions reported as current, we expect outflows of resources within one year; for provisions reported as noncurrent, we do not expect them until after one year. The utilization dates are subject to significant uncertainty, especially with regard to risks from warranty obligations and litigation risks. The other provisions consider all obligations that are identifiable at the balance sheet date, based on past events, and are uncertain in terms of amount or timing. Provisions are recognized at amounts most likely to be utilized if the probability of a charge is higher than 50 %. If the effect of discounting is material, noncurrent provisions are recognized at the present value of the uncertain obligations.

Change in other provisions

€ mill.	Opening balances as of 1/1/2023	Utilization	Release	Addition	Interest effects	Classified as held for sale	Currency translation differences	Closing balances as of 12/31/2023
Personnel-related provisions	1.7	(0.1)	0.0	0.4	0.0	0.0	0.0	2.0
Warranty obligations and follow-up costs	21.8	(0.5)	(1.5)	8.9	0.0	1.2	(0.1)	29.8
Litigation risks and impending losses	13.9	(3.3)	(0.9)	6.1	0.0	0.0	(0.4)	15.4
Risks from M&A transactions	4.2	0.0	(1.3)	0.0	0.0	0.0	0.0	2.9
Sundry provisions	28.6	(10.4)	0.0	20.3	0.0	0.0	0.1	38.6
Other provisions	70.2	(14.3)	(3.7)	35.7	0.0	1.2	(0.4)	88.7

The warranty obligations include both provisions for specific warranty cases and provisions recognized on the basis of past experience in the amount of the expected warranty claims from sales made. The accrued litigation risks and impending losses account for obligations under lawsuits and for loss risks from contracts in progress. As of the balance sheet date, provisions for impending losses on purchase obligations totaled €7.6 million (previous year: €9.0 million). As in the previous year, provisions for M&A transactions were partially released in the reporting year due to the expiry of warranty obligations. The sundry provisions include provisions for restoration obligations, restructuring and possible claims for damages.

Liabilities

Liabilities according to remaining terms

€ mill.	2023	2022	2023	2022	2023	2022	2023	2022
Remaining term	≤ 1 year		1–5 years		> 5 years		Total	
Financial liabilities	198.4	49.2	87.2	234.8	34.4	32.6	320.0	316.6
Trade payables	171.4	167.3	0.5	1.3	0.0	0.4	171.9	169.0
Income tax liabilities	12.0	9.8	–	–	–	–	12.0	9.8
Other liabilities	122.9	126.6	4.5	8.7	1.4	1.7	128.8	137.0
Total	504.7	352.9	92.2	244.8	35.8	34.7	632.7	632.4

(26.1) Financial liabilities

Breakdown of financial liabilities

€ mill.	2023	2022
Liabilities to banks	95.1	209.4
Liabilities from leases	26.5	30.0
Bank overdrafts	0.0	28.0
Noncurrent financial liabilities	121.6	267.4
Liabilities to banks	143.6	13.0
Bank overdrafts	37.1	20.3
Liabilities from leases	10.1	9.9
Interest payable to hybrid capital investors	5.1	5.1
Other interest payable	2.5	0.9
Current financial liabilities	198.4	49.2
Financial liabilities	320.0	316.6

Financial liabilities are generally measured at amortized cost. Current and noncurrent lease liabilities result from the recognition of leases in accordance with IFRS 16. For the measurement of these items, see the explanations to Note 11 in the notes to the consolidated financial statements on page 140. Bank overdrafts are shown separately from current and noncurrent liabilities to banks in the table because they were allocated to cash and cash equivalents in the cash flow statement.

In July 2017, Schuldschein loans with terms of seven years amounting to €115 million were issued by Vossloh AG. The agreed interest rate is fixed at 1.763 % for an amount of €90 million and variable at a margin of 120 basis points above Euribor for an amount of €25 million. A floor of 0.0 % applied to the reference figure. At the end of 2021, a Schuldschein loan in the amount of 25 million with a term of seven years (until December 2028) and a fixed interest rate of 0.8 % per year was placed. The funds from this were used in January 2022 to prematurely repay the floating-rate Schuldschein loan, which would have been due in July 2024.

At the end of November 2017, Vossloh AG concluded a €150 million syndicated loan with eight banks. The financing agreement now has a term until November 2024 after exercising the option to extend it by one year respectively in November 2018 and 2019. In April 2019, the volume of the loan was increased by €80 million to €230 million. If necessary, it can be increased by up to a further €70 million during the term of the loan. The funds are available to the company in the form of a revolving line of credit that can be flexibly accessed. Compliance with a covenant in the form of the ratio of net financial debt to EBITDA was agreed in the syndicated loan. A breach of the agreed threshold of this key figure will allow the lending banks to terminate the agreement ahead of time. At the same time, the amount of the key figure in question determines the interest rate (basis points above Euribor). This is currently 0.65 %. As of the balance sheet date, the credit line had been utilized in the amount of €64.1 million via cash, lines of credit available to subsidiaries, and guarantees (previous year: €91.6 million). Compliance with the covenant must be proven every six months and was affirmed as of the half-year and the reporting date. The existing liability stemming from this syndicated loan is reported under current financial liabilities in accordance with the agreed maturity as at the balance sheet date. In the previous year, it was still reported under noncurrent financial liabilities. In the fourth quarter of 2023, talks were initiated with the syndicate banks regarding a new loan agreement, which have largely been concluded.

Furthermore, in July 2021, Vossloh AG took out a loan of €20 million from DZ Bank AG with a term until July 2024 and a margin of 0.75 % above the 3-month Euribor. A floor of 0.0 % applies to the reference value. In addition, two Schuldschein loans of €30 million each were issued in July 2023 with terms until 2028 and 2030 respectively. The interest rate is based on the 6M Euribor with an additional margin of 125 and 145 basis points respectively. Payer interest rate swaps were concluded for these two instruments in November 2023, whereby the variable 6M Euribor interest rates were converted into fixed interest rates.

For the reconciliation of the IFRS 9 measurement categories, see “Additional information on financial instruments” on page 158 et seq.

Contract liabilities result from contracts where the revenue recognition takes place over a period of time and the advance payments made by customers and partial invoices are in excess of the cumulative performance from the processing of the respective contracts. For the detailed breakdown of these liabilities into gross receivables, prepayments received and partial invoices and other information, see under contract assets Note 18 to the consolidated financial statements. No contract liabilities were recognized in the previous year or the year under review.

(26.2) Trade payables and contract liabilities

These pertain to the actual income taxes due to the tax authorities as at the balance sheet date, which are reported by the various Group companies.

(26.3) Income tax liabilities

Breakdown of other liabilities

€ mill.	2023	2022
Derivatives from cash flow hedges	0.1	0.0
Freestanding derivatives	0.0	0.0
Noncurrent financial liabilities	0.1	0.0
Deferred income	2.0	2.3
Social security and health insurance contributions	0.1	0.3
Advance payments received	–	4.9
Other	3.7	2.9
Noncurrent nonfinancial liabilities	5.8	10.4
Other noncurrent liabilities	5.9	10.4
Derivatives from cash flow hedges	2.0	0.1
Other liabilities to affiliated companies	0.5	0.3
Debtors with credit balances	0.4	0.6
Freestanding derivatives	0.1	0.2
Liabilities to insurance companies	0.0	0.0
Current financial liabilities	3.0	1.2
Advance payments received	48.0	63.9
Personnel-related liabilities	40.8	31.9
VAT payable	7.4	7.1
Social security and health insurance contributions	6.8	5.1
Deferred income	3.7	5.0
Other nonincome taxes	3.3	4.7
Liabilities to employees	3.1	3.4
Other	6.8	4.3
Current nonfinancial liabilities	119.9	125.4
Other current liabilities	122.9	126.6

(26.4) Other liabilities

Upon initial recognition, financial instruments are stated at their fair value as of the trading date including direct transaction costs, if any, and thereafter carried at amortized cost unless their measurement at fair value is required.

The recognition of gains/losses from the measurement at fair value depends on whether the IFRS 9 hedge accounting criteria are met. The corresponding gains/losses from measuring derivatives in cash flow hedges at fair value are recognized directly in equity after considering deferred taxes.

Changes in the market value of freestanding derivatives are recognized in other operating income or other operating expense.

The prepayments received, recognized at €48.0 million (previous year: €68.8 million) under other liabilities consist of advance customer payments for projects where revenue recognition will not be carried out over a period of time.

In accordance with IAS 19, the current liabilities to employees are recognized at the undiscounted amount owed.

Notes to the segment report

The primary format for segment reporting is defined by Vossloh's internal organizational and reporting structures, which differentiates between the products and services offered by the Vossloh Group's business units. In accordance with IFRS 8, segment reporting to the Executive Board and Supervisory Board encompasses not only the divisions but also separately presents their business units.

The segment structure in the three divisions has not changed compared with the previous year. In addition to the Fastening Systems business unit, the Tie Technologies business unit is part of the Core Components division. Vossloh Switch Systems and Vossloh Rail Services continue to be the only business units of the Customized Modules and Lifecycle Solutions divisions, respectively.

The Core Components division comprises the Fastening Systems and Tie Technologies business units. Vossloh Fastening Systems is a leading manufacturer of rail fastening systems. The product lineup includes rail fasteners for every application: from regional transportation to heavy-haul and high-speed lines. Vossloh Tie Technologies, another business unit within this division, is the leading manufacturer of concrete ties in North America and Australia. In addition to concrete ties, switch ties, concrete elements for slab tracks and level crossing systems are manufactured at several plants in the USA and at various production sites in Australia, Mexico and Canada.

The Customized Modules division, respectively the Switch Systems business unit, is one of the leading switch manufacturers worldwide. The business unit equips rail networks with switches and crossings as well as with the related control and monitoring systems, which it also installs and maintains if required. Here, also, the lineup extends from light-rail to high-speed applications.

The Lifecycle Solutions division, respectively the Rail Services business unit, engage in activities such as rail trading, long-rail (un)loading at construction sites, welding new rails, reconditioning old rails, on-site welding, rail replacement, rail grinding/milling, rail inspection and construction site supervision. It also organizes and monitors just-in-time rail shipments to construction sites and ensures on-site availability of the approved (un)loading systems.

In the consolidation, all intrasegment and intersegment transactions are eliminated. This pertains primarily to the offsetting of intragroup income/expenses, the elimination of dividends between Group companies, the offsetting of shareholdings held by the respective parent companies against the equity of the subsidiaries attributable to them and the elimination of intragroup receivables/payables. The accounting methods applied by all segments are identical and conform to IFRS as adopted by the EU. Intersegment business is transacted at arm's length.

The segment information for each division and business unit is presented on page 122 et seq.

The major noncash segment expenses include additions to provisions.

In the explanation of its results of operations in the combined management report, the Vossloh Group reports the pretax value added as a key performance indicator. The Group used a pretax WACC of 8.5 % (previous year: 7.0 %) in the year under review.

A reconciliation of the segment result "value added" of the entire Group to the earnings before interest and taxes (EBIT) presented in the consolidated income statement is shown below:

Reconciliation of value added to EBIT

€ mill.	2023	2022
Value added	18.9	11.5
Cost of capital employed (WACC: 8.5 % (previous year: 7.0 %))	79.6	66.6
EBIT	98.5	78.1

Segment information by region is provided for noncurrent assets and external sales revenues in accordance with IFRS 8.33. The external sales revenues presented by region are based on the customer location. As sales revenues with unconsolidated subsidiaries are not taken into account in this overview of external sales revenues, the figures are not compatible with the overview of sales by region on page 42 of the combined management report.

Segment information by region

€ mill.	2023	2022	2023	2022
	External sales revenues		Noncurrent assets ¹	
Germany	141.8	101.7	227.1	221.4
France	95.1	89.7	181.7	178.8
Rest of Western Europe	101.6	87.7	41.7	41.6
Northern Europe	139.9	130.1	23.8	18.8
Southern Europe	116.5	101.9	11.2	11.4
Eastern Europe	88.3	78.9	29.3	16.5
Total of Europe	683.2	590.0	514.8	488.5
Americas	189.5	122.6	91.7	97.6
Asia	215.1	204.6	41.8	45.7
Africa	14.7	22.3	0.0	0.0
Australia	111.7	106.6	41.7	42.4
Total	1,214.2	1,046.1	690.0	674.2

¹ Excluding financial instruments and deferred tax assets.

Additional information on financial instruments

The recognition and measurement of financial instruments are based on the following measurement categories of IFRS 9:

- Financial assets at amortized cost
- Financial assets at fair value with the recognition of changes in value through profit or loss (FVTPL)
- Financial assets at fair value with the recognition of changes in value through other comprehensive income (FVOCI)

Vossloh's consolidated balance sheet includes both derivative and nonderivative financial instruments.

Nonderivative financial instruments

On the asset side, nonderivative financial instruments primarily comprise receivables, cash and cash equivalents and other financial assets.

On the liabilities side, they include financial liabilities. They are recognized in the consolidated balance sheet when Vossloh becomes a contractual party to the financial instrument.

Financial assets are derecognized according to IFRS 9 when the contractual right to payments from a financial asset expires or when the financial asset is transferred along with all material risks and opportunities. Financial liabilities are derecognized when the contractual obligation is settled, canceled or expires.

Derivative financial instruments

Derivative financial instruments whose value is derived from a basis value are, in particular, forward exchange contracts.

The Vossloh Group uses various derivative financial instruments. They are primarily used to hedge currency risks from firm foreign currency contractual obligations, future foreign currency receivables/payables, and interest rate risks arising from long-term financing.

Hedges of assets and liabilities reported in the balance sheet are recognized as freestanding derivatives. The offsetting changes in value of the underlying and hedging transactions, which relate to the hedged risk, are recognized in the consolidated financial statements. Any fair value changes (gains/losses) due to exchange rate volatility are recognized in the income statement. Currency exposures are not hedged based on planned items, but are generally hedged by means of a foreign currency forward directly after an order is received.

When accounting for cash flow hedges of pending or uncompleted transactions (executory contracts), changes in the derivative's fair value are recognized directly in equity after allowing for deferred taxes. Upon completion or recognition of the underlying transactions, the amounts previously recognized in equity are either recycled to the income statement or offset against the cost of purchased assets. A hedging relationship classified as effective in previous fiscal years was terminated in 2020 due to an amendment to the contract terms. The derivative that was originally designated as a hedging instrument has since been measured at fair value through profit or loss.

The nominal volume of the foreign currencies hedged by freestanding derivatives is divided as follows:

€ mill.	Currency	2023	2022
USA	USD	88.5	92.6
Switzerland	CHF	9.0	–
Australia	AUD	7.6	8.5
Sweden	SEK	–	8.3
Mexico	MXN	2.6	3.7
India	INR	2.3	3.1
Malaysia	MYR	2.1	1.6
Poland	PLN	1.1	1.0
United Kingdom	GBP	1.0	–
China	CNY	–	0.3
Nominal value		114.2	119.1

The table below shows the fair value of derivatives used for hedging currency and interest rate risks, as well as the hedged nominal volumes:

Derivative financial instruments			Fair value	Nominal value	Fair value	Nominal value
€ mill.			2023		2022	
Interest rate swaps	Residual terms	up to 5 years	(0.6)	33.2	0.2	4.5
		over 5 years	0.9	90.0	4.0	60.0
			0.3	123.2	4.2	64.5
Foreign currency forwards	Residual terms	up to 1 year	1.7	109.9	1.3	119.1
		up to 5 years	(0.1)	4.2	–	–
			1.6	114.1	1.3	119.1
Total			1.9	237.3	5.5	183.6

Discounted estimated future cash flow methods are used to determine fair values of interest hedging instruments, currency hedging transactions and foreign currency forwards. The discount is based on current market rates, which match the maturity of the financial instruments.

The significant increase in long-term interest rate swaps was driven by the two new interest rate swaps concluded in the reporting year to hedge the variable interest rate level for the Schuldschein loans taken out in 2023 in the amount of €60 million. These financial instruments are reported under other noncurrent financial instruments in the balance sheet.

The carrying amounts of financial instruments, the assignment based on measurement category and the required disclosures on fair value according to IFRS 13 and their measurement sources according to IFRS 7 are presented in the following table:

Carrying amounts, measurement categories and fair values as of December 31, 2023

€ mill.	Carrying amounts under IFRS 9 according to balance sheet 12/31/2023	Measurement categories in accordance with IFRS 9			Fair values 12/31/2023
		Amortized costs	Fair value through OCI (FVOCI)	Fair value through profit or loss (FVTPL)	
Trade receivables	201.0	201.0	–	–	201.0
Securities	1.1	1.1	–	–	1.1
Other financial instruments and other assets	19.5	13.6	2.6	3.3	19.5
Cash and cash equivalents	99.4	99.3	–	0.1	99.4
Total financial assets	321.0	315.0	2.6	3.4	321.0
Financial liabilities	283.4	283.4	–	–	278.5
Trade payables	171.9	171.9	–	–	171.9
Other liabilities	106.8	104.6	2.1	0.1	106.8
Total financial liabilities	562.1	559.9	2.1	0.1	557.2

Carrying amounts, measurement categories and fair values as of December 31, 2022

€ mill.	Carrying amounts under IFRS 9 according to balance sheet 12/31/2022	Measurement categories in accordance with IFRS 9			Fair values 12/31/2022
		Amortized costs	Fair value through OCI (FVOCI)	Fair value through profit or loss (FVTPL)	
Trade receivables	228.0	228.0	–	–	228.0
Securities	2.3	1.1	–	1.2	2.3
Other financial instruments and other assets	28.7	19.3	4.8	4.6	28.7
Cash and cash equivalents	76.8	76.5	–	0.3	76.8
Total financial assets	335.8	324.9	4.8	6.1	335.8
Financial liabilities	276.7	276.7	–	–	276.7
Trade payables	169.0	169.0	–	–	169.0
Other liabilities	114.3	114.1	–	0.2	114.3
Total financial liabilities	560.0	559.8	–	0.2	560.0

Trade receivables, cash and cash equivalents and other receivables and assets primarily have short maturities. Their carrying amounts as of the reporting date, therefore, approximately correspond to the fair value.

Trade payables and contract liabilities, as well as other liabilities, also generally have short remaining terms. Their carrying amounts, therefore, approximately correspond to the fair value.

The fair value of noncurrent financial liabilities was calculated by discounting the payments of principal and interest to be expected from these liabilities in the future based on current market interest rates.

The financial liabilities carried at fair value mainly pertain to freestanding derivatives.

The table below shows the assignment of the financial assets and liabilities carried at fair value to the fair value hierarchy levels in accordance with IFRS 7 and IFRS 13. There were no reclassifications between the various levels of the fair value hierarchy either during the reporting year or the previous year.

Assignment to levels of the fair value hierarchy

€ mill.	Determined based on market prices (Level 1)		Derived from market prices (Level 2)		Measurement not based on market prices (Level 3)	
	2023	2022	2023	2022	2023	2022
Financial assets measured at fair value			6.0	10.9		
Financial liabilities measured at fair value			2.2	0.2		
Total	0.0	0.0	8.2	11.1	0.0	0.0

The basis for the levels of the hierarchy for the measurement of fair value is the inputs applied. In Level 1, inputs are in the form of unadjusted quoted prices in active markets for identical assets or liabilities. Measurement models are normally used for inputs at both Level 2 and Level 3. While the inputs at Level 2 are observable on the market or can be derived, there is no observable market data at Level 3.

Vossloh AG enters into derivative transactions under framework agreements concluded with banks ("Framework agreement for financial futures contracts") which do not qualify for netting. The reason for this is that the Group has no legal claim to offset the amounts recognized at the present time. The right to offset can only be enforced when future events occur, such as if a bank loan is defaulted on or other credit events.

The following table presents the carrying amounts of the recognized financial instruments that are subject to the outlined agreements:

Offsetting options for derivative financial assets and liabilities

€ mill.	2023	2022
Financial assets		
Recognized gross amounts of financial assets	4.0	5.8
Financial instruments that qualify for offsetting	0.0	0.0
Net balance sheet figures of financial assets	4.0	5.8
Offsettable on the basis of framework agreements	(1.6)	(0.1)
Total net value of financial assets	2.4	5.7
Financial liabilities		
Recognized gross amounts of financial liabilities	(2.1)	(0.3)
Financial instruments that qualify for offsetting	0.0	0.0
Net balance sheet figures of financial liabilities	(2.1)	(0.3)
Offsettable on the basis of framework agreements	1.6	0.1
Total net value of financial liabilities	(0.5)	(0.2)

Net gains/losses on financial instruments by measurement category

€ mill.	Assets at amortized cost	Assets at fair value through profit or loss (FVTPL)	Assets at fair value through other comprehensive income (FVOCI)	Liabilities at amortized cost	2023	2022
Net gains/losses from:						
Income from investments			0.6		0.6	0.3
Interest	0.4	0.2		(9.3)	(8.7)	(4.6)
Subsequent measurement						
from additions to valuation adjustments	(1.8)				(1.8)	(0.5)
from reversals of valuation allowances	0.0				0.0	1.4
from currency translation	0.0				0.0	(2.2)
at fair value		(2.5)			(2.5)	(0.3)
Total	(1.4)	(2.3)	0.6	(9.3)	(12.4)	(5.9)

Interest is accounted for here within the net interest result, while the net gains and losses on disposal and currency translation are disclosed within other operating income or other operating expenses.

Gains from the remeasurement to fair value of securities held for trading and the write-down of financial instruments available for sale are included in the above table and recognized within the other financial result.

Financial risk management

The Vossloh Group's business operations are exposed to financial risks. These risks relate to liquidity, currency, interest and credit. The Group-wide management and limitation of the liquidity, currency and interest rate risks is handled by Treasury Management. Credit risks are monitored as part of general risk management.

Vossloh manages its liquidity risks (i.e. the risk that the Group is not able to meet its payment obligations at all times) through liquidity planning and a central cash management system. At the end of the reporting period, cash and cash equivalents as well as readily marketable securities of €100.5 million were at the Group's disposal, besides additional, unutilized credit facilities of €244.4 million to satisfy any future cash requirements. €165.9 million were related to free credit lines of Vossloh AG under the syndicated loan with a term until November 2024. The majority of the free credit lines of the subsidiaries, which totaled €78.5 million, had a duration of up to a year or were granted for an unlimited term. The table below shows the contractually agreed undiscounted payments of principal and interest for financial liabilities:

Maturities of interest and principal payments

€ mill.	up to 1 year				1 to 5 years				more than 5 years			
	2023		2022		2023		2022		2023		2022	
	Repay- ment	Interest	Repay- ment	Interest	Repay- ment	Interest	Repay- ment	Interest	Repay- ment	Interest	Repay- ment	Interest
Nonderivative financial liabilities	(161.3)	(14.1)	(28.9)	(10.9)	(87.2)	(11.2)	(206.8)	(2.5)	(34.4)	(2.0)	(32.6)	(0.2)
Derivative financial liabilities	(2.1)	0.0	(0.3)	0.0	(0.1)	0.0	0.0	0.0	0.0			
Derivative financial assets	2.4		1.8						1.8			

Currency risks arise from recognized noneuro assets and liabilities whose euro equivalent may be adversely affected by unfavorable exchange rates, and pending or uncompleted currency transactions whose future cash flows may show a negative trend depending on how foreign exchange rates develop. Significant operations-related currency risks Vossloh is exposed to originate from trade receivables and payables denominated in a noneuro currency, as well as from pending or uncompleted trade and purchasing transactions. Vossloh has issued binding instructions to centrally hedge against currency risks Group-wide through Treasury Management by using foreign currency forwards at matching maturities and amounts as micro hedges of the associated underlying transactions. The fixed exchange rates for the hedged underlying transactions counter any unfavorable effects of currency rate fluctuations on estimates and assets. As of the reporting date, Vossloh has designated currency derivatives with a nominal volume of €9.0 million in cash flow hedges; all other currency derivatives are freestanding. The translation of foreign separate financial statements into the Group currency, the euro, results in currency translation differences (translation risks) which are recognized directly in the balance sheet item "Accumulated other comprehensive income" (see the section "Currency translation" on page 128). Income, expenses and carrying values of companies that are not based in the eurozone are thus dependent on the respective euro exchange rate. Translation risks are not currently hedged because they do not directly affect cash flow. In addition, investments in foreign companies are typically long-term.

Interest rate risks Interest rate risks mainly result from floating-rate short- and long-term loans raised for Group financing purposes, as well as from short-term funds invested at variable rates.

The risk of an unfavorable market rate trend and thus higher interest payments for floating-rate notes is contained by contracting interest rate swaps (see the glossary for these terms on page 195).

In connection with hedge accounting, such interest rate hedging transactions are accounted for as cash flow hedges. Interest rate floors embedded in hedging transactions are recognized in the income statement as fair value hedges. The nominal value of the interest rate swaps was €123.2 million as of the reporting date. Of this amount, €33.2 million related to terms of up to 5 years and €90.0 million to terms of more than 5 years.

The dollar offset method is used for assessing the effectiveness of the hedge. The interest rate hedge concluded in 2018 was already no longer effective in 2020. The cash flow hedge reserve of €(0.2) million at the time of dissolving the hedge relationship will be released on a straight-line basis in profit or loss over the remaining term, which runs until the middle of 2026.

The fair value of derivatives used for hedging against currency and interest rate risks, as well as the hedged nominal volumes, are detailed in the "Additional information on financial instruments" section on page 158 et seq. Taking into account the existing interest rate derivatives, 69 % of the financial liabilities were taken up with fixed interest rates as of the reporting date, with 31 % subject to a variable interest rate.

Sensitivity analysis Given certain assumptions, sensitivity analyses put an approximate figure to the risk that exists if certain influential factors undergo changes. The following changes have been assumed with regard to interest-rate risk and exchange-rate risk:

- an increase in market interest rates of 1 % or a reduction in market interest rates of 0.25 % (parallel shift in the yield curve);
- a simultaneous appreciation or depreciation of the euro against all foreign currencies by 10 %.

Financial instruments originally stipulated with variable interest rates as well as existing interest rate derivatives were taken into consideration in the determination of the interest-rate risk as of the reporting date. A market interest rate that was higher by 100 basis points related to the financial liabilities and receivables recognized at variable rates as of December 31, 2023, would have reduced the financial result by €0.1 million due to the increased interest income. A market interest rate that was lower by 25 basis points would have reduced the net financial result by €0.5 million. Equity would have been €4.2 million higher at the higher market interest rate or €0.8 million lower at the lower market interest rate. This is based on the underlying assumption that the changed interest rate would have applied for an entire year.

As currency risks were almost fully hedged, the impact of a simultaneous 10 % depreciation of the euro on the unhedged foreign currency positions was insignificant for the results of operations. The following table shows the effects of the sensitivity analysis of existing key foreign currency derivatives and foreign currency loans on other net interest result and equity. A positive value means an increase in earnings and equity.

Sensitivity analysis of key foreign currency derivatives

€ mill.	USD			
	12/31/2023		12/31/2022	
	+ 10 %	- 10 %	+ 10 %	- 10 %
Net interest result	(0.6)	0.7	(0.4)	0.6
Equity	(0.4)	0.5	(0.3)	0.4

Credit risks are defined as the risk that counterparties fail to meet their financial obligations. The credit risk attached to the cash and cash equivalents invested by the Vossloh Group with banks and the short-term securities held by Group companies, as well as to hedging instruments contracted with banks, is minimized by selecting counterparties of prime standing only. As part of business operations, trade receivables and other receivables are potentially exposed to credit risk.

Credit risks

These credit risks are monitored by the risk management system and minimized by taking out credit insurance (for example, Euler Hermes). Specific default risks are taken into account through adequate allowances.

The balance of gross receivables (receivables before deduction of allowances) is broken down as follows in terms of operational credit risks:

Balance of gross current receivables

€ mill.	Receivables neither past due nor impaired	Receivables past due but not impaired	Impaired receivables	Gross balance of receivables
Trade receivables				
2023	149.9	55.1	12.0	217.0
2022	159.5	69.1	9.4	238.0
Others				
2023	43.4	0.0	0.0	43.4
2022	44.4	0.0	0.0	44.4

The analysis below breaks down the receivables past due:

Receivables past due

€ mill.	Up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	More than 12 months	Total
Trade receivables						
2023	23.5	12.8	5.2	5.5	8.1	55.1
2022	22.4	15.1	8.2	6.6	16.8	69.1
Others						
2023	–	–	–	–	0.0	0.0
2022	–	–	–	–	0.0	0.0

No specific credit risk arises from past due receivables since, given customer structure of the Vossloh Group, many debtors are government or other public sector agencies.

The maximum credit risk of all financial assets corresponds to their carrying amounts (see the overview on page 160).

By December 31, 2021, the contractual terms previously referencing EONIA were switched to the new reference interest rate EURO short-term rate (€STR). The calculation method of the Euribor had already changed in 2019.

IBOR-reform

In 2021, the Vossloh Group entered into a new credit agreement with a link to USD-LIBOR, already including the agreements on the replacement of the reference interest rate. The alternative reference rate for the USD-LIBOR is the Secured Overnight Financing Rate (SOFR), however certain USD-LIBORs were not discontinued until the end of June 2023. This agreement automatically switches the instrument from USD-LIBOR to SOFR as soon as the respective USD-LIBOR is discontinued.

The central Treasury department continues to track developments in this area and assess agreements which are affected. It is also responsible for managing the transition to alternative rates and making the necessary amendments to agreements.

Other disclosures

Contingent liabilities Contingent liabilities decreased by €22.7 million compared to December 31, 2022, going from €51.7 million to €29.0 million. €23.7 million thereof is attributable to contingent liabilities for the former Locomotives business unit sold as of May 31, 2020, while €0.3 million is attributable to contingent liabilities for the former Electrical Systems business unit sold as of January 31, 2017. For the still remaining contingent liabilities for the former Locomotives business unit, Vossloh AG has received an irrevocable and unconditional guarantee at first request from a first-class bank. The remaining liability for the former Electrical Systems business unit is reinsured by an irrevocable and unconditional guarantee from Knorr-Bremse AG. The contingent liabilities of €0.5 million (previous year: €20.8 million) result from guarantee relationships and relate entirely to the former business units. A total of €28.5 million (previous year: €30.9 million) of the contingent liabilities are attributable to letters of comfort; of this amount, €23.5 million related to the former business units and €5.0 million (previous year: €5.2 million) to nonconsolidated affiliated companies. The risk of a claim is considered unlikely for all of the listed contingent liabilities.

Obligations arising from orders due to the acquisition of intangible assets and property, plant and equipment (order commitments) totaled €6.8 million (previous year: €23.2 million).

Leasing Agreements on the use of assets have frequently been concluded between the companies of the Vossloh Group and the respective owners. The subject of these agreements primarily relates to land and buildings, machinery and factory as well as office equipment, in particular company cars and IT equipment.

The resulting right-of-use assets are capitalized under property, plant and equipment pursuant to IFRS 16, while the present values of the payment obligations are recognized as financial liabilities. The option granted under IFRS 16.4 with regard to rights of use for intangible assets is exercised in such a way that rights of use arising from such contracts are not recognized on the balance sheet. The accounting methods applied for the rights of use and for the financial liability resulting from the lease are outlined in the explanatory notes to property, plant and equipment. There, the expense incurred for the depreciation of capitalized values in use was also shown. Interest expense from the compounding of lease liabilities is accounted for under the net interest result.

Expenses relating to short-term leases (remaining term of less than one year) and for low-value assets – the resulting rights of use are not capitalized in accordance with the option in IFRS 16.6 – are accounted for under other operating expense in the income statement. The same applies to variable lease payments, which are not to be taken into account when measuring the lease liability. Gains or losses from what are referred to as “sale-and-leaseback” transactions are accounted for depending on the conditions of the lease agreement to the extent that such transactions take place. There were no such transactions during the year under review, as in the previous year. Rental income stemming from subleases is accounted for as other operating income.

The following table provides a summary of the expenses and payments recognized in the income statement relating to leases. All payments in this regard relate to cash changes in lease liabilities and expenses recognized in the income statement related to leases which did not lead to right-of-use assets being recognized in the balance sheet.

€ mill.	2023	2022
Interest expense from the compounding of lease liabilities	1.2	1.1
Expenses from short-term leases	4.7	4.6
Expenses from the renting of low-value assets	0.5	0.4
Expenses from variable lease payments	0.4	0.3
Total lease payments	19.5	19.1
Rental income from subletting	0.1	0.0

The undiscounted payments resulting from the leases recognized in the balance sheet are shown in the following table:

Distribution of future lease payments over time								
€ mill.	2023	2022	2023	2022	2023	2022	2023	2022
Remaining term	≤ 1 year		1 to 5 years		> 5 years		Total	
Liabilities from leases	11.6	12.7	26.0	33.2	10.1	13.4	47.7	59.3

Future payments that have not yet been taken into account when measuring liabilities from leases may result from variable lease payments, extension options that do not yet appear to be largely probable or not exercising termination options or from residual value guarantees that have not been taken into account. The resulting payments are insignificant in total. As of the reporting date, the Vossloh Group had no lease agreements that have already been concluded but for which utilization would not commence until a later date. There are no restrictions imposed by lease agreements or assurances about certain financial circumstances.

Significant Group companies with other (thus noncontrolling) shareholders:

1. Vossloh Fastening Systems (China) Co., Ltd., Kunshan, China
2. Vossloh (Anyang) Track Material Co., Ltd., Anyang, China
3. Vossloh Cogifer KIHN SA, Rumelange, Luxembourg
4. Vossloh Beekay Castings Ltd., New Delhi, India
5. Futrifer-Indústrias Ferroviárias SA, Lisbon, Portugal

Disclosures regarding companies with noncontrolling interests

Re 1: 32 % of the shares of capital of this company are held by shareholders with a noncontrolling interest.

In the year under review, €7.6 million (previous year: €6.5 million) of the company's net income was attributable to these shareholders. As of December 31, 2023, the share of equity attributable to shareholders with a noncontrolling interest was €12.9 million (previous year: €13.0 million).

Significant financial information for Vossloh Fastening Systems (China) Co., Ltd., Kunshan, China		
€ mill.	2023	2022
Noncurrent assets	10.9	11.4
Current assets	67.8	77.1
Noncurrent liabilities	3.2	6.7
Current liabilities	35.0	41.2
Sales revenues	105.5	102.9
Value added	28.5	23.5
Total comprehensive income	20.9	19.2
Cash flow	3.0	0.3
Dividends to shareholders	20.9	25.6

Re 2: 49 % of the shares of capital of this company are held by shareholders with a noncontrolling interest.

In the year under review, €1.8 million (previous year: €1.0 million) of the company's net income was attributable to these shareholders. As of December 31, 2023, the share of equity attributable to shareholders with a noncontrolling interest was €9.1 million (previous year: €8.1 million).

Significant financial information for Vossloh (Anyang) Track Material Co., Ltd., Anyang, China

€ mill.	2023	2022
Noncurrent assets	31.3	35.0
Current assets	15.4	16.9
Noncurrent liabilities	6.9	7.6
Current liabilities	9.0	15.6
Sales revenues	41.3	38.5
Value added	1.7	0.2
Total comprehensive income	2.0	1.4
Cash flow	0.7	1.1

Re 3: 10.79 % of the shares of capital of this company are held by shareholders with a noncontrolling interest.

In the year under review, €0.7 million (previous year: €0.3 million) of the company's net income was attributable to these shareholders. As of December 31, 2023, the share of equity attributable to shareholders with a noncontrolling interest was €2.4 million (previous year: €2.0 million).

Significant financial information for Vossloh Cogifer KIHN SA, Rumelange, Luxembourg

€ mill.	2023	2022
Noncurrent assets	14.4	15.3
Current assets	37.0	31.4
Noncurrent liabilities	1.1	0.4
Current liabilities	30.5	29.0
Sales revenues	66.8	50.7
Value added	6.3	3.1
Total comprehensive income	6.4	2.8
Cash flow	2.0	(0.4)
Dividends to shareholders	3.0	1.6

Re 4: 41.52 % of the shares of capital of this company are held by shareholders with a noncontrolling interest.

In the year under review, €0.2 million (previous year: €0.1 million) of the company's net income was attributable to these shareholders. As of December 31, 2023, the share of equity attributable to shareholders with a noncontrolling interest was €3.6 million (previous year: €3.7 million).

Significant financial information for Vossloh Beekay Castings Ltd., New Delhi, India

€ mill.	2023	2022
Noncurrent assets	6.6	7.0
Current assets	7.9	7.5
Noncurrent liabilities	0.9	0.4
Current liabilities	2.9	2.7
Sales revenues	10.6	11.2
Value added	(0.1)	(0.3)
Total comprehensive income	0.0	(0.2)
Cash flow	(0.4)	0.4
Dividends to shareholders	0.1	0.2

Re 5: 39 % of the shares of capital of this company are held by shareholders with a noncontrolling interest.

In the year under review, €0.5 million (previous year: €0.5 million) of the company's net income was attributable to these shareholders. As of December 31, 2023, the share of equity attributable to shareholders with a noncontrolling interest was €1.9 million (previous year: €2.1 million).

Significant financial information for Futrifer-Indústrias Ferroviárias SA, Lisbon, Portugal		
€ mill.	2023	2022
Noncurrent assets	9.7	10.6
Current assets	12.4	11.6
Noncurrent liabilities	2.1	1.8
Current liabilities	6.5	6.3
Sales revenues	20.4	18.4
Value added	0.6	0.7
Total comprehensive income	1.3	1.2
Cash flow	3.0	(1.0)
Dividends to shareholders	1.8	1.3

Where shareholders of other Group companies hold noncontrolling interests, these interests were insignificant both individually and cumulatively.

Vossloh AG is the ultimate controlling entity of the Vossloh Group. The consolidated companies of the Vossloh Group transact normal business with unconsolidated affiliated companies and associated companies. Resulting transactions were executed at arm's length basis.

Related party transactions

Related unconsolidated companies and associated companies are disclosed in the list of shareholdings on page 172 et seq.

Individuals among the Vossloh Group's related parties are the members of the Executive and Supervisory Boards.

Up to the time of his decease on February 23, 2021, Mr. Heinz Hermann Thiele was in a position to exert a significant influence on the Vossloh AG through KB Holding GmbH which held majority stake. Since then, his heir Mrs. Nadia Thiele and executor of his will Mr. Robin Brühmüller are in a position to control Vossloh AG via the majority shareholder, KB Holding GmbH. They also control the companies of the Knorr-Bremse Group indirectly. They are accordingly treated as related parties. Transactions with companies of the Knorr-Bremse Group in the fiscal year resulted in purchases of materials in the amount of €0.1 million (previous year: €0.1 million), sales revenues in the amount of €0.2 million (previous year: €0.2 million) as well as open receivables and advance payments as of December 31, 2023 in the amount of €0.0 million (previous year: €0.0 million) and trade payables of €0.0 million (previous year: €0.0 million).

The table below shows the breakdown of transactions with related parties. These were conducted mainly with joint ventures (JV). Transactions with unconsolidated subsidiaries that are reflected in segment reporting as internal sales revenues and in the consolidated balance sheet as receivables/payables due from or to affiliated companies were insignificant overall. The same applies to transactions with associated companies. No transactions with related individuals took place.

€ mill.	2023	2022
Sale or purchase of goods		
Sales revenues from the sale of finished and unfinished goods	9.3	9.9
Cost of materials from the purchase of finished and unfinished goods	21.0	26.5
Trade receivables	4.0	1.6
Trade payables	5.5	6.9
Sale or purchase of other assets		
Proceeds from the sale of other assets	0.0	0.0
Expenses from the purchase of other assets	0.0	0.0
Receivables from the sale of other assets	0.0	0.5
Services rendered or received		
Income from services rendered	0.7	0.8
Expenses for services received	0.4	0.7
Licenses		
License income	0.1	0.2
License expenses	1.4	1.2
Financing		
Interest income from financing loans granted	0.0	0.0
Interest expense for financing loans received	0.0	0.0
Receivables on financial loans granted	(0.4)	0.1
Provision of collaterals		
Provision of guarantees or letters of comfort	5.0	0.0
Provision of other collateral	0.0	0.0

Payments to related parties

€	Short-term benefits due		Retirement benefit entitlements (service cost)		Share-based remuneration		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Executive Board of Vossloh AG	3,320,694	2,927,771	231,235	194,782	1,742,848	1,665,200	5,294,777	4,787,753
Supervisory Board of Vossloh AG	692,417	420,000	–	–	–	–	692,417	420,000

The short-term benefits due for the Executive Board comprised the fixed and annual variable remuneration. The target achievement criteria for the multiyear bonuses of the Executive Board members mainly relate to the absolute and relative performance of the share price of the Vossloh share.

Another component of the multiyear bonus falls under the provisions of IAS 19, also shown in the table above in the "Share-based remuneration" column.

The reporting of the multiyear bonus as a whole is thus in accordance with IFRS 2.

For absolute performance, certain share increase rates over the respective period of the multiyear bonus are contractually defined as target figures. For relative performance, the price performance is compared with that of a weighted index comprised of DAX, MDAX and SDAX. Over- or under-performance then leads to a specific target achievement. The carrying amount of the Group's liabilities recognized for the multiyear bonus came to €3.7 million as of the balance sheet date (previous year: €3.6 million). The total remuneration of the Executive Board members pursuant to Section 314 HGB is €5,181,486 (previous year: €3,952,441).

Pension provisions for the CEO come to €2.3 million (previous year: €1.7 million).

The total remuneration of the former members of the Executive Board and members of the management as well as their surviving dependents amounted to €1,139,288 (previous year: €1,183,658). This related entirely to pension payments. Current pension payments are subject to adjustment in relation to the collective pay trend in the metal and electrical industries of North Rhine-Westphalia.

Remuneration to former Executive Board members of Vossloh AG and their surviving dependents

Pension obligations to former members of the Executive Board and members of the management, as well as their relatives amounted to €20,534,200 (previous year: €20,078,847). Employer pension liability insurance policies totaling €9,633,985 (previous year: €9,812,242) are pledged in each beneficiary's favor. The remaining amount of these pension obligations is covered by provisions.

In the year under review, the fees for the auditor of the consolidated financial statements totaled €0.8 million. At €0.7 million, these relate mainly to attestation services, and include fees for the audit of the consolidated financial statements, the financial statements of Vossloh AG and its German subsidiaries, and audits in connection with interim financial statements. Other attestation services of €0.1 million were provided in the area of sustainability reporting and board remuneration.

Auditor fees

In November 2023, the Executive and Supervisory Boards issued the Declaration of Conformity pursuant to Section 161 of the German Stock Corporation Act (AktG), and made it permanently available to shareholders on Vossloh's website at www.vossloh.com/en/investor-relations/corporate-governance/declaration-of-conformity.

German Corporate Governance Code

The syndicated loan from 2017, most recently amounting to €230 million with a term until November 2024, was refinanced early in February 2024 with the conclusion of a new syndicated loan for €240 million. The new financing agreement was concluded with a total of eight banks as part of a club deal with a minimum term of five years. It contains a sustainability component for the first time: the amount of the margin is linked to the compliance rate of sales revenues in accordance with the EU Taxonomy Regulation as part of a bonus-malus regulation.

Events after the balance sheet date

The sale of the Signaling Systems activities by Vossloh Cogifer SA was completed at the beginning of March and the associated assets and liabilities were sold to the purchaser. The proceeds amounted to approximately €10 million. The exact amount depends on the carrying amounts on the date of completion and will be determined subsequently. It is not expected to have a significant impact on the Group's earnings position.

Pursuant to Section 313 (2) HGB, details of the Vossloh Group's shareholdings are listed below:

Group companies and investments

List of shareholdings

€ mill.	Footnote	Shareholding in %	at	Consoli- dation ¹	Equity ²	Result after taxes ²
(1) Vossloh Aktiengesellschaft, Werdohl				(k)		
(2) Vossloh International GmbH, Werdohl		100.00	(1)	(k)		
(3) Vossloh US Holdings, Inc., Wilmington, USA		100.00	(2)	(k)		
(4) Vossloh Australia Pty. Ltd., Sydney, Australia		100.00	(1)	(k)		
Core Components division						
Fastening Systems business unit						
(5) Vossloh Fastening Systems GmbH, Werdohl	3	100.00	(1)	(k)		
(6) Vossloh Tehnica Feroviara SRL, Bucharest, Romania		100.00	(5)	(n)	0.2	0.0
(7) Vossloh Drazni Technika s.r.o., Prague, Czech Republic		100.00	(5)	(k)		
(8) Vossloh Sistemi S.r.l., Cesena, Italy		100.00	(5)	(k)		
(9) Vossloh Skamo Sp.z o.o., Nowe Skalmierzyce, Poland		100.00	(5)	(k)		
(10) FÉDER-7 Rugógyártó Kft., Sárkeresztes, Hungary		100.00	(5)	(n)	0.4	0.0
(11) Vossloh Fastening Systems America Corporation, McGregor, USA		100.00	(3)	(k)		
(12) Vossloh Fastening Systems (China) Co., Ltd., Kunshan, China		68.00	(5)	(k)		
(13) Vossloh-Werke International GmbH, Werdohl		100.00	(5)	(k)		
(14) Beijing China-Railway Vossloh Technology Co., Ltd., Beijing, China		49.00	(5)	(n)	2.4	0.8
(15) Vossloh Fastening Systems Southern Africa Proprietary Ltd., Cape Town, South Africa	6	100.00	(74)	(n)	0.0	0.0
(16) TOO Vossloh Fastening Systems (Kazakhstan), Kapshagay, Kazakhstan		50.00	(13)	(e)		
(17) Suzhou Vossloh Track Systems Co., Ltd., Suzhou, China		100.00	(13)	(k)		
(18) AO Vossloh Fastening Systems RUS, Engels, Russia		50.00	(5)	(e)		
(19) Vossloh Fastening Systems Australia Pty. Ltd., Sydney, Australia		100.00	(4)	(k)		
(20) OOO Vossloh Bahn- und Verkehrstechnik, Moscow, Russia		99.00/1.00	(2)/(1)	(k)		
(21) Vossloh Maschinenfabrik Deutschland GmbH, Werdohl		100.00	(5)	(n)	(1.5)	(0.1)
(22) Vossloh Fastening Systems India Private Ltd., New Delhi, India	5	99.99/0.01	(5)/(13)	(k)		
(23) Vossloh (Anyang) Track Material Co., Ltd., Anyang, China		51.00	(13)	(k)		
(24) Kunshan Vossloh Railway Materials Trading Co., Ltd., Kunshan, China		100.00	(13)	(k)		
Tie Technologies business unit						
(25) Rocla International Holdings, Inc., Wilmington, USA		100.00	(3)	(k)		
(26) Rocla Concrete Tie, Inc., Lakewood, USA		100.00	(25)	(k)		
(27) RCTI de Mexico, S. de R. L. de C. V., Mexico City, Mexico		99.998/0.002	(26)/(3)	(k)		
(28) RocBra Participacoes e Empreendimentos Ltda., São Paulo, Brazil	6	100.00	(25)	(n)	5.5	(0.5)
(29) Cavan Rocbra Industria E Comercio De Pre Moldados De Concreto S/A, São Paulo, Brazil	6	20.00	(28)	(n)	26.6	2.9
(30) Austrak Pty. Ltd., Brisbane, Australia		100.00	(4)	(k)		
(31) Vossloh Tie Technologies Canada ULC, Vancouver, Canada		100.00	(26)	(k)		
Customized Modules division						
Switch Systems business unit						
(32) Vossloh France SAS, Rueil-Malmaison, France		100.00	(1)	(k)		
(33) Vossloh Cogifer SA, Rueil-Malmaison, France		100.00	(32)	(k)		
(34) Jacquemard AVR SA, St. Jean Bonnefonds, France		100.00	(33)	(k)		
(35) Vossloh Cogifer Finland Oy, Salo, Finland		100.00	(36)	(k)		
(36) Vossloh Nordic Switch Systems AB, Ystad, Sweden		100.00	(33)	(k)		
(37) Vossloh Cogifer KIHN SA, Rumelange, Luxembourg		89.21	(33)	(k)		
(38) Vossloh Laeis GmbH, Trier		100.00	(37)	(k)		
(39) Futrifer-Indústrias Ferroviárias SA, Lisbon, Portugal		61.00	(33)	(k)		
(40) Amurrio Ferrocarril y Equipos SA, Amurrio, Spain		50.00	(33)	(e)		
(41) Montajes Ferroviarios S. L., Amurrio, Spain		100.00	(40)	(n)	0.6	0.4
(42) Burbiola SA, Amurrio, Spain		50.00	(40)	(n)	1.8	0.1
(43) Vossloh Cogifer UK Ltd., Scunthorpe, United Kingdom		100.00	(33)	(k)		
(44) Vossloh Cogifer Italia S.r.l., Milan, Italy		100.00	(33)	(k)		
(45) Vossloh Cogifer Polska Sp.z o.o., Bydgoszcz, Poland		97.01	(33)	(k)		

€ mill.	Footnote	Shareholding in %	at	Consoli- dation ¹	Equity ²	Result after taxes ²
(46) ATO-Asia Turnouts Ltd., Bangkok, Thailand		51.00	(33)	(e)		
(47) Vossloh Cogifer Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia		100.00	(33)	(k)		
(48) VOSSLOH MIN SKRETNICE DOO ZA Proizvodnjui Montazu Skretnica i Opreme Nis, Niš, Serbia		100.00	(33)	(k)		
(49) Vossloh Beekay Castings Ltd., New Delhi, India	5	58.48	(33)	(k)		
(50) Vossloh Cogifer Turnouts India Private Ltd., Hyderabad, India	5	100.00	(33)	(k)		
(51) Vossloh Cogifer Signalling India Private Ltd., Bangalore, India	5	100.00	(33)	(k)		
(52) Vossloh Cogifer Australia Pty. Ltd., Castlemaine, Australia		100.00	(4)	(k)		
(53) Vossloh Cogifer Kloos BV, Nieuw-Lekkerland, the Netherlands		100.00	(33)	(k)		
(54) Wuhu China Railway Cogifer Track Co., Ltd., Wuhu, China		50.00	(33)	(e)		
(55) Vossloh Cogifer Southern Africa Proprietary Ltd., Cape Town, South Africa		100.00	(74)	(n)	0.0	0.0
(56) Ibrafer-Internacional Brasileira De Aparelhos Feroviarios Participacoes Ltda., Sorocaba, Brazil		19.00	(33)	(n)	3.5	0.0
(57) Ibrafer MBM Ltda., Sorocaba, Brazil		97.38	(56)	(n)	3.6	0.0
(58) Vossloh Infrastructure Systems LLC, Moscow, Russia		90.00/10.00	(37)/(48)	(n)	0.0	(0.1)
Lifecycle Solutions division						
Rail Services business unit						
(59) Vossloh Rail Services GmbH, Hamburg	3	100.00	(1)	(k)		
(60) Vossloh Rail Services Deutschland GmbH, Hamburg	3	100.00	(59)	(k)		
(61) Vossloh Rail Inspection GmbH, Leipzig	3	100.00	(59)	(k)		
(62) VOSSLOH Turkey Demiryolu Sistemleri Ltd. Şti., Istanbul, Turkey		100.00	(63)	(k)		
(63) Vossloh Rail Services International GmbH, Hamburg	3	100.00	(59)	(k)		
(64) Vossloh Rail Services Scandinavia AB, Örebro, Sweden		100.00	(63)	(k)		
(65) Vossloh Rail Services North America Corporation, Denver, USA		100.00	(3)	(k)		
(66) Beijing CRM-Vossloh Track Maintenance Technology Co., Ltd., Beijing, China		47.00	(63)	(e)		
(67) Vossloh Rail Services Kunshan Co., Ltd., Kunshan, China		100.00	(63)	(k)		
(68) Vossloh Rail Services Finland Oy, Kouvola, Finland		100.00	(63)	(k)		
(69) Rhomberg Sersa Vossloh GmbH, Föhren		50.00	(59)	(e)		
(70) Vossloh Services France SAS, Rueil-Malmaison, France		49.90/50.10	(33)/(63)	(k)		
(71) Vossloh Rail Services Italia S.r.l., Cesena, Italy		100.00	(63)	(k)		
(72) Vossloh ETS BV, Purmerend, the Netherlands		100.00	(63)	(k)		
(73) Vossloh Rail Services Espana S.L., Madrid, Spain		100.00	(63)	(n)	0.0	0.0
(74) Vossloh Rail Services Australia Pty. Ltd., Sydney, Australia		100.00	(4)	(n)	0.0	0.0
Other companies						
(75) Vossloh Southern Africa Holdings Proprietary Ltd., Johannesburg, South Africa		100.00	(2)	(n)	(0.1)	0.0
(76) Vossloh RailWatch GmbH, Hamburg	4	100.00	(1)	(k)		

¹ Fully consolidated companies are noted (k), those accounted for using the equity method (e) and unconsolidated companies (n).

Exclusion from the scope of consolidation is based on immateriality with respect to net assets, financial position and results of operations.

² Foreign currency amounts in the case of equity are translated at the current rate (average exchange rate as of the balance sheet date) and result after tax are translated at the annual average exchange rate.

³ Company claims exemption from preparing and publishing separate financial statements pursuant to Section 264 (3) or 264b HGB.

⁴ Included in the consolidation for the first time in the reporting year.

⁵ Differing fiscal year April 1 to March 31.

⁶ Information on equity and result after taxes is based on the latest available financial statements.

Executive Board
of Vossloh AG

Oliver Schuster, born 1964, Düsseldorf

Chief Executive Officer (CEO since 10/1/2019)

First appointment: 3/1/2014, appointed until: 2/28/2025

Group mandates:

- Vossloh Cogifer SA: Deputy Chairman of the Supervisory Board
- Vossloh Fastening Systems (China) Co., Ltd.: Chairman of the Administrative Board and legal representative of the company

Dr. Thomas Triska, born 1975, Balve

Chief Financial Officer (CFO)

First appointment: 11/1/2020, appointed until: 10/31/2028

External mandates:

- Wohnungsgesellschaft Werdohl GmbH:
Member of the Supervisory Board

Group mandates:

- Vossloh Cogifer SA: Chairman of the Supervisory Board
- Vossloh International GmbH: Managing Director
- Vossloh France SAS: President

Jan Furnivall, born 1976, Meerbusch

Chief Operating Officer (COO)

First appointment: 11/1/2020, appointed until: 10/31/2028

Group mandates:

- Vossloh International GmbH: Managing Director
- Vossloh US Holdings, Inc.: Vice President

Prof. Dr. Rüdiger Grube^{2,4}, Chairman, Hamburg,
Managing Partner of Rüdiger Grube International Business Leadership GmbH and former Chairman
of the Executive Board of Deutsche Bahn AG (Member of the Supervisory Board since 2/5/2020)
- Chairman of the Supervisory Board of Hamburger Hafen- und Logistik AG, Hamburg
- Non-Executive Member of the Administrative Board of Deufol SE, Hofheim (Wallau)
- Chairman of the Supervisory Board of ALSTOM Transportation Germany GmbH, Berlin
- Member of the Supervisory Board of AVW Immobilien AG, Hamburg
- Member of the Supervisory Board of Meta Wolf AG, Kranichfeld
- Chairman of the Supervisory Board of Vodafone GmbH, Düsseldorf

Ulrich M. Harnacke^{2,3,4}, Vice Chairman, Mönchengladbach, Independent Accountant,
Tax Advisor and Business Consultant (Member of the Supervisory Board since 5/20/2015)
- Member of the Shareholders' Committee of Thüga Holding GmbH & Co. KGaA, Munich,
Member of the Supervisory Board of Thüga Aktiengesellschaft, Munich, and Member of
the Supervisory Board of CONTIGAS Deutsche Energie-AG, Munich
- Member of the Supervisory Board and Chairman of the Audit Committee of Brenntag SE, Essen
- Member of the Advisory Board of Zentis GmbH & Co. KG, Aachen⁵

Dr. Roland Bosch^{3,4}, Königstein/Taunus, Managing Director of WOLFF & MÜLLER Holding GmbH & Co. KG
(Member of the Supervisory Board since 5/27/2020)
- President of the Administrative Board of Danzer AG, Ruggell (Liechtenstein)
- Chairman of the Supervisory Board of Erbud S.A., Warsaw (Poland)

Martin Klaes¹, Werdohl, Fitter, Chairman of the Works Council of Vossloh Fastening Systems GmbH and Vossloh AG
(Member of the Supervisory Board since 5/24/2023)

Marcel Knüpfer^{1,2,3}, Zwenkau, Technical Administration Specialist and shift supervisor, Chairman of the
General Works Council of Vossloh Rail Services Deutschland GmbH and Member of the Group Works Council
(Member of the Supervisory Board since 6/1/2020)

Dr. Bettina Volkens^{2,4}, Königstein/Taunus, self-employed Consultant and Member of various Supervisory Boards
(Member of the Supervisory Board since 5/27/2020)
- Member of the Supervisory Board of CompuGroup Medical SE & Co. KGaA, Koblenz
- Member of the Supervisory Board of Bilfinger SE, Mannheim
- Member of the Supervisory Board of Elektrobau Mulfingen GmbH, Mulfingen

Andreas Kretschmann^{1,2,3}, Neuenrade, Certified Social Security Professional, Chairman of the
Group Works Council and Member of the Works Council of Vossloh Fastening Systems GmbH
(Member of the Supervisory Board from 8/30/2017 to 5/24/2023)

¹ Employee representative

² Member of the Personnel Committee

³ Member of the Audit Committee

⁴ Member of the Nomination Committee

⁵ Optional committee

Proposed dividend In accordance with German GAAP, the financial statements for the 2023 fiscal year show a net profit for the year of €93,850,213.80. After including the profit carried forward of €28,854,606.53, net profit retained came to €122,704,820.33.

The Executive Board and Supervisory Board propose to the Annual General Meeting that a dividend of €1.05 per share be paid out on the dividend-bearing capital stock of €49,857,682.23 and that the remaining amount of €104,262,431.33 be carried forward. The total dividend amount is €18,442,389.00.

Werdohl, Germany, March 7, 2024

Vossloh AG
The Executive Board

Oliver Schuster, Dr. Thomas Triska, Jan Furnivall

Responsibility statement

We confirm that, to the best of our knowledge and in accordance with applicable accounting principles, the consolidated financial statements present a true and fair view of the Group's net assets, financial position and results of operations, and the combined management report gives a true and fair view of the Group's performance and the overall position of the Group, as well as the significant risks and opportunities associated with the Group's expected development.

Werdohl, Germany, March 7, 2024

Vossloh AG
The Executive Board

Oliver Schuster, Dr. Thomas Triska, Jan Furnivall

Independent Auditor's report

To Vossloh Aktiengesellschaft, Werdohl/Germany

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

Audit Opinions

We have audited the consolidated financial statements of Vossloh Aktiengesellschaft, Werdohl/Germany, and its subsidiaries (the Group) which comprise the consolidated balance sheet as at 31 December 2023, the consolidated statement of profit and loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 January to 31 December 2023, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report for the parent and the group of Vossloh Aktiengesellschaft, Werdohl/Germany, 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 corporate governance statement pursuant to Section 289f and Section 315d German Commercial Code (HGB), including the further reporting on corporate governance included therein, which is referred to in the combined management report, nor the content of the consolidated nonfinancial statement pursuant to Section 315b HGB, which is included in the combined management report. In addition, we have not audited the content of the disclosures included in section "Adequacy and effectiveness of the risk management system and the internal control system" of the combined management report that were marked unaudited.

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 IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2023 and of its financial performance for the financial year from 1 January to 31 December 2023, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not cover the content of the statements referred to above as well as of the section "Adequacy and effectiveness of the risk management system and the internal control system".

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

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (No. 537/2014; referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) 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 combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 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 the following, we present the issue of recoverability of goodwill, which we have determined in the course of our audit to be a key audit matter.

Our presentation of this key audit matter has been structured as follows:

- a) description (including reference to corresponding information in the consolidated financial statements)
- b) auditor's response

Recoverability of goodwill

- a) The consolidated financial statements of Vossloh Aktiengesellschaft disclose goodwill of mEUR 294.2 under the intangible assets balance sheet item, accounting for 21.1% of the consolidated balance sheet total.

Within Vossloh Group, a distinction is made between four cash-generating units (CGUs), each of which is allocated goodwill. Goodwill is tested for impairment (impairment test) annually as at the balance sheet date or on related occasions. This impairment test is carried out by comparing the carrying amounts of the cash-generating units with their respective recoverable amounts in order to determine any need for impairment. The recoverable amount is determined on the basis of value in use taking into account the medium-term budget of the respective unit using expected discounted cash flows (discounted cash flow method).

The cash flow forecasts are based on the group planning for a three-year detailed planning period that was approved by the executive board, acknowledged by the supervisory board and which is applicable at the time the impairment test is carried out. This also comprises expectations on the future development of the market and country-specific assumptions on the development of macroeconomic indicators. Planning periods further in the future that account for a significant portion of value in use (period of perpetuity) are included in the value in use by rolling forward of cash flows taking into account a CGU-specific growth rate. Discounting is made using the weighted capital costs of the respective cash-generating unit.

The result of this valuation is highly dependent on the executive board's assessment of the future cash flows and the discount rate used and, therefore, is subject to great uncertainty. Therefore, and due to the complexity of the valuation of this high-amount item, this matter was of particular significance in the scope of our audit.

The executive board's disclosures on goodwill are included in chapter 10 of the notes to the consolidated financial statements.

- b) During our audit, we, among other things, obtained an understanding of the method applied in the impairment test, estimated the determination of the weighted capital costs and assessed the calculation method of the impairment test by consulting our valuation specialists. We examined the appropriateness of the future cash flows used in the valuation, among other things, by comparing them with the current planning prepared by the executive board and acknowledged by the supervisory board and by means of questioning the executive board regarding the material planning assumptions. Moreover, we reviewed the planning in a critical manner taking into account general and industry-specific market expectations. Together with the Parent's representatives in charge, we thoroughly discussed and obtained an under-

standing of any incremental adjustments of the detailed planning period and the rolling forward of cash flows for the period of perpetuity.

As already minor changes of the discount rate used may have material impacts on the amount of the determined recoverable amount, we dealt in detail with the parameters used in determining the discount rate used and obtained an understanding of the computation scheme. Furthermore, on account of the material significance of goodwill for assets and liabilities of the Group, we performed additional own sensitivity analyses in order to be able to assess any possible risk for impairment in the event of a potential change in a key valuation assumption. In addition, we audited the completeness and appropriateness of the disclosures in the notes to the consolidated financial statements required under IAS 36.

Other Information

The executive board and the supervisory board are responsible for the other information. The other information comprises

- the report of the supervisory board,
- the remuneration report pursuant to Section 162 AktG,
- the corporate governance statement pursuant to Section 289f HGB and Section 315d HGB, including the further reporting on corporate governance included therein, which is referred to in the combined management report,
- the consolidated nonfinancial statement pursuant to Section 315b HGB, which is included in the combined management report,
- the disclosures included in section "Adequacy and effectiveness of the risk management system and the internal control system" of the combined management report marked as unaudited,
- the executive board's confirmation pursuant to Section 297 (2) sentence 4 HGB and Section 315 (1) sentence 5 HGB, respectively, regarding the consolidated financial statements and the combined management report, and
- all other parts of the annual report,
- but not the consolidated financial statements, not the audited content of the combined management report and not our auditor's report thereon.

The supervisory board is responsible for the report of the supervisory board. The executive board and the supervisory board are responsible for the statement according to Section 161 AktG concerning the German Corporate Governance Code, which is part of the corporate governance statement and which is referred to in the combined management report, as well as for the remuneration report. Otherwise, the executive board is responsible for the other information.

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

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

- is materially inconsistent with the consolidated financial statements, with the audited content of the combined management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

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

The executive board is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive board is responsible for such internal control as it has 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 board is responsible for assessing the Group's ability to continue as a going concern. It also has the responsibility for disclosing, as applicable, matters related to going concern. In addition, it is 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 board is responsible for the preparation of the combined management report that as a whole provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive board is responsible for such arrangements and measures (systems) as it has considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

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

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

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

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

We exercise professional judgement and maintain professional scepticism throughout the audit. We also - identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- evaluate the appropriateness of accounting policies used by the executive board and the reasonableness of estimates made by the executive board and related disclosures.
- conclude on the appropriateness of the executive board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective 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 IFRS as adopted by the EU and with the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- evaluate the consistency of the combined 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 board in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive board 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 provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken or safeguards applied to eliminate independence threats.

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

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Audit of the Electronic Reproductions of the Consolidated Financial Statements and of the Combined Management Report Prepared for Publication Pursuant to Section 317 (3a) HGB

Audit Opinion

We have performed an audit in accordance with Section 317 (3a) HGB to obtain reasonable assurance whether the electronic reproductions of the consolidated financial statements and of the combined management report (hereinafter referred to as "ESEF documents") prepared for publication, contained in the file, which has the SHA 256 value 631807ff7c27c4bd6bf2cc1c4dc48b0b0fb8ccb1394a4cea443d96f7654d11d6, meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB ("ESEF format"). In accordance with the German legal requirements, this audit only covers the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format, and therefore covers neither the information contained in these electronic reproductions nor any other information contained in the file identified above.

In our opinion, the electronic reproductions of the consolidated financial statements and of the combined management report prepared for publication contained in the file identified above meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB. Beyond this audit opinion and our audit opinions on the accompanying consolidated financial statements and on the accompanying combined 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 of the Combined Management Report" above, we do not express any assurance opinion on the information contained within these electronic reproductions or on any other information contained in the file identified above.

Basis for the Audit Opinion

We conducted our audit of the electronic reproductions of the consolidated financial statements and of the combined management report contained in the file identified above in accordance with Section 317 (3a) HGB and on the basis of the IDW Auditing Standard: Audit of the Electronic Reproductions of Financial Statements and Management Reports Prepared for Publication Purposes Pursuant to Section 317 (3a) HGB (IDW AuS 410 (06.2022)). Our responsibilities in this context are further described in the "Group Auditor's Responsibilities for the Audit of the ESEF Documents" section. Our audit firm has applied the requirements of the IDW Quality Management Standards.

Responsibilities of the Executive Board and the Supervisory Board for the ESEF Documents

The executive board of the parent is responsible for the preparation of the ESEF documents based on the electronic files of the consolidated financial statements and of the combined management report according to Section 328 (1) sentence 4 no. 1 HGB and for the tagging of the consolidated financial statements according to Section 328 (1) sentence 4 no. 2 HGB.

In addition, the executive board of the parent is responsible for such internal controls that it has considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements for the electronic reporting format pursuant to Section 328 (1) HGB.

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 Audit of the ESEF Documents

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

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

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the general meeting on 24 May 2023. We were engaged by the supervisory board on 29 August 2023. We have been the group auditor of Vossloh Aktiengesellschaft, Werdohl/Germany, without interruption since the financial year 2019.

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).

OTHER MATTER – USE OF THE AUDITOR'S REPORT

Our auditor's report must always be read together with the audited consolidated financial statements and the audited combined management report as well as with the audited ESEF documents. The consolidated financial statements and the combined management report converted into the ESEF format – including the versions to be submitted for inclusion in the Company Register – are merely electronic reproductions of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our audit opinion contained therein are to be used solely together with the audited ESEF documents made available in electronic form.

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Christian Siepe.

Düsseldorf/Germany, 7 March 2024

Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

Signed:

André Bedenbecker

Wirtschaftsprüfer

(German Public Auditor)

Signed:

Christian Siepe

Wirtschaftsprüfer

(German Public Auditor)

Remuneration report

Pursuant to Article 162 of the German Stock Corporation Act (AktG), this report discloses the remuneration paid and owed by the company to all current and former members of the Executive and Supervisory Board in the 2023 fiscal year.

Executive Board remuneration

The remuneration paid and owed to the members of the Executive Board in the 2023 financial year is based on the remuneration system (the "remuneration system") that has been in force since January 1, 2023 and was approved by the Annual General Meeting on May 24, 2023. The remuneration system was applied to the remuneration of all applicable Executive Board members in the 2023 fiscal year without exception. The remuneration system does not apply in part to the employment contract of the current CEO, which was concluded in 2019 and therefore before the remuneration system came into effect.

Remuneration system and principles of remuneration

The remuneration for Executive Board members of Vossloh AG consists of fixed and variable components.

The fixed, non-performance-related remuneration consists of the **basic remuneration** and **fringe benefits** (such as, in particular, the provision of a company car and allowances for health, accident and luggage insurance) and – for the current CEO only – retirement benefit commitments in the form of pension payments upon reaching the retirement age of 63.

The performance-related component includes short-term variable remuneration ("annual bonus") and long-term variable remuneration ("multiyear bonus"). The **annual bonus** paid is dependent on the extent to which short-term performance targets are achieved. The relevant performance targets in the 2023 fiscal year were Group EBIT, Group sales and the average working capital. The **multiyear bonus** is contingent on long-term performance targets being achieved over an assessment period of three years (or two years for the incumbent CEO due to the previous contract which is not subject to the current remuneration system). The performance targets for the multiyear bonus for the 2023 fiscal year are the return on capital employed (ROCE) and the absolute and the relative performance of the Vossloh share in comparison to the weighted average performance of the DAX, MDAX and SDAX over the assessment period of the 2023 to 2025 fiscal years (or 2023 to 2024 for the incumbent CEO). The performance criteria for the remuneration paid and owed in the 2023 fiscal year are broken down into performance targets, target values, weightings and target achievement levels and disclosed below for each Executive Board member in the "Executive Board remuneration in the 2023 fiscal year" section.

In the event that the employment contract of an Executive Board member is subject to the remuneration system, the total remuneration of that Executive Board member will be limited to the **maximum remuneration** stipulated in their individual contract. The maximum remuneration specified by the Supervisory Board is €3,250,000 gross p.a. for the current CEO and €2,250,000 gross p.a. for each of the other members of the Executive Board.

During the 2023 fiscal year, the Supervisory Board had no reason to make use of its power to withhold or reclaim variable remuneration components in certain justified cases („malus and clawback provisions“), in particular in the case of certain material breaches of duty or in the event of the consolidated financial statements containing incorrect information.

Due to the fact that the remuneration report for the 2022 fiscal year was approved by the Annual General Meeting on May 24, 2023, there was also no reason to question the implementation of the remuneration system or the reporting, which had already been adapted last year to the now widespread understanding of the remuneration granted and owed in the reporting year.

Executive Board remuneration in the 2023 fiscal year

The table below is based on the Draft Guidelines on the Standardized Presentation of the Remuneration Report and provides information about the benefits owed and granted to the members of the Executive Board in the 2023 fiscal year within the meaning of Section 162 (1) Sentence 1 AktG

In the remuneration report, in addition to the basic remuneration for the respective reporting year, the remuneration paid and owed for the annual and multiyear bonuses is shown as the remuneration for which the assessment period expired at the end of the reporting year and which will be paid out in spring 2024 after the annual financial statements have been adopted on the basis of the respective target achievement. In accordance with this understanding of the term, the annual bonus 2023 of all members of the Executive Board and the multiyear bonus 2022 of the incumbent CEO (whose old contract provides for a two-year assessment period for the multiyear bonus) as well as the multiyear bonus 2021 of the other Executive Board members are allocated to the 2023 fiscal year as remuneration paid and owed.

Provisions for pension benefits are shown separately in "Retirement Benefits" rather than as paid and owed as no additions were made and none came due.

€		Fixed remuneration	Payments in kind	Total basic remuneration	Annual bonus	Multiyear bonus ¹	Total variable remuneration	Total remuneration	Remuneration in relation to total remuneration	
									Proportion basic remuneration	Proportion variable remuneration
Remuneration paid and owed										
Oliver Schuster CEO since 10/1/2019, Member of the Executive Board since 3/1/2014	2022	550,000	25,943	575,943	678,324	714,000	1,392,324	1,968,267	29 %	71 %
	2023	579,167	26,248	605,415	816,000	471,736	1,287,736	1,893,151	32 %	68 %
Dr. Thomas Triska Member of the Executive Board since 11/1/2020	2022	350,000	17,818	367,818	474,827	0	474,827	842,645	44 %	56 %
	2023	366,667	17,909	384,576	571,200	333,565	904,765	1,289,341	30 %	70 %
Jan Furnivall Member of the Executive Board since 11/1/2020	2022	350,000	6,032	356,032	474,827	0	474,827	830,859	43 %	57 %
	2023	366,667	6,079	372,746	571,200	333,565	904,765	1,277,511	29 %	71 %

¹ The basic remuneration for Dr. Triska also includes the contributions of €22.9 thousand made by him to a provident fund for his retirement pension by way of deferred compensation; see the explanations in the "Retirement benefits" section.

² The basic amount of the 2021 multiyear bonus for Dr. Triska and Mr. Furnivall was increased once by 2/12 to take into account the start of their appointment to the Executive Board in November 2020.

The remuneration of the Executive Board in the table above meets the aims of the remuneration system. The remuneration promotes the long-term development of the company by providing incentive for long-term and sustainable growth. The members of the Executive Board participate in the success of the company through the use of appropriate performance criteria and ambitious targets. The multiyear bonus makes up the majority of the variable remuneration if targets are achieved in full. The majority of the performance criteria for the multiyear bonus are tied to the performance of the Vossloh share, ensuring that the interests of Vossloh AG's shareholders are represented.

The performance targets, their weighting and, in the case of the share price-based components of the multi-year bonus, the target values have been agreed in the employment contracts of the Executive Board members. The specific target values for the annual bonus and the multiyear bonus for the 2023 fiscal year were defined before the beginning of the fiscal year.

The target and threshold values as well as the extent to which targets were achieved in relation to the individual performance targets are provided in the following overview. With regard to the annual bonus for the 2023 fiscal year, the Supervisory Board made use of the option provided in the remuneration system and employment contracts to reduce or increase the target bonus for achieving all of the targets in full for the annual bonus under certain conditions. The target values set before the beginning of the fiscal year were not (subsequently) changed as part of this process. The Supervisory Board is of the opinion that the Executive Board managed the company extremely successfully in the past year, the most successful financial year since the company's business activities were focused on rail infrastructure. Despite adverse circumstances, in particular the unforeseeable geopolitical developments, the members of the Executive Board clearly exceeded the targets set in all respects. The Supervisory Board exercised its discretion and recognized this achievement by multiplying the target bonus for the members of the Executive Board by a factor of 1.2.

		Applied performance criteria and type of remuneration required	Relative weighting of performance criteria (in %)	Thresholds for target achievement		Determined performance according to line specification	Extent to which target has been achieved in %
				0 % target achievement, target value missed by (in %)	170 % target achievement, target exceeded by (in %)		
Performance criteria incl. target range for variable remuneration paid and owed in the 2023 fiscal year							
Oliver Schuster	Annual bonus	Group EBIT (€ mill.)	65	(24.7)	8.6	98.5	275
		Group sales (€ mill.)	20	(13.2)	5.1	1,214.3	250
		Average working capital (€ mill.)	15	15.7	(4.4)	209.4	210
	Multiyear bonus	Average ROCE (Return on Capital Employed) (%)	48	(31.0)	9.2	9.4	157
		Absolute performance of the Vossloh share (€)	26	(6.9)	4.7	42.0	0
		Relative performance of the Vossloh share (€)	26	(2.0)	2.4	42.0	144
Dr. Thomas Triska	Annual bonus	Group EBIT (€ mill.)	65	(24.7)	8.6	98.5	275
		Group sales (€ mill.)	20	(13.2)	5.1	1,214.3	250
		Average working capital (€ mill.)	15	15.7	(4.4)	209.4	210
	Multiyear bonus	Average ROCE (Return on Capital Employed) (%)	32	(22.4)	14.5	8.5	125
		Absolute performance of the Vossloh share (€)	34	(10.1)	7.1	43.0	2
		Relative performance of the Vossloh share (€)	34	(2.1)	2.5	43.0	144
Jan Furnivall	Annual bonus	Group EBIT (€ mill.)	65	(24.7)	8.6	98.5	275
		Group sales (€ mill.)	20	(13.2)	5.1	1,214.3	250
		Average working capital (€ mill.)	15	15.7	(4.4)	209.4	210
	Multiyear bonus	Average ROCE (Return on Capital Employed) (%)	32	(22.4)	14.5	8.5	125
		Absolute performance of the Vossloh share (€)	34	(10.1)	7.1	43.0	2
		Relative performance of the Vossloh share (€)	34	(2.1)	2.5	43.0	144

Former members of the Executive Board Former member of the Executive Board of Vossloh AG Mr. Werner Andree received remuneration paid and owed within the meaning of Section 162 (1) Sentence 1 AktG in the form of a pension in the amount of €265,965 in the 2023 fiscal year (previous year: €258,135). In the reporting year, other former members of the Executive Board received a total of €873,323 (previous year: €925,523) in pension payments.

The company offers the members of the Executive Board the option of converting remuneration components up to the amount of their fixed annual salary into an entitlement to company pension benefits of equal value each year (deferred compensation). If the option of deferred compensation is utilized, this is carried out via a provident fund. Dr. Triska took advantage of this option in the reporting year. The resulting present value of the future pension amounts to €13,765.56 as at December 31, 2023; this does not result in an expense for the company or a provision, as the claim is financed via a reinsurance policy and the contributions are made by Dr. Triska.

Pension expenses

The old contract for the current CEO also includes an entitlement to receive pension payments upon reaching 63 years of age. Depending on the years of service on the Executive Board, annual pension benefits after a minimum three-year Executive Board membership amount to 1%, or in the case of a first-time contract renewal 2 %, up to a maximum of 40 % of the average fixed remuneration to be taken as a basis during the last three years before leaving the company. Upon death, the surviving spouse is entitled to a pension in the amount of 60 % of the last amount to be paid to the Management Board member.

The present value of the pension entitlement and the addition in accordance with the requirements of German commercial law and the pension expense in accordance with IFRS are provided in the following table:

€		Pension entitlements in accordance with the requirements of German commercial law		Service costs in accordance with IFRS	
		Amount added in for the fiscal year	Present value of pension obligation		
Entitlements to defined retirement benefits					
	Oliver Schuster Chairman of the Executive Board since October 1, 2019	2022	446,526	2,510,044	194,782
		2023	87,944	2,597,988	231,235

In the event of an agreed premature termination of the employment contract, the Executive Board contracts contain commitments to pay out their expected remuneration for the regular remaining term of the contract, unless the termination is based on a unilateral resignation by the Executive Board member without good cause or on a revocation of the appointment for a reason that also constitutes good cause for the termination of the employment relationship. However, the commitments are in any case limited to a maximum of two years' remuneration (so-called severance payment cap). The variable remuneration attributable to the period up to the termination of the contract is paid in accordance with the remuneration system based on the originally agreed targets and comparison parameters and on the due dates specified in the contract. No payment obligations are made in the event of an early termination of Executive Board duties due to a change of control.

Commitments in the event of premature termination of duties

Remuneration of the Supervisory Board

The remuneration of the Supervisory Board is based on Article 17 of the company's Articles of Association and the remuneration system for the members of the Supervisory Board which was approved by the Annual General Meeting on May 24, 2023, which has been applied without restriction since January 1, 2023.

Remuneration of the Supervisory Board in 2023

In addition to the reimbursement for their expenses and in line with recommendation G.18 of the GCGC, Supervisory Board members receive a fixed annual remuneration for duties performed of 50,000 (gross) to be paid after the conclusion of the fiscal year. The Supervisory Board Chairman receives three times and the vice-chairman one-and-a-half times the above fee. Membership in a committee is compensated by a premium of one quarter of the aforementioned remuneration amounts. The Audit Committee Chairman receives three times the additional Audit Committee membership fee. If the Supervisory Board Chairman is also a committee member, no additional fee is to be paid for his activities on the committee.

In addition, the members of the Supervisory Board receive a gross attendance fee of €2,000 for each meeting of the Supervisory Board or its committees that they have attended (physically or virtually). If the members of the Supervisory Board attend several meetings of the Supervisory Board or its committees on the same day, the attendance fee is only paid once in total. No attendance fee is granted for resolutions passed by circular resolution.

Due to the fact that the remuneration report for the 2022 fiscal year was approved by the Annual General Meeting on May 24, 2023, there was no reason to question the reporting on the remuneration of the Supervisory Board.

The table below provides information about the remuneration owed and paid to the members of the Supervisory Board in the 2023 fiscal year within the meaning of Section 162 AktG:

	2023					2022				
	Fixed remuneration		Remuneration for activities on committees/attendance fees		Total	Fixed remuneration		Remuneration for activities on committees		Total
	€	%	€	%	€	€	%	€	%	€
Prof. Dr. Rüdiger Grube, Chairman	150,000	87	22,000	13	172,000	120,000	100	0	0	120,000
Ulrich M. Harnacke, Deputy Chairman	75,000	45	92,500	55	167,500	60,000	60	40,000	40	100,000
Dr. Roland Bosch	50,000	52	47,000	48	97,000	40,000	80	10,000	20	50,000
Dr. Bettina Volkens	50,000	52	47,000	48	97,000	40,000	80	10,000	20	50,000
Marcel Knüpfer	50,000	66	26,333	34	76,333	40,000	100	–	0	40,000
Martin Klaes (since May 24, 2023)	33,333	81	8,000	19	41,333	–	–	–	–	–
Andreas Kretschmann (until May 24, 2023)	20,833	51	20,417	49	41,250	40,000	67	20,000	33	60,000
Total	429,167		263,250		692,417	340,000		80,000		420,000

Comparative view of changes in board compensation, the results of operations and remuneration for employees

The table below provides a comparison between the change in the remuneration provided for the members of the Executive Board and Supervisory Board on the one hand and the change in the results of operations of Vossloh AG and the Vossloh Group and the average remuneration for employees.

%	2020 compared to 2019	2021 compared to 2020	2022 compared to 2021	2023 compared to 2022
Executive Board remuneration^{1,2}				
Oliver Schuster (CEO)	42 %	13 %	9 %	–4 %
Dr. Thomas Triska (CFO)		7 %	3 %	53 %
Jan Furnivall (COO)		7 %	3 %	54 %
Supervisory Board remuneration¹				
Prof. Dr. Rüdiger Grube (Chairman of the Supervisory Board)		0%	0%	43%
Ulrich M. Harnacke (Deputy Chairman of the Supervisory Board)	–8%	–8%	0%	68%
Dr. Roland Bosch		–17%	0%	94%
Martin Klaes (since May 24, 2023)				–
Marcel Knüpfer		0%	0%	91%
Andreas Kretschmann (until May 24, 2023)	29%	16%	0%	65%
Dr. Bettina Volkens		–17%	0%	94%
Earnings development				
Net income/net loss for the financial year in accordance with HGB (Vossloh AG)	16 %	115 %	–928 %	247 %
EBIT in accordance with IFRS (Vossloh Group) ³	31 %	–1 %	8 %	26 %
Average remuneration of employees on an FTE basis				
Remuneration for employees ⁴	–16 %	–1 %	2 %	8 %

¹ Determined on a pro rata basis in previous years when required.

² Without the first-time inclusion of the multiyear bonus for Dr. Triska and Mr. Furnivall, there would be an increase of 13% and 14% respectively in 2023 compared to 2022.

³ Includes adjusted figure for 2019. The change in 2020 would have been 294% compared to the previous year if unadjusted EBIT had been used.

⁴ Wages and salaries in accordance with IFRS (excluding discontinued operations); number of employees on an FTE basis excluding the members of the Vossloh AG Executive Board.

The remuneration specified for the respective members of the Executive Board and Supervisory Board in the relevant fiscal year corresponds to the remuneration paid and owed in the 2023 fiscal year within the meaning of Section 162 of the German Stock Corporation Act (AktG) and in line with how the company defines the term. The results of operations is based on the company's net income disclosed in the separate financial statements of Vossloh AG in accordance with Section 275 (2) No. 17 HGB and the EBIT of the Vossloh Group. Remuneration for employees is based on the average remuneration excluding incidentals for all employees of the Vossloh Group on an FTE basis, including managers/executives within the meaning of Section 5 (3) of the Works Constitution Act and temporary staff. Any remuneration received by an employee who is also a member of the Supervisory Board of Vossloh AG is not included. In order to ensure the comparability of disclosures related to the earnings trend and remuneration for employees, all employees working for a subsidiary reported as a discontinued operation in the consolidated financial statements for the relevant fiscal year are excluded.

Werdohl, Germany, March 7, 2024

Vossloh AG

The Executive Board
Oliver Schuster, Dr. Thomas Triska, Jan Furnivall

The Supervisory Board
Prof. Dr. Rüdiger Grube

Report of the independent auditor

To Vossloh Aktiengesellschaft, Werdohl/Germany

We have audited the accompanying remuneration report of Vossloh Aktiengesellschaft, Werdohl/Germany, ("the Company") for the financial year from 1 January to 31 December 2023, including the related disclosures, which has been prepared to comply with Section 162 German Stock Corporation Act (AktG).

Responsibilities of the Executive Directors and of the Supervisory Board

The executive directors and the supervisory board of Vossloh Aktiengesellschaft, Werdohl/Germany, are responsible for the preparation of the remuneration report, including the related disclosures, that complies with the requirements of Section 162 AktG. The executive directors and the supervisory board are also responsible for such internal control as they consider necessary to enable the preparation of a remuneration report, including the related disclosures, that is free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

Auditor's Responsibilities

Our responsibility is to express an opinion on this remuneration report, including the related disclosures, based on our audit. We conducted our audit in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). These Standards require that we fulfil the professional responsibilities and that we plan and perform the audit so that we obtain reasonable assurance as to whether the remuneration report, including the related disclosures, is free from material misstatements.

An audit involves performing audit procedures in order to obtain audit evidence for the amounts stated in the remuneration report, including the related disclosures. The choice of the audit procedures is subject to the auditor's professional judgement. This includes assessing the risk of material misstatements, whether due to fraud or error, in the remuneration report, including the related disclosures. In assessing these risks, the auditor considers the system of internal control, which is relevant to preparing the remuneration report, including the related disclosures. Our objective is to plan and perform audit procedures that are appropriate in the circumstances, but not to express an audit opinion on the effectiveness of the Company's system of internal control. An audit also comprises an evaluation of the accounting policies used, of the reasonableness of accounting estimates made by the executive directors and the supervisory board as well as an evaluation of the overall presentation of the remuneration report, including the related disclosures.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Audit Opinion

In our opinion, on the basis of the knowledge obtained in the audit, the remuneration report for the financial year from 1 January to 31 December 2023, including the related disclosures, complies, in all material respects, with the accounting principles of Section 162 AktG.

Other Matter – Formal Audit of the Remuneration Report

The audit of the content of the remuneration report described in this report comprises the formal audit required under Section 162 (3) AktG including the issuance of a report on this audit. Since our audit opinion on the audit of the content is unmodified, this audit opinion includes that the disclosures required under Section 162 (1) and (2) AktG are contained, in all material respects, in the remuneration report.

Intended Use of the Report

We issue this report as stipulated in the engagement letter agreed with the Company. The audit has been performed for the purposes of the Company and the report is solely intended to inform the Company about the result of the audit.

Liability

This report is not intended to be used by third parties as a basis for any (asset) decision. We are liable solely to Vossloh Aktiengesellschaft, Werdohl/Germany, and our liability is also governed by the engagement letter dated 30 August 2023 agreed with the Company as well as the "General Engagement Terms for Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" promulgated by the Institut der Wirtschaftsprüfer (IDW) in the version dated 1 January 2017 (IDW-AAB). However, we do not accept or assume liability to third parties.

Düsseldorf/Germany, 7 March 2024

Deloitte GmbH

Wirtschaftsprüfungsgesellschaft

Signed:

André Bedenbecker

Wirtschaftsprüfer

(German Public Auditor)

Signed:

Christian Siepe

Wirtschaftsprüfer

(German Public Auditor)

Financial calendar 2024/2025

Financial calendar 2024

Annual General Meeting	May 15, 2024
Publication of interim report/interim financial statements as of March 31	April 25, 2024
as of June 30	July 25, 2024
as of September 30	October 31, 2024
For further dates, go to www.vossloh.com	

Financial calendar 2025

Publication of 2024 financial data	March 2025
Press conference	March 2025
Investor and analyst conference	March 2025
Annual General Meeting	May 2025

Investor Relations

Contact	Dr. Daniel Gavranovic
Email	investor.relations@vossloh.com
Phone	+49 2392 52-609
Fax	+49 2392 52-219

Information on the Vossloh share

ISIN	DE0007667107
Trading locations	Xetra, Tradedate, Frankfurt, Düsseldorf, Berlin, Hanover, Hamburg, Stuttgart, Munich
Index	SDAX
Number of shares outstanding as of 12/31/2023	17,564,180
Annual average number of shares outstanding	17,564,180
Share price on 12/31/2023	€41.95
High/low price 2023	€44.65/€36.50
Reuters code	VOSG.DE
Bloomberg code	VOS.GR
Proposed dividend	€1.05

Disclaimer: This annual report contains forward-looking statements based on estimates made by the Executive Board regarding future developments. The statements and forecasts represent an assessment based on all information presently available. If the assumptions underlying such statements and forecasts fail to materialize, actual results may differ from current expectations. Trademarks: All trademarks or product names mentioned in this annual report are the property of their respective owners. This applies in particular to DAX, MDAX, SDAX, TecDAX and Xetra, which are registered trademarks and the property of Deutsche Börse AG.

Glossary

Capital employed	Working capital plus fixed assets	Interest rate cap	Option deal that hedges buyers against increasing interest rates through an interest rate ceiling
Cash pooling	Balance transfer procedure for pooling liquidity	Interest rate swap	Contractual agreement on the exchange of fixed and variable interest payment flows based on an underlying nominal value
Credit line	Credit agreement between two or more parties	Net financial debt	Financial liabilities minus cash and cash equivalents and short-term securities
Derivative financial instruments	Contracts whose fair values are derived from basis values (e.g., stocks or currencies)	Personnel expenses per employee	Personnel expenses/annual average headcount
EBIT	Earnings before interest and taxes	Return on capital	See return on capital employed
EBIT margin	EBIT/sales revenues	Return on capital employed	EBIT/average capital employed
EBITDA	Earnings before interest, taxes, depreciation and amortization	Treasury	Finance management
EBITDA margin	EBITDA/sales revenues	Value added	EBIT minus weighted average cost of capital (WACC) x average capital employed
EBT	Earnings before taxes	Working capital	Trade receivables (including contract assets) plus inventories minus trade payables (including contract liabilities) minus prepayments received minus other current provisions (adjusted for matters not attributable to the operating business)
Employee bonus program	Program for granting shares to employees free of charge or at reduced prices	Working capital intensity	Average working capital/sales
Equity ratio	Equity/balance sheet total		
Financial liabilities	Schuldschein loans, bank debts, notes payable and liabilities from finance leases		
Guarantee	Assumption of guarantees and surety bonds		
IAS/IFRS	International Accounting Standards/ International Financial Reporting Standards		

Addresses

Vossloh Aktiengesellschaft

Vosslohstrasse 4 • 58791 Werdohl, Germany
PO Box 1860 • 58778 Werdohl, Germany
Phone +49 2392 52-0
Fax +49 2392 52-219
www.vossloh.com

Vossloh Fastening Systems GmbH

Vosslohstrasse 4 • 58791 Werdohl, Germany
PO Box 1860 • 58778 Werdohl, Germany
Phone +49 2392 52-0
Fax +49 2392 52-448

Vossloh Tie Technologies

Rocla Concrete Tie, Inc.
1819 Denver W Dr.,
S 450 Lakewood, CO 80401
Phone +1 303 296-3500
Fax +1 303 297-2255

Vossloh Switch Systems

Vossloh Cogifer SA
23 rue François Jacob
92500 Rueil-Malmaison, France CEDEX
Phone +33 155 477 300
Fax +33 155 477 392

Vossloh Rail Services GmbH

Hannoversche Strasse 10
21079 Hamburg, Germany
Phone +49 40 430931-0
Fax +49 40 430931-342

Imprint

Vossloh AG

Main address:
Vosslohstrasse 4 • 58791 Werdohl, Germany
Mailing address:
PO Box 1860 • 58778 Werdohl, Germany

Editorial staff:

Vossloh AG
Uwe Jülichs, Swisttal
Dr. Ilse Preiss, Winnenden

Project coordination, design, realization:

Vossloh AG,
Corporate Marketing Communication

Photography:

Andreas Henk, Düsseldorf
Markus-Steuer.de
Vossloh AG
Adobe Stock
iStock

Illustration:

Adobe Stock
Vossloh AG

Final corrections:

pro verbis, Bochum

Production:

Staudt Lithographie GmbH, Bochum

Editorial deadline: March 2024

This Annual Report has also been published in German and is available at www.vossloh.com.

Ten-year overview*

		2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Income statement data											
Sales revenues	€ mill.	1,214.3	1,046.1	942.8	869.7	916.4	865.0	918.3	822.5	952.9	1,100.8
EBIT	€ mill.	98.5	78.1	72.3	73.1	55.7 ⁴	54.2	70.3	57.5	42.3	30.6 ⁴
Net interest result	€ mill.	(16.0)	(10.6)	(7.5)	(14.4)	(18.5)	(13.4)	(12.5)	(10.6)	(11.1)	(24.2)
EBT	€ mill.	82.5	67.5	64.8	58.7	(56.1)	40.8	57.8	46.9	31.2	(207.6)
Net income	€ mill.	55.3	56.0	35.9	20.8	(136.8)	22.7	0.3	10.1	77.8	(205.7)
Earnings per share	€	2.21	2.38	1.31	0.98	(8.32)	1.14	(0.50)	0.22	5.42	(16.46)
Return on capital employed	%	10.5	8.2	8.1	8.4	(4.2)	6.8	8.9	8.8	5.8	(21.7)
Value added	€ mill.	18.9	11.5	9.5	12.5	(105.4)	(5.8)	11.1	(1.5)	(31.1)	(267.8)
Balance sheet data											
Fixed assets	€ mill.	746.1	731.6	726.0	694.1	659.2	646.1	568.7	467.8	486.7	548.8
Capital expenditure ¹	€ mill.	74.5	58.2	51.3	68.7	59.8	60.5	39.5	30.3	34.2	50.7
Depreciation ¹	€ mill.	59.5	53.1	51.9	50.0	86.4	35.5	33.6	31.5	35.7	123.2
Closing working capital	€ mill.	193.1	191.6	175.6	155.3	180.3	216.0	190.0	159.2	213.8	226.5
Closing capital employed	€ mill.	939.2	923.2	901.6	849.4	839.5	862.0	758.7	627.0	700.5	775.3
Equity	€ mill.	638.5	625.1	587.9	412.4	403.6	523.3	532.4	550.8	428.7	349.6
thereof:											
Noncontrolling interests	€ mill.	28.1	27.2	28.6	15.9	9.4	10.8	15.0	18.0	17.0	19.7
Net financial debt ²	€ mill.	219.5	237.5	215.6	351.3	370.4	307.3	207.7	85.0	218.6	283.0
Total assets	€ mill.	1,392.7	1,368.8	1,289.4	1,214.4	1,331.4	1,266.9	1,252.9	1,367.2	1,389.9	1,604.4
Equity ratio	%	45.8	45.7	45.6	34.0	30.3	41.3	42.5	40.3	30.8	21.8
Cash flow statement data											
Cash flow from operating activities	€ mill.	137.3	71.6	81.3	56.1	12.3	37.6	24.5	65.8	107.8	(42.2)
Cash flow from investing activities	€ mill.	(65.4)	(44.9)	(57.9)	(3.0)	(15.5)	(95.0)	(124.2)	(43.2)	(11.6)	(58.3)
Cash flow from financing activities	€ mill.	(39.4)	(29.3)	(30.8)	(67.4)	28.1	(14.1)	20.7	79.3	(77.0)	103.7
Net cash inflow/outflow	€ mill.	32.5	(2.6)	(7.4)	(14.3)	24.9	(71.5)	(79.0)	101.9	19.2	3.2
Workforce											
Annual average headcount	Number	3,999	3,794	3,612	3,482	3,774	3,720	3,934	3,682	4,069	4,883
thereof: in Germany	Number	869	788	748	720	871	866	854	840	1,244	1,853
Abroad	Number	3,130	3,006	2,864	2,762	2,903	2,854	3,080	2,842	2,825	3,030
Personnel expenses	€ mill.	255.2	226.8	211.8	205.1	260.1	214.9	214.8	197.1	218.1	283.0
Personnel expenses per employee	€ thous.	63.8	59.8	58.6	58.9	68.9	57.0	54.6	53.5	53.6	58.0

Ten-year overview of Vossloh AG

		2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Capital stock	€ mill.	49.9	49.9	49.9	49.9	49.9	45.3	45.3	45.3	37.8	37.8
Dividends per share ³	€	1.05	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00
Year-end closing price	€	41.95	39.10	45.15	41.35	37.00	42.45	46.80	59.61	57.74	53.50
Closing market capitalization	€ mill.	736.8	686.8	793.0	726.3	649.9	677.8	747.3	951.8	793.1	712.9

*2017 and 2016 with Locomotives and Electrical Systems business units reported under discontinued operations;

2015 with Rail Vehicles and Electrical Systems reported under discontinued operations;

2014 and earlier years as described previously.

¹ Excluding noncurrent financial instruments; depreciation/amortization plus impairment losses/reversals of impairment losses

² In brackets: net financial assets

³ Subject to the approval of the Annual General Meeting

⁴ 2014 and 2019 have been adjusted



vossloh.com