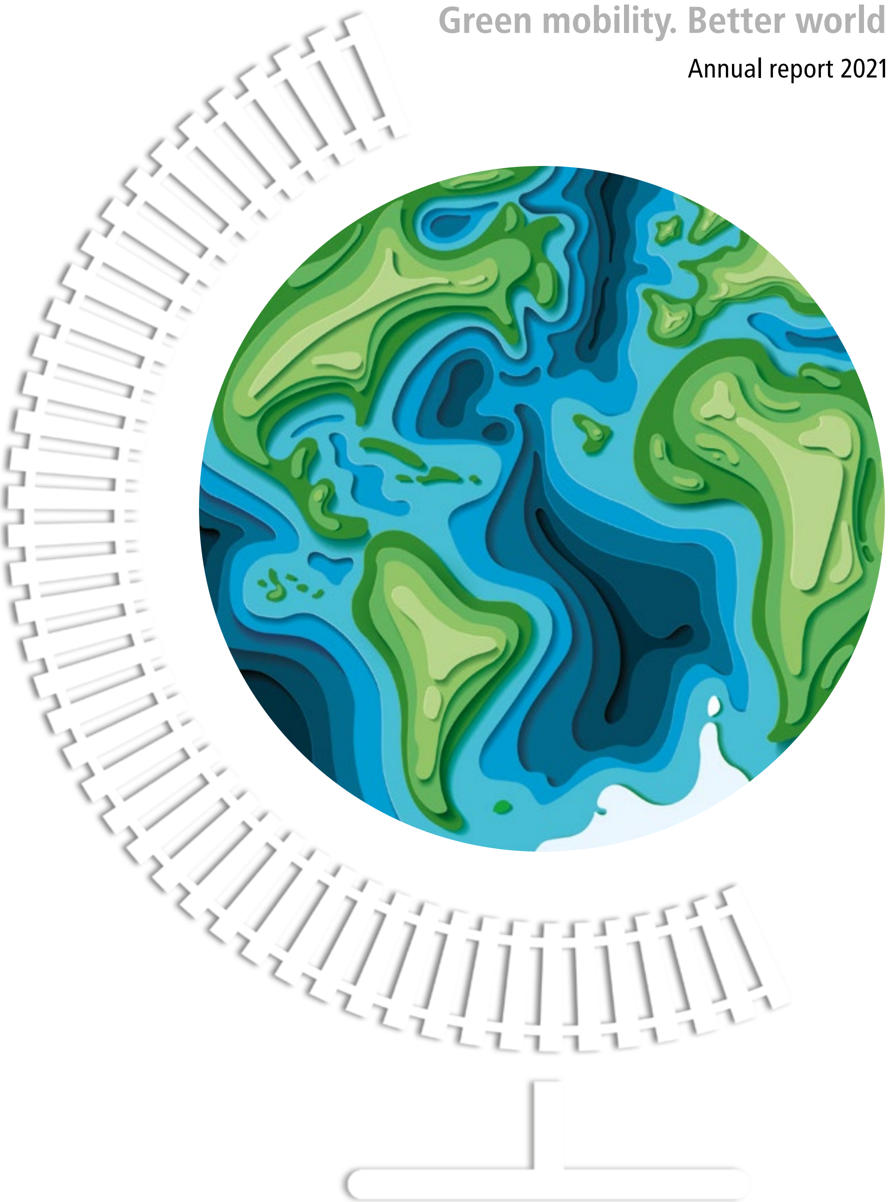
vossloh

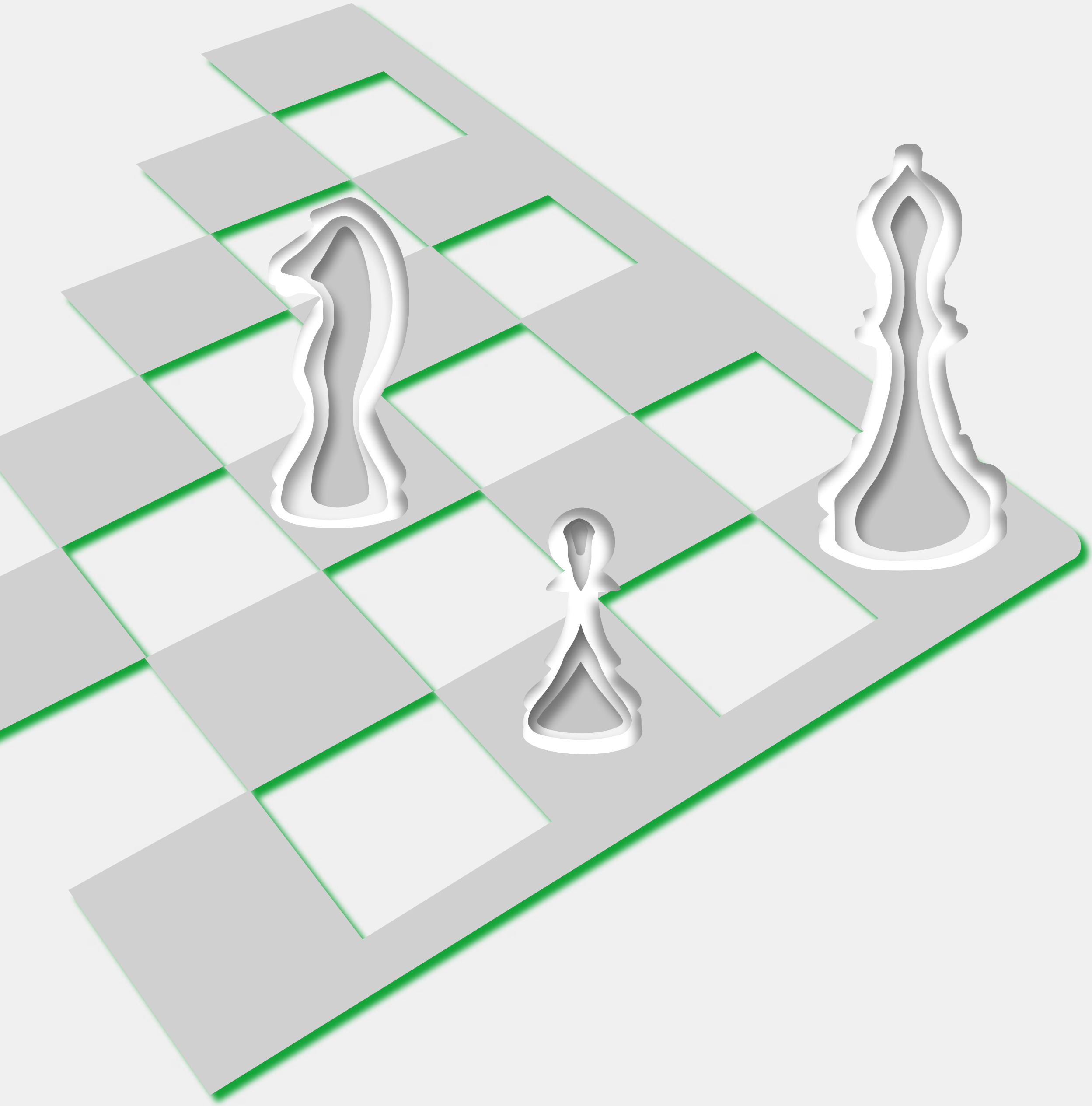
enabling green mobility

Green mobility. Better world.

Annual report 2021



Annual financial statements and combined management report of Vossloh AG for the 2021 fiscal year



Combined management report

of the Vossloh Group and Vossloh AG as of December 31, 2021

Business and market environment

Segmentation and competitive position

Vossloh is active in rail infrastructure markets worldwide. The Company provides a wide range of 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 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 16 ff.

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.
- In North America and Australia, Vossloh is a leading manufacturer of concrete ties.

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 Fastening Systems business unit are located in Germany, China, Poland, the USA and Russia. The Tie Technologies business unit manufactures concrete ties in the USA, Mexico, Canada and Australia. The switch systems and crossings in the Customized Modules division are manufactured primarily in France, Sweden, Australia, Luxembourg, Poland, Finland, the United Kingdom, India and China. The majority of rail services in the Lifecycle Solutions division are provided in Western and Northern Europe, in addition to China and the USA.

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 as well as
- 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, EBITDA margin and EBIT margin. While the Company uses sales revenues, EBITDA margin 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 is focused 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/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 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 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 7.0 percent was used as the yield expected by investors and lenders for the purposes of intragroup controlling in the 2021 fiscal year, as it was in the previous year.

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. The Vossloh Group has no nonfinancial performance indicators of significance for the activities of the company. Nonfinancial performance indicators which do not play a central role in management are provided in the nonfinancial Group statement, which begins on page 45.

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 Group Executive Board with the involvement of the relevant central departments of Vossloh AG.

Economic report

Macroeconomic and industry-specific conditions

Investments in rail infrastructure around the world are generally made 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 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 2021 was 97.7 percent according to the statistical office of the European Union. This was the most recent figure available when this annual report was prepared. The debt ratio was 96.6 percent at the end of the third quarter of 2020. At the end of September 2021, the debt ratio of the entire EU was 90.1 percent, compared to 89.2 percent in the previous year. The higher debt ratios are primarily attributable to the substantial increases in sovereign debt resulting from the financing of government measures to contain the COVID-19 pandemic. In the year under review, there was no significant impact on Vossloh’s business activities from the increase in sovereign debt.

From a global perspective, the rail technology market has shown a steady upward trend 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, the increase of international trade flows and, most significantly, increasing environmental awareness. 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. The European Union had designated 2021 as the ”European Year of Rail“ to promote the climate targets for the transport sector defined in the European Green Deal. Moreover, the rail sector is undergoing a profound transformation due to digitalization, automation and artificial intelligence, but also due to the standardization and liberalization of rail transport.

A number of studies regularly analyze developments in the global rail technology market. The most important of these is the World Rail Market Study, published by the European rail industry association UNIFE. The study is updated every two years; the most recent results were published in October 2020.

According to UNIFE, the current global volume of the rail market is around €177 billion per year. The Association of the European Rail Industry considers about 62 percent of the total volume – some €110 billion – to be an accessible market share. 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. Based on UNIFE data, the accessible share of the infrastructure market (excluding electrification) was worth around €18 billion per year between 2017 and 2019. Roughly 35 percent of market volume is accounted for by Western Europe and approximately 30 percent by NAFTA countries (USA, Canada and Mexico) according to UNIFE data. These are followed by the Asia Pacific region with roughly 14 percent, Eastern Europe with 8 percent and Africa/ Middle East with 6 percent. Markets in the Commonwealth of Independent States (CIS) and Latin America represent smaller portions of the accessible market volume at approximately 4 percent and 3 percent respectively. The total volume of the accessible infrastructure services market is currently worth around €6 billion based on UNIFE data, equivalent to approximately 40 percent of the total infrastructure services market.

Business acquisitions

The contract for the acquisition of all shares in the companies ETS Spoor BV (now operating under the name of Vossloh ETS BV) and ETS International BV was signed on July 30, 2021. The acquirer is Vossloh Rail Services International GmbH, Hamburg. Both companies do business in the Dutch rail market and distribute the products and services of companies from several segments. The main goal of the acquisition is to tap into additional market potential for services relating to the maintenance of rails and switches. ETS International BV, which up to now was only active in international projects, will be merged into Vossloh ETS BV during the 2022 fiscal year.

Results of operations

Vossloh divisions – Orders received and order backlog

	Orders received		Order backlog	
€ mill.	2021	2020	2021	2020
Core Components	398.4	349.6	211.8	247.0
Customized Modules	452.5	472.6	391.4	338.4
Lifecycle Solutions	122.2	103.5	14.9	10.2
Vossloh AG/consolidation	(25.5)	(10.2)	(6.7)	(1.1)
Group	**947.6**	**915.5**	**611.4**	**594.5**

Orders received significantly higher than previous year

In the 2021 fiscal year, the Vossloh Group was able to significantly increase orders received, exceeding the previous year's figure by €32.1 million. The positive trend was attributable in particular to the Core Components division. Here again, the increase could be traced back to the Fastening Systems business unit, which had higher orders received in China, India and Australia in particular. By contrast, the Tie Technologies business unit had lower orders received than a year earlier. While orders received increased in Australia, this number remained well below the previous year's level in the United States. The Lifecycle Solutions division reported noticeably higher orders received. The increase was in particular due to a positive development of the order situation in China as well as in the Netherlands – following the acquisition of ETS Spoor – and in Germany. By contrast, the Customized Modules division did not match the previous year's figure but again achieved a high level in 2021. This was mainly due to a major order from Turkey. The book-to-bill ratio of the Vossloh Group, i.e. the ratio of orders received to sales, amounted to 1.01 in the fiscal year (previous year: 1.05). The order backlog increased by €16.9 million at the end of 2021. Due to the high number of framework agreements, the order backlog indicator is only of limited significance. Order volumes from new framework agreements are generally not recognized in orders received until the point in time at which the orders are actually called off.

Sales revenues of €942.8 million were significantly higher than originally expected

In the 2021 fiscal year, the Vossloh Group generated significantly higher sales revenues than in the previous year. Sales revenues increased by 8.4 percent from €869.7 million in 2020 to €942.8 million. This was significantly above the originally forecast sales corridor of €850 million to €925 million and also at the upper end of the forecast that was raised in mid-2021 from €900 million to €950 million. The increase in sales revenues was mainly attributable to the Core Components division and here to the Fastening Systems business unit. The Customized Modules and Lifecycle Solutions divisions also contributed to the increase.

Vossloh Group – Sales by region

	€ mill.	%	€ mill.	%
	2021		2020	
Germany	94.6	10.0	74.2	8.5
France	73.1	7.8	89.1	10.2
Rest of Western Europe	71.2	7.6	67.4	7.8
Northern Europe	114.9	12.2	115.5	13.3
Southern Europe	81.3	8.6	64.4	7.4
Eastern Europe	67.4	7.1	65.4	7.5
Total of Europe	**502.5**	**53.3**	**476.0**	**54.7**
The Americas	89.8	9.5	127.3	14.7
Asia	218.9	23.2	151.4	17.4
Africa	28.3	3.0	15.8	1.8
Australia	103.3	11.0	99.2	11.4
Total	**942.8**	**100.0**	**869.7**	**100.0**

Noticeable increase in sales revenues in Europe, especially in Germany and Southern Europe

Compared to the previous year, sales revenues in Europe increased by 5.6 percent in the year under review. With growth of 27.6 percent, the sales trend in Germany, in particular, contributed to the increase. This was primarily due to higher sales revenues in the Fastening Systems business unit. By contrast, the Group recorded a downturn in sales revenues from France. The Customized Modules division saw a sharp drop in sales there. In Northern Europe, sales revenues remained at the level of the previous year. In Southern Europe, Vossloh generated sales that were 26.2 percent higher than in the previous year. This was mainly due to higher sales revenue contributions from the Fastening Systems business unit in Italy. In Eastern Europe, sales revenues were slightly above the previous year's level. In particular, higher sales revenues in the Fastening Systems business unit in Hungary and Romania were able to more than offset lower sales revenues from the Customized Modules division in Serbia.

Sales revenues in the Americas down significantly compared to the previous year

In the Americas, sales revenues in 2021 were 29.5 percent below the previous year's level. The decline was mainly due to lower sales revenues in the Tie Technologies business unit in the United States. In addition, a portion of the decline in sales revenues in the Americas region is attributable to companies that have since been divested.

Significant increase in sales revenues in Asia

In Asia, the Vossloh Group achieved a significant increase in sales revenues compared to the previous year: Sales revenues increased by 44.6 percent. The primary driver of this development was increased sales revenues in the Fastening Systems business unit in China. Higher sales revenues in the Lifecycle Solutions division in China also contributed to the increase.

Sales revenues in Australia slightly above the high level of the previous year

In Australia, Group sales already exceeded the high level of the previous year by 4.1 percent. The slight increase can be explained by higher sales at the Fastening Systems business unit and the Customized Modules division.

Significant increase in sales revenues in Africa

The Vossloh Group generated sales revenues in Africa that were 78.7 percent higher. The higher sales revenues of the Customized Modules division in Egypt made a major contribution to the growth.

The Vossloh Group's cost of sales totaled €724.8 million in the year under review and, in line with the trend in sales revenues, was significantly higher than in the previous year (€672.8 million). Despite an increase in the cost-of-materials ratio due to a significant rise in material prices, the cost of sales as a percentage of sales revenues was 76.9 percent in the year under review, slightly down from the previous year's figure of 77.4 percent. The Vossloh Group's selling and administrative expenses rose from €148.1 million to €160.8 million. The share of these expenses in sales revenues was nearly unchanged from the previous year at 17.1 percent (previous year: 17.0 percent). The operating result, the balance of other operating income of €18.7 million (previous year: €21.3 million) and other operating expenses of €7.8 million (previous year: €10.0 million) – at €10.9 million, remained nearly unchanged relative to the previous year's value of €11.3 million.

Vossloh Group – Sales revenues and earnings

	€ mill.	%	€ mill.	%
	2021		2020	
Sales revenues	942.8	100.0	869.7	100.0
EBITDA/EBITDA margin	124.2	13.2	123.1	14.2
EBIT/EBIT margin	72.3	7.7	73.1	8.4
Net income	35.9	3.8	20.8	2.4
Earnings per share (in €)	1.31		0.98	

Significant increase in earnings and profitability on an operating basis, previous year was boosted by €15.6 million book effect

Excluding the €15.6 million book value adjustment recognized in profit or loss as part of the transitional consolidation of a Chinese company in the Fastening Systems business unit in the previous year, Vossloh achieved a significant year-on-year increase in EBITDA and EBIT figures in the 2021 fiscal year. Non-operational one-time effects related to a carrying amount adjustment recognized in profit and loss following the transitional consolidation of two subsidiaries in the Customized Modules division, and through the recognition of a provision for further restructuring measures in France, offset each other in the reporting year. On an operational basis, EBITDA increased as a result by 15.6 percent and EBIT by 25.7 percent. These increases were achieved despite the substantial impact of material price increases, which particularly affected profitability in the second half of the year. Operating profitability also improved noticeably after factoring out the book effect in the previous year. The EBIT margin increased from 6.6 percent in the previous year to 7.7 percent at operating level and was thus within the expected corridor of 7 percent to 8 percent. The EBITDA margin also increased noticeably from 12.4 percent in the previous year to 13.2 percent at operating level and was thus also within the forecast corridor of 13 percent to 14 percent.

Net interest result in the 2021 fiscal year improved significantly to €(7.5) million compared with the previous year's figure of €(14.4) million. This was primarily attributable to lower currency conversion losses from secured Group-internal loans in foreign currencies. In addition, financing costs from financial liabilities also decreased significantly, which was a consequence of the improved balance sheet structure attributable to the hybrid note placed in February 2021. Earnings before taxes increased to €64.8 million in the year under review (previous year: €58.7 million).

Earnings per share significantly higher than in the previous year

Income taxes in the Vossloh Group amounted to €28.6 million in the year under review. The significant increase compared with the previous year's figure of €11.7 million was due not only to the higher operating result but also to impairments on deferred tax assets in Germany. Earnings from discontinued operations improved significantly from €(26.2) million in the previous year to €(0.3) million due to the elimination of losses from the sale of the former Locomotives business unit completed at the end of May 2020. Net income increased significantly by 72.8 percent compared to 2020.

€5.1 million of the net income was attributable to hybrid capital investors, while €7.7 million was attributable to other shareholders (previous year: €3.6 million). Net income attributable to Vossloh AG shareholders of €23.1 million was significantly above the previous year's figure of €17.2 million. Earnings per share improved significantly year on year based on an unchanged average number of shares outstanding of 17,564,180.

Dividend of €1.00 per share planned for 2021

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 a dividend of €1.00 (previous year: €1.00) for the fiscal year 2021 at the Annual General Meeting scheduled for May 18, 2022, which will once again be held virtually due to the coronavirus pandemic.

Vossloh Group – Value management

€ mill.	2021	2020
Average capital employed[1]	896.9	865.8
ROCE[1]	8.1	8.4
Value added[1]	9.5	12.5

[1]Comparative information adjusted retrospectively in accordance with IAS 8; see explanations on page 133 of the annual report.

ROCE and value added on an operational basis higher than in the previous year

ROCE and value added in the previous year benefited significantly from the above-mentioned book effect (EBIT effect: €15.6 million). On an operational basis, ROCE and value added increased noticeably in 2021. The increase was exclusively attributable to higher operating EBIT. The increase in average capital employed was mainly a result of fixed assets that were higher on a yearly average. In addition, higher average working capital as a result of the significant growth in sales also contributed to the increase. Value added also improved on an operating basis and was within the expected corridor of €0 million to €15 million. The weighted average cost of capital before taxes (WACC) was unchanged at 7.0 percent in the 2021 fiscal year.

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.

Net financial debt significantly reduced compared to the previous year as a result of the hybrid note

The net financial debt of the Vossloh Group (calculated as financial liabilities minus cash and cash equivalents and short-term securities) excluding lease liabilities fell significantly from €307.4 million at the end of 2020 to €174.0 million at the end of the 2021 fiscal year. The significant decrease was mainly due to inflows from the hybrid note placed in February 2021 of roughly €150 million and a positive free cash flow in 2021. This was offset in particular by dividend, lease and interest payments and by the payments totaling €10.6 million for the acquisition of ETS Spoor in 2021. At the end of 2021, net financial debt including lease liabilities of €41.6 million (previous year: €43.9 million) amounted to €215.6 million (previous year: €351.3 million).

Financial liabilities amounted to €291.6 million at the end of the year under review, a considerable decrease compared to the previous year's figure of €419.5 million. This was largely due to the hybrid note, which is allocated to equity in accordance with IFRS. Current financial liabilities fell year on year from €175.0 million to €69.2 million. The figure for the previous year included the Schuldschein loan of €135 million that came due in July 2021.

At the end of 2020, €250 million of the financial liabilities were attributed to Schuldschein loans placed in the 2017 fiscal year with terms of four years (until July 2021) totaling €135 million and seven years (until July 2024) totaling €115 million. The interest rate was fixed at 0.988 percent for the four-year maturities for an amount of €85 million and variable at an amount of €50 million with a margin of 85 basis points above Euribor. For the seven-year maturities, a partial amount of €90 million had a fixed interest rate of 1.763 percent and the remaining amount of €25 million, 120 basis points above Euribor. In the year under review, Vossloh used the funds from the hybrid note to fully redeem the Schuldschein loans with four-year terms. In addition, 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 percent per year was placed at the end of 2021. In January 2022, Vossloh used these funds to prematurely redeem the floating-rate Schuldschein loan in the same amount maturing in July 2024.

An additional €35.7 million in financial liabilities relates to drawdowns from the syndicated loan agreed in November 2017, totaling €230 million and with a term that runs until November 2024. The interest rate is based on the amount of an indicator stipulated in the credit agreement (net financial debt relative to EBITDA), as well as the extent of the drawdowns on the line of credit, and was 0.9 percent at the end of the year under review. A limit is set for this indicator (covenant). If exceeded, the lending banks are permitted to terminate the agreement ahead of time. Compliance with the covenant is verified every six months; such compliance was affirmed as of the half-year and as of the end of 2021. When added together, the sum total of cash and cash equivalents and short-term securities came to €76.0 million at the end of 2021 (previous year: €68.1 million).

The Group's contingent liabilities decreased from €109.0 million in the previous year to €58.0 million. The majority of this, €50.0 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 by a first-class bank.

As of the end of the year, the Group had committed and unutilized credit facilities of €279.0 million (previous year: €223.7 million) at its disposal.

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 next five years is 4.0 percent. 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 leads to significantly greater financial flexibility, which positively bolsters the implementation of the corporate strategy.

Vossloh Group – Development of cash flows

€ mill.	2021	2020
Cash flow from operating activities	81.3	56.1
Cash flow from investing activities	(57.9)	(3.0)
Cash flow from financing activities	(30.8)	(67.4)
Net cash inflow/outflow	(7.4)	(14.3)
Free cash flow	30.6	4.0

Free cash flow significantly higher than in the previous year

Cash flow from operating activities was significantly higher in the year under review than in the previous year. This was partly due to the higher gross cash flow (calculated as the sum of EBIT from continuing and discontinued operations, depreciation/amortization/impairment losses [less write-ups] of noncurrent assets and changes in noncurrent provisions) as a result of the elimination of losses from the Transportation division, which has now been sold. The figure for the previous year was also impacted by high negative effects from an increase in working capital in the divested Transportation division. With cash outflows from capital expenditure in intangible assets and property, plant and equipment largely unchanged, there was also a significant increase over the previous year in free cash flow – defined as cash flow from operating activities less capital expenditures in intangible assets and property, plant and equipment as well as capital expenditures in companies accounted for using the equity method plus cash inflows from profit distributions or the sale of companies accounted for using the equity method. Cash flow from investing activities was significantly lower than in the previous year, mainly due to the proceeds from the sale of the Transportation division in the previous year and outflows from the acquisition of ETS Spoor in the year under review. Cash flow from financing activities includes the proceeds from the hybrid note, which were largely used for repayment of a Schuldschein loan and the reduction of medium- and long-term loans, which are also included. The improved balance sheet structure attributable to the hybrid note led to a significant decrease in interest paid. In contrast, disbursements to shareholders and noncontrolling interests were significantly higher in 2021, since dividend payments were suspended in 2020 in the context of the uncertainty surrounding the pandemic.

Vossloh Group – Capital expenditure and depreciation/amortization

€ mill.	2021		2020	
	Capital expenditure	Depreciation/ amortization	Capital expenditure	Depreciation/ amortization
Core Components	23.6	24.3	31.1	22.6
Customized Modules	14.2	13.7	18.0	14.6
Lifecycle Solutions	11.4	12.3	16.5	12.2
Vossloh AG/consolidation	2.1	1.6	3.1	0.6
Total	**51.3**	**51.9**	**68.7**	**50.0**

In recent years, Group figures have been driven primarily by two major individual capital expenditure items: construction of a state-of-the-art production facility for rail fastening systems at the Werdohl headquarters ("Factory of the Future") and modernization of the production site for manganese frogs in Outreau (northern France). The volume of capital expenditure for these two projects amounted to some €40 million each. Both capital expenditures were completed in 2021 and can also be cited as major drivers in the decline in capital expenditure compared with the previous year. Accordingly, capital expenditures in the Core Components division were noticeably below the previous year's level. In the Fastening Systems business unit, the major portion of capital expenditures in 2021 continued to be attributable to the "Factory of the Future", although to a much lesser extent than in the previous year. Among other things, the Tie Technologies business unit continued to invest in optimizing the production process in the new plant built in Canada in 2019. The greatest individual capital expenditure in the Customized Modules division went towards modernization of the production facility in Australia. In the Lifecycle Solutions division, investments continued to be made in the development of a high-performance milling machine, which went into operation at the end of 2021. The capital expenditure shown in the table above reflects additions in the fiscal year and also include capital expenditure in assets financed by a lease agreement. Capital expenditure is reported in the cash flow statement (including capital expenditure from the Transportation division, which was sold in the 2020 fiscal year) insofar as it has already led to payments. The values therefore differ. Depreciation and amortization in the cash flow statement of the previous year includes effects from the divested Transportation division. Depreciation and amortization at a Group level includes impairments/reversals of impairment losses and puts them at the same level as in the previous year.

Capital expenditure commitments for the acquisition of intangible assets and property, plant and equipment totaled €12.7 million as of December 31, 2021 (previous year: €19.0 million). They resulted first from the Australian company in the Tie Technologies business unit and second mainly from orders for the "Factory of the Future" in Werdohl and the modernization of the production site in Outreau.

Asset and capital structure

Vossloh Group – Asset and capital structure

		12/31/2021	12/31/2020
Total assets[1]	€ mill.	1,289.4	1,214.4
Equity[1]	€ mill.	587.9	412.4
Equity ratio[1]	%	45.6	34.0
Closing working capital[2]	€ mill.	175.6	155.3
Fixed assets[1,3]	€ mill.	726.0	694.1
Closing capital employed[1,4]	€ mill.	901.6	849.4

[1] Comparative information adjusted retrospectively in accordance with IAS 8; see explanations on page 133 of the annual report.
[2] 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)
[3] Fixed assets = intangible assets plus property, plant and equipment plus investment properties plus investments in companies accounted for using the equity method plus other noncurrent financial instruments
[4] Capital employed = working capital plus fixed assets

Equity ratio increases by 11.6 percentage points

The Vossloh Group's equity at the end of 2021 was significantly above the previous year's figure. The main drivers of this development were the hybrid note recognized in equity and the positive net income in 2021. This resulted in an equity ratio that was 11.6 percentage points higher.

Working capital intensity improved again

The working capital as of December 31, 2021 reporting date increased as a result of the significant growth in sales compared to the previous year. Average working capital totaled €194.7 million in the year under review (previous year: €186.4 million). By contrast, the average working capital intensity – the ratio of average working capital to sales revenues – fell from 21.4 percent to 20.6 percent. The Customized Modules and Lifecycle Solutions divisions contributed to this positive trend.

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

During the past fiscal year, the Vossloh Group made significant progress both operationally and strategically. The Company achieved or exceeded all forecasts for the key performance indicators for the 2021 fiscal year. Vossloh had initially forecast a sales corridor of €850 million to €925 million for the 2021 fiscal year. Following a strong business development in the first half of 2021, Vossloh raised its sales forecast to €900 million to €950 million. Sales revenues ultimately rose by 8.4 percent to €942.8 million and thus were at the upper end of the raised forecast. In terms of profitability, Vossloh raised its EBIT and EBITDA margin from operating 6.6 percent respectively 12.4 percent in the previous year to 7.7 percent respectively 13.2 percent in the year under review putting both figures within the forecast range. EBIT increased from operating €57.5 million in the previous year to €72.3 million. This improvement must be seen as extremely positive, particularly against the backdrop of a significant negative impact arising from material price increases. Value added amounted to €9.5 million, so that it also met the forecast of the company.

The level of reported orders received also trended significantly upward. Vossloh achieved appreciably higher orders received compared with the previous year and a book-to-bill ratio slightly exceeding 1, with sales revenues significantly up. In addition, the Group announced that it had entered into numerous framework agreements in the 2021 fiscal year. The comprehensive order volume from these framework agreements is only included to a limited extent in the orders received. Only the call-offs under these framework agreements are generally reported as orders received.

The Group's financial position also improved significantly. A hybrid note in the amount of €150 million was successfully placed in February 2021. The notes's equity capitalization led to a substantial strengthening of the balance sheet structure and increased financial flexibility considerably. Net financial debt, excluding lease liabilities, was reduced from €307.4 million at the end of 2020 to €174.0 million at the end of 2021. The equity ratio went up to 45.6 percent (previous year: 34.0 percent). The hybrid note is linked to sustainability criteria, thus underscoring the great importance of sustainability within the Group. In addition, Vossloh raised its free cash flow from €4.0 million to €30.6 million.

The 2021 fiscal year was also very successful from a strategic perspective. With the acquisition of the Dutch ETS Spoor in July 2021, Vossloh substantially strengthened its competitive position in an important reference market for forward-looking business models and improved access to strategically important customers. The acquisition also helps to complete the product portfolio in the rail infrastructure sector. At its Werdohl headquarters, Vossloh successfully completed the multi-year major project to build a state-of-the-art production facility for rail fastening systems. In addition, 2021 was also very successful in terms of strategically important preventive and corrective maintenance services. In 2021, Vossloh sold the most maintenance machines it has ever sold within one year. The Company also adopted a Group-wide sustainability program in 2021 and firmly incorporated sustainability in its corporate values.

From an operational and strategic perspective, 2021 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

		2021	2020
Orders received	€ mill.	398.4	349.6
Order backlog	€ mill.	211.8	247.0
Sales revenues[1]	€ mill.	429.1	375.3
EBITDA	€ mill.	71.0	74.2
EBITDA margin	%	16.5	19.8
EBIT	€ mill.	46.7	51.6
EBIT margin	%	10.9	13.7
Average working capital	€ mill.	117.5	99.9
Average working capital intensity	%	27.4	26.6
Average capital employed	€ mill.	346.5	320.3
ROCE	%	13.5	16.1
Value added	€ mill.	22.4	29.1

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

Orders received substantially increased in comparison with previous year

In the Core Components division, orders received in the year under review were up by €48.8 million and thus significantly higher than in the previous year. The Fastening Systems business unit had a higher level of orders received in China, including the major order which was awarded in December 2021. In addition, business in the Australian tie market improved significantly year on year, while orders in the North American tie market were down on the previous year. The order backlog at the end of 2021 was €35.2 million lower than in the previous year.

Significant 14.3 percent increase in sales revenues

Sales revenues in the Core Components division went up by 14.3 percent in the year under review. This increase was due to a significant rise in sales revenues for the Fastening Systems division, while the sales revenues of the Tie Technologies business unit were down on the previous year as expected.

EBIT and EBIT margin significantly higher on operational basis despite negative impact of material price increases

The EBIT achieved by the Core Components division was €4.9 million lower than the previous year’s figure of €51.6 million. The figure for the previous year was positively influenced by a €15.6 million carrying amount adjustment recognized in profit and loss. This transpired in the course of a transitional consolidation of a joint venture in China in the Fastening Systems business unit. The division improved its EBIT and EBIT margin significantly on an operational basis. The considerable operational improvement was driven by deliveries rescheduled to 2021 due to the pandemic, which were partially compensated for by changes in material prices.

Return on capital employed (ROCE) for the Core Components division was lower than in the previous year due to the carrying amount adjustment recognized in profit or loss in fiscal year 2020. Average capital employed was higher than in 2020, largely as a result of the year-on-year increase in average working capital. Average working capital intensity was just 0.8 percentage points higher than in the previous year. Value added in the 2021 fiscal year was significantly lower than in the previous year.

Vossloh Fastening Systems

At €269.5 million, orders received at Vossloh Fastening Systems in 2021 were much higher than the previous year's figure of €211.0 million. In addition to a higher order volume in China, the contract to supply rail fastening systems for a metro route in India and sales success in Australia, this was due to increased orders under framework agreements with tie factories in Germany. This more than compensated for lower project-related orders received, particularly in the Americas, Mongolia and Egypt. At €150.0 million, the order backlog at the end of 2021 was down on the previous year (€177.1 million).

Orders received significantly higher than in previous year

Sales revenues for Vossloh Fastening Systems in 2021 amounted to €292.4 million (previous year: €216.3 million). This development was largely driven by deliveries for major projects in the Chinese high-speed segment that had been rescheduled from 2020 to the first half of 2021 due to the COVID-19 pandemic. Sales were also higher in Italy and Germany.

Significant increase in sales revenues

The value added for Vossloh Fastening Systems remained high at €23.3 million, despite the downturn from the previous year's figure of €30.2 million. It should be noted that the previous year's figure included a positive book effect related to the transitional consolidation of a Chinese joint venture.

High positive value added once again

Vossloh Tie Technologies

The Tie Technologies business unit recorded orders received of €132.3 million in the year under review, which represents a decrease of €19.4 million from the previous year's figure of €151.7 million. The downturn was mainly caused by a lower number of new orders in the US market. Orders received were higher in Australia, Mexico and Canada. The order backlog amounted to €65.1 million at the end of 2021 (previous year: €75.5 million).

Orders received below previous year due to fewer orders in the USA

The sales revenues in the Tie Technologies business unit totaled €142.3 million, down from the previous year's high figure of €169.1 million. This was mainly due to the sluggish demand from Class I customers in the USA and an expected downturn in sales revenues in Australia. Sales revenues were up in Canada and Mexico.

Sales revenues down from the previous year's high figure

The value added of Vossloh Tie Technologies, at €(0.8) million, was slightly higher than the previous year's figure of €(1.1) million.

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

		2021	2020
Orders received	€ mill.	452.5	472.6
Order backlog	€ mill.	391.4	338.4
Sales revenues[1]	€ mill.	418.7	401.8
EBITDA	€ mill.	47.6	44.6
EBITDA margin	%	11.4	11.1
EBIT	€ mill.	34.0	30.0
EBIT margin	%	8.1	7.5
Average working capital	€ mill.	69.5	76.0
Average working capital intensity	%	16.6	18.9
Average capital employed[2]	€ mill.	366.6	367.1
ROCE[2]	%	9.3	8.2
Value added[2]	€ mill.	8.3	4.3

[1] Sales revenues include external sales revenues and sales to other divisions.
[2] Comparative information adjusted retrospectively in accordance with IAS 8; see explanation on page 133 of the annual report.

Order backlog significantly above previous year's level

Orders received in the Customized Modules division were 4.3 percent lower than the previous year's high figure. New orders were down year on year in several markets, particularly in France, Poland and Egypt. Part of this downturn was offset by major orders in Turkey, Mexico and Australia. The order backlog was significantly above the previous year's level as a result of and due to the full consolidation of two companies in India and Portugal.

Slight increase in sales revenues

The division's sales revenues increased by €16.9 million compared to 2020. The upwards trend was particularly significant in Egypt, Australia and India and was able to more than offset the downturns in certain areas, particularly France. Sales contributions from companies fully consolidated for the first time totaling €11.5 million in the year under review were offset by sales revenues from activities that have since been sold in North and South America totaling €11.7 million in the previous year.

EBIT significantly above the previous year's result

The division's EBIT in 2021 was 13.2 percent higher than in the previous year, a significant amount thanks to operational efficiency gains in France and elsewhere. Material price increases had a negative impact on earnings in the year under review. Non-operational one-time effects related to a carrying amount adjustment recognized in profit and loss following the transitional consolidation of two subsidiaries in the Customized Modules division offset each other in the reporting year through the recognition of a provision for further restructuring measures in France.

Due to the overall improvement, ROCE was significantly higher than in the previous year. Value added also improved significantly. Average capital employed remained largely on the level of the previous year.

Working capital intensity noticeably improved

Further operational improvements led to a considerable year-on-year downturn in average working capital intensity. Working capital intensity improved by 2.3 percentage points compared with 2020.

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

		2021	2020
Orders received	€ mill.	122.2	103.5
Order backlog	€ mill.	14.9	10.2
Sales revenues[1]	€ mill.	115.5	103.8
EBITDA	€ mill.	21.6	20.9
EBITDA margin	%	18.7	20.2
EBIT	€ mill.	9.3	8.8
EBIT margin	%	8.0	8.4
Average working capital	€ mill.	13.0	13.1
Average working capital intensity	%	11.2	12.6
Average capital employed[2]	€ mill.	184.3	177.4
ROCE[2]	%	5.0	4.9
Value added[2]	€ mill.	(3.6)	(3.7)

[1] Sales revenues include external sales revenues and sales to other divisions.
[2] Comparative information adjusted retrospectively in accordance with IAS 8, see explanation on page 133 of the annual report.

Orders received significantly higher than in previous year

In the 2021 fiscal year, the Lifecycle Solutions division recorded orders received that were much higher than in the previous year. The increase in orders received was largely driven by the machinery sales subsegment in China, as well as additional orders due to the acquisition of ETS Spoor in the Netherlands. The order backlog was significantly higher at the end of 2021 than in the previous year.

11.4 percent increase in sales revenues

The Lifecycle Solutions division recorded an 11.4 percent increase in sales revenues compared to the previous year. The increase was mainly due to higher sales revenues from machine sales in China. The first contributions from the company ETS Spoor, which was acquired in 2021, also played a small role in the increase in sales revenues. In contrast, sales revenues from rail and switch grinding were down from the previous year. The Lifecycle Solutions division's degree of internationalization, measured on the basis of sales revenues earned outside of Germany, rose from 46.9 percent in the 2021 fiscal year to 48.4 percent.

EBIT increases once again

The division's EBIT increased by €0.5 million compared with the previous year, despite ancillary acquisition costs incurred for ETS Spoor. Machine sales played a particularly significant role in the improvement in earnings.

The value added was at the previous year's level. Working capital intensity improved by 1.4 percentage points compared with the previous year.

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 regulations of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The explanations below refer to the annual 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

For the 2021 fiscal year, Vossloh AG reported sales revenues of €7.6 million (previous year: €7.5 million), resulting 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). 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.

Administrative expenses totaled €18.5 million for 2021, a decrease compared to the previous year (€19.8 million). The reasons for this decrease included higher consulting costs of €3.6 million in the previous year due to the strategy project carried out at that time, which decreased to €2.1 million in the year under review. Despite the expansion of the Executive Board, personnel expenses of €12.0 million increased only slightly compared with the previous year (€11.6 million). In addition, trade fair costs also remained relatively on par with the previous year, as the InnoTrans industry trade fair was again unable to take place in the year under review due to the COVID-19 pandemic.

The considerable decrease in other operating expenses in the reporting year from €3.5 million in the previous year to €1.6 million was due to lower exchange rate losses from the hedging of intragroup receivables from Group companies in countries that use foreign currencies. Other operating income of €0.5 million was again at the expected level after having been significantly higher in the previous year at €12.3 million due to a subsequent purchase price component from the sale of Vossloh Kiepe GmbH and the sale of Vossloh Locomotives GmbH.

The financial result for 2021 improved significantly compared with the previous year and amounted to €27.0 million, compared with €(42.0) million in the previous year. Significant income from investments (€17.6 million) and from profit transfer agreements (€12.5 million) was offset by a negative net interest result of €6.1 million. In the previous year, assumption of losses in the amount of €28.6 million as well as depreciation and amortization on investments due to permanent impairment in the amount of €47.0 million had a significant impact on the financial result.

The negative net interest result was largely due to the interest expense of €5.1 million on the hybrid note. Interest expenses totaled €12.8 million (previous year: 8.9 million), while interest income of €6.7 million (previous year: €9.6 million) was realized primarily from passing through of these funds in the form of short-term loans or extended-term loans to Group companies. Loss carryforwards kept income taxes low at €0.1 million (previous year: €0.0 million). Vossloh AG's net income in the year under review amounted to €7.7 million (previous year: net loss for the year of €53.0 million), which confirmed the expectation expressed in the outlook of the 2020 Annual Report.

Year on year, total assets increased slightly from €895.8 million to €918.6 million. Financial assets decreased by €37.9 million, while receivables from affiliated companies increased by €60.8 million. The Group's financing was therefore restructured in terms of maturity. At the same time, the Group's financing of the US activities was partly converted from debt to equity in order to improve the cost of currency hedging.

Financial assets decreased by a total of €37.9 million to €565.1 million. Current assets increased by €59.8 million to €348.4 million, largely as a result of the aforementioned €60.8 million increase in receivables from affiliated companies. There were no significant changes in other assets.

At €360.7 million, liabilities to banks on the balance sheet increased significantly as of the reporting date compared with the previous year's figure of €332.8 million. Liabilities to affiliated companies increased from €25.7 million to €30.4 million. Provisions totaled €28.8 million, slightly above the previous year's level of €25.7 million. Despite the net income for the financial year, equity decreased from €500.1 million to €490.3 million due to the dividend payment. The equity ratio fell from 55.8 percent in the previous year to 53.4 percent.

Overall, the development of Vossloh AG's earnings, net assets and financial position in the 2021 fiscal year can be viewed as positive, despite a slight decrease in equity, as a result of reduced administrative expenses and the positive net income.

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 due to Mrs. Nadia Thiele and Mr. Robin Brühmüller, as executor of the will of the deceased Heinz Hermann Thiele, indirectly holding 50.09 percent of its share capital on December 31, 2021. 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 Mr. Heinz Hermann Thiele, or subsequently his heiress 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.

Statuary 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, 2021.

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.

Shareholdings in excess of 10 percent 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 percent of the voting rights. KB Holding GmbH, Grünwald, Germany, holds 50.09 percent 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, Ms. Nadia Thiele, Munich, Germany and Mr. Robin Brühmüller (executor of the estate of the late Heinz Hermann Thiele), Munich, Germany.

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 Incorporation
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 Association 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 percent 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 percent of the share capital, either at the time this authorization becomes effective or at the time this authorization is exercised. The above-mentioned 10 percent 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, 2021, the Company did not hold any treasury shares.

Agreements upon a change of control
There are nine material Company agreements that are subject to a change of control clause.

In the case of eight 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 percent of the shares or voting rights in the Company.

- Two Schuldschein loans arranged by Landesbank Hessen-Thüringen Girozentrale and BNP Paribas: 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;

- A syndicated loan agreement with Bayerische Landesbank, BNP Paribas' German branch, Commerzbank AG, Deutsche Bank AG's German branch, HSBC Trinkaus & Burkhardt AG, Landesbank Baden-Württemberg, Landesbank Hessen-Thüringen Girozentrale and Skandinaviska Enskilda Banken AB's (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.

In one other agreement, a change of control essentially means the purchase of more than 30 percent 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 percent 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 arrangements have been made with Executive Board members or Vossloh employees regarding post-takeover indemnification or other compensation upon a change of control.

Workforce

As at December 31, 2021, there were 3,687 employees[1] within the Vossloh Group contributing to achieving the Group's goals. This represents an increase of 220 employees or 6.3 percent compared to the previous year (3,467 employees).

Workforce-related performance indicators

€ thousand	2021	2020
Personnel expenses per employee	58.6	58.9
Sales revenues per employee	261.0	249.8

The average number of employees was 3,612 in the reporting year compared to 3,482 in the 2020 fiscal year. The increase of 3.7 percent is mainly due to the first-time full consolidation of the Indian company Vossloh Beekay Castings Ltd. in the Customized Modules division.

Out of the overall average number of employees, 72.9 percent (previous year: 73.9 percent) were employed at locations in Europe. Of the remaining 27.1 percent, 54.1 percent (previous year: 32.7 percent) were employed in Asia, 25.2 percent (previous year: 44.0 percent) in the Americas and 20.7 percent (previous year: 23.3 percent) in Australia.

Personnel expenses

€ mill.	2021	2020
Wages and salaries	169.5	162.9
Social security expenses and charges	36.8	36.8
Pension expenses	5.5	5.4
Total	**211.8**	**205.1**

Divisions

The average number of employees is distributed as follows across the divisions. The following revenue was generated on the basis of the associated personnel expenses:

	Number Ø employees		Personnel expenses per employee in € thousand		Sales revenues per employee in € thousand	
Division	2021	2020	2021	2020	2021	2020
Core Components	879	938	64.7	60.5	488.3	400.2
Customized Modules	2,150	1,987	49.5	52.2	194.7	202.2
Lifecycle Solutions	520	498	69.8	66.0	222.0	208.2

In addition, an average of 63 employees (previous year: 59) were employed by Vossloh AG.

For additional information, please refer to the "Employee aspects" section of the nonfinancial Group statement.

[1]This section presents the number of employees based on Full Time Equivalents.

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 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. In 2021, a Group-wide innovation playbook was drawn up and approved, and a Group Innovation Committee was also set up. Vossloh intends to increase collaboration across business units to develop new products, services and business models, make decision-making processes more efficient and structured, 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 new construction, 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 create intelligent infrastructure components which monitor load levels and track condition. This data provides an indication of how worn these components are, making it easier to identify which maintenance strategies will be most effective, and when they should be used. This can reduce the risk of component failure – and thus partial infrastructure failure – during ongoing operations. In the future it will be able by using artificial intelligence to detect wear patterns, predict the failure of track components and prevent these failures by planning maintenance measures ahead of time. Vossloh uses its in-depth knowledge of the rail track as a system to address its customers' main requirement "track availability" and develop comprehensive solutions in partnership with all of Vossloh's business units.

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 2021, expenses for research and development – including capitalized internally generated assets – came to a total of €12.2 million (previous year: €13.5 million). This represents a share of approximately 1.3 percent of Group sales (previous year: 1.6 percent). €4.2 million (previous year: €4.0 million) of R&D expenses were attributable to the Core Components division and almost entirely to the Fastening Systems business unit. R&D expenses in the Customized Modules division came to €4.8 million (previous year: €4.2 million). €2.5 million (previous year: €5.3 million) were attributable to the Lifecycle Solutions division. €0.7 million (previous year: €0.0 million) were attributed to Vossloh AG.

€3.2 million of the newly capitalized assets that were generated internally or as a result of third-party deliveries or service performance in the 2021 fiscal year (previous year: €4.6 million) concerned the Customized Modules division.

Vossloh Konzern – Research and development costs

€ mill.	2021	2020
Research and development costs	12.2	13.5
of which capitalized	3.2	4.6
Research and development expenses (income statement)	**9.0**	**8.9**
Amortization (of capitalized development costs)	0.8	0.3

Maximizing track availability and reducing lifecycle costs

Vossloh's research and development efforts in 2021 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 ("enabling green mobility").

Predictive maintenance based on track condition data

The digitalization of rail infrastructure opens up new opportunities for Vossloh to create value with its products and services. Apps released by Vossloh bring measurement and track condition data together, provide a quick overview of which routes require action, and suggest suitable measures for repairing damage. Vossloh uses configurable IoT sensors to measure vibrations and provide data from different parts of the track (rail ties, frogs, point machines, etc.). This data is validated and compressed, and then sent to the Vossloh Analytics Platform using a mobile phone network for analysis. The platform compiles data from measurement instruments and sensors in various infrastructure components with data from Vossloh railgrinders to provide an overall picture of the condition of the track.

Vossloh's rail profiling machines are also used to diagnose track issues. They record data about the condition of the track without disrupting rail schedules, and then send this data to an asset management system, such as mapl-e or MR.pro, both of which were developed in-house by Vossloh. In addition to visualizing the condition of the track, mapl-e can also identify appropriate maintenance measures and assess the economic viability of such measures. This enables asset managers to plan and budget for maintenance. Vossloh's customers are able to access measurement data, analyses, assessments and recommendations from a secure area on the analysis platform. This digital service allows Vossloh customers to better understand their infrastructure and increase availability with targeted and preventive maintenance.

Vossloh's "Digital Twin" application enhances maintenance measures for point machines by combining augmented reality with virtual reality. The "digital twin" provides a virtual copy of a physical object or system, which includes comprehensive product and function data as well as a real-time visual overlay. Vossloh also uses drones to generate digital three-dimensional models of busy routes. These 3D models can be used to optimize track layouts, switch designs and overhead lines to increase speeds and capacity on routes whilst also reducing the need for maintenance.

Switch disruptions are one of the main reasons for track unavailability and unplanned maintenance. In switch management in particular, digitalization has already created a number of solutions. 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 Easyswitch MIM-H for mainline routes is the latest generation of this Vossloh point machine, which is highly regarded as a modular plug-and-play solution that offers excellent reliability.

Digitalization also offers opportunities for Vossloh's R&D activities: The research and development activities of every division are increasingly focused on data-processing technology – a trend which continued in 2021. This makes it possible for multidimensional simulations, such as the finite element or multibody simulation methods, to be devised more quickly and at lower cost than with conventional methods. The innovative DYNADeV platform developed by Vossloh simulates wheel-to-rail contact to predict the mechanical behavior of a switch. The simulation tool removes the need for expensive track measurements and lengthy laboratory testing. In addition to accelerating the development and certification process for switches, the virtual process also provides an indication of which trains damage the rail infrastructure, due to deformed wheels and other factors.

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. Vossloh is helping to reduce noise emissions with dampening rail fasteners, "whisper switches" and acoustic rail grinding. All of our solutions in this area were further improved in 2021. 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

Cooperation 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. One example is Vossloh's partnership with Deutsche Bahn AG subsidiary DB Systemtechnik GmbH in data-driven switch monitoring. 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.

R&D by division

In 2021, the R&D experts in the Core Components division continued to work on new solutions for improved noise and vibration protection. These projects focused on the 336V rail fastening system installed on local transport routes, which is currently being trialed by the Melbourne metro system. This system uses cellentic intermediate layers. cellentic is a highly flexible elastomer. Components made from this material help optimize the elasticity of the track. This reduces vibrations, dampens structure-borne noise and protects the superstructure, particularly when installed in combination with the EPS (engineered polymer sleeper) composite tie developed by Vossloh. The composite tie is now available for a variety of applications and completed a number of real-world tests in 2021 in Russia, Bulgaria, Italy, Germany and elsewhere. Vossloh's experts began investigating new thermoplastic materials for the Company's own synthetic components and developing new tension clamps. The team also intends to improve the service life of specialized tension clamps in stretches of track which are used particularly heavily. Vossloh launched a project in partnership with a major rail company with the aim of increasing the service life of a clamp to 2.5 billion metric tons of load.

In 2021, R&D engineers in the Customized Modules division continued to test the new, ultra-resilient rolled steel CogX. The heat-treated laminated steel for frogs and switch points was tested in additional switch systems for trams and heavy-duty traffic. The material provides a higher level of resistance to wear and impact compared to existing solutions, and extends service lives by up to 30 percent. The Company also continued practical tests of an energy-efficient and fully hydraulic point machine and the digitally controlled MIM-H point machine on high-speed routes. The COGISLIDE coating developed by the division went into production after many years of successful trials. Slide chairs in switches coated with this material can be moved smoothly and easily without lubrication. Work began on developing an energy-efficient heating system with improved performance that can be tailored to both high-speed and also conventional routes. Customized Modules has a strong and reliable partner in France's national state-owned rail company (SNCF) for all of its switch development projects.

The Lifecycle Solutions division focused its R&D activities on milling machines, onboard rail condition measuring systems and software for evaluating and visualizing even more condition data – all with the aim of enhancing smart maintenance. New units were developed for high-speed railgrinders in 2021, including units that increase the amount that can be removed in high-speed grinding or provide an indication of grinding quality (section and longitudinal profile and absence of cracks). The control and sensor systems of mobile, VTM performance milling and VTM compact milling units were adapted to meet new requirements. Changes to the compressors and suction unit made it possible to collect more of the metal chips produced during milling. The division is systematically investigating alternatives to diesel and petrol-powered locomotives due to increasing customer demand. Vossloh is trialing the use of battery-powered electric motors and overhead lines. At the beginning of 2022, Vossloh was awarded the contract to deliver the world's first emission-free high-speed railgrinders for use in the Shenzhen subway network. These railgrinders combine a HSG-city with an electric traction unit.

Optimizing production and administration

In addition to enhancing its range of products and services, Vossloh is also making consistent improvements to its production processes. The Company wants its factories to be smart and highly efficient. Vossloh's "factory of the future" at its Werdohl site produces tension clamps using a digitally-managed and highly-automated process. It began operations at the beginning of 2021. Now that Vossloh has completed its "OT 2020" project, the Company has an optimized frog production facility and a competence center for foundry technology in Outreau. The Group's two major switch plants have specialized in specific stages along the value chain (metal milling in Reichshoffen, final assembly and shipping in Fère-en-Tardenois), which has brought significant improvements in efficiency. Vossloh is also increasing its commitment to global collaboration and speeding up the exchange of knowledge between business units as part of international development projects. The Company is using cutting-edge communication and collaboration solutions for these projects.

Vossloh's internal business processes will be shaped by streamlined processes and digital data streams. The preliminary study on a Group-wide uniform ERP system was started in the fall of 2020. The chosen solution 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).

Risk and opportunity management

Organization

Risks and opportunities for the Company's net assets, financial position and results of operations are systematically identified, analyzed, evaluated, reported, monitored and managed at all levels within the Vossloh Group. 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. In addition to specific topics related to the evaluation of investments and Group financing, the business development of Vossloh AG is subject to the majority of the risks and opportunities which also apply to the business of the Group. Acquired companies are promptly integrated into the system.

The risk and opportunity management system is a component of the business, planning and control process. The organization of structures and processes is documented in a Group-wide policy. This policy was updated and incorporated into the reporting system in the 2021 fiscal year to reflect the additional requirements in the amended version of the assurance standard IDW PS 340. The majority of the update relates to the assessment of mutual dependencies between reported individual risks and how they are aggregated into an overall risk position (net view) which is then compared to the risk-bearing capacity of the Group. The risk-bearing capacity of the Group has been redefined in light of the additional requirements in the amended version of the assurance standard IDW PS 340. It was systematically determined using earnings and liquidity ratios and will be reviewed on an ongoing basis by Corporate Controlling and the Executive Board. All relevant risks with a very low probability of occurrence (less than 5 percent – so-called tail events) are systematically included in the reporting process.

The structure of the risk and opportunity management system is based on the structure of the operating processes of each of the 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, promptly and systematically.

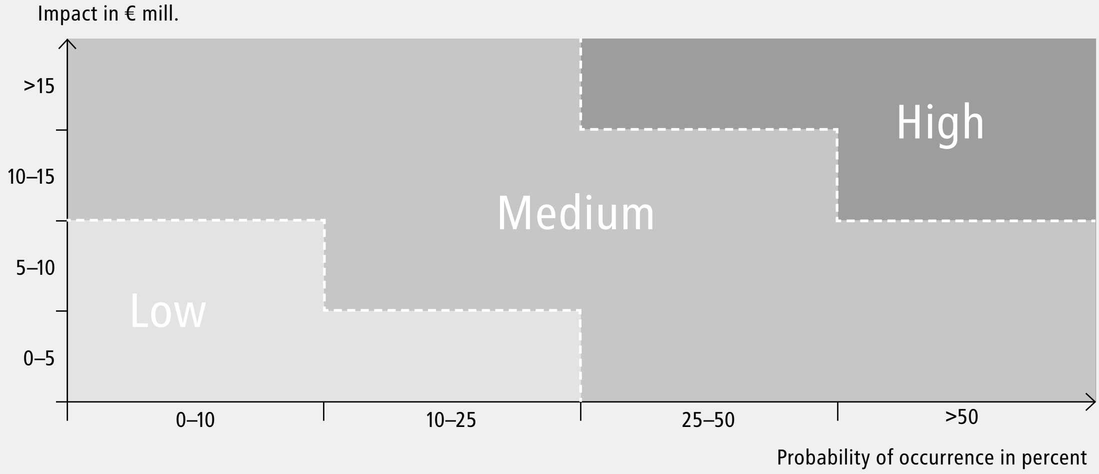
Vossloh evaluates risks and opportunities in regard to their potential impact on earnings and the Company's financial position. The possible impact of a risk is primarily calculated using the EBIT financial performance indicator. Its influence on the liquidity situation is also recorded. Interest and income tax risks and risks from discontinued operations are assessed in light of the impact of the risk 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 percent 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 labor concerns.

Vossloh documents and presents risks and opportunities in standardized reports. They contain detailed information on risks and opportunities, the parameters by which they are evaluated, and potential measures to manage these risks or harness these opportunities. The risks and opportunities report is issued on a quarterly basis. It supplements the current annual outlook and also addresses predictable and adequately specific risks and opportunities for the following three years. Ad hoc reports round out the regular reports and provide the means to assess the current situation at any time. The risk reports are intended to be read by 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 management of 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. Internal Audit checks whether the risk and opportunity management system is adequate and functional and whether it is in compliance with statutory requirements on an annual basis. The changes made in light of the additional requirements in the amended version of the assurance standard IDW PS 340 were reviewed in 2021. The early warning risk control system is audited on a regular basis.

The significance that individual risk categories hold for the Vossloh Group is evaluated, where possible, based on 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 significant to the development of the Vossloh Group. Significant 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 global megatrends such as population growth, urbanization, globalization, sustainability and digitalization.

Production shutdowns due to the COVID-19 pandemic had a lesser impact on the Vossloh Group in the 2021 fiscal year. Short-term production shutdowns due to infections among employees or official requirements as well as customers and suppliers being affected by worker shortages only affected operations in some areas. Compared to other sectors, the impact of the pandemic on rail infrastructure and therefore also on Vossloh was significantly lower.

The ongoing global pandemic and its consequences will have a significant impact on the global economy in 2022. Uncertainty will remain high. Despite its impact classified as relatively low, this issue is considered a material risk for the Vossloh Group. Still, the risk is not considered to be very high due to the Group's resistance to crises.

Regulatory activities, the state of rail deregulation in different countries and government budgets also have an influence on Vossloh. The latter has a major impact on the ability of public clients to make investments. 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. In the infrastructure maintenance markets, which are highly critical to the Group, there has been an increased trend toward cost-cutting in recent years due to the continuing strain on public clients' budgets. This trend may intensify sporadically as a consequence of the pandemic. However, there currently seems to be far more 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. The EU Commission has designated 2021 as the "European Year of Rail". Numerous regions around the world have set up rail subsidy schemes as part of climate action initiatives. Many countries have announced economic stimulus programs which include measures to boost investment in rail infrastructure.

Vossloh was active in rail infrastructure markets around the world in 2021. In this field, the Group is one of the leading providers in its core business. Vossloh generates more than 85 percent 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, especially in the freight sector, 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 classifies the overall economic risk as medium due to the COVID-19 pandemic. As in the previous year, the industry risk for the forecast financial targets is also assessed as low.

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 monitors changes in material and energy prices on an ongoing basis. If the prices of the materials used and the energy sources required for the production process do not follow the expected trend due to the pandemic or other factors, risks or opportunities for forecast income may arise from procurement prices being higher or lower, particularly in the Core Components division. This is a significant individual risk or opportunity.

Risks can also 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 chain, the operating units are generally exposed to the risk of operational shutdowns and quality problems affecting production as well as health, safety and environmental risks. These risks can accumulate if significant investment at a site has an impact on production processes or if individual sites are in a restructuring process. A number of French manufacturing sites in the Customized Modules division are currently undergoing restructuring. These are significant individual risks or opportunities. Vossloh avoids or reduces the ensuing risks by means of extensive policies and directives on product and quality management, safe manufacturing practices, occupational health and safety and environmental protection. The Vossloh Group is certified in accordance with a wide range of international quality, environmental and social standards, such as ISO 9001, ISO 14001, ISO 50001 or OHSAS 18001 respectively ISO 45001. If newly acquired units do not hold equivalent certifications, they are brought into compliance with these standards as quickly as possible.

In the context of order performance, risks for Vossloh may arise from the complexity of projects. These 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. These risks can be limited, but not fully eliminated, by formulating contracts appropriately and ensuring that 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-term operational performance of the units in question is significantly weaker than expected and/or if the general interest level increases. The goodwill of acquired companies is not amortized in accordance with IFRS 3 in conjunction with IAS 36. Instead, this goodwill undergoes impairment testing each year as of the balance sheet date. Vossloh also carries out impairment testing during the year if exceptional events occur. This testing involves a comparison of the relevant carrying amount of a group of cash-generating units (CGUs) in relation to the goodwill of acquired companies against the value in use.

Vossloh has recognized the relevant IFRS regulations for risk provisions for existing operational risks. Despite the provisions for known risks with a very high probability of occurrence, the risk of net profit reductions arising from the restructuring of individual sites cannot be fully eliminated and may have negative effects on the achievement of forecast financial targets. The absolute risk value arising from the completion of projects is dependent on the volume and value of development services connected to the relevant order and on the quality of the products.

Vossloh believes that the amount of risk arising from the value chain and the completion of projects is still moderate. As in the previous year, the risk of possible impairment of goodwill is also classified as moderate. The risk from changes in the price of materials is still classified as moderate. Overall, the other operating risks are still deemed to be low.

Financial risks and opportunities

Corporate Treasury 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 can arise if Vossloh is 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. Revenue sharing 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. The funds from the hybrid note were used to repay the Schuldschein loans of €135 million due in July 2021. The proceeds from a Schuldschein loan of €25 million with a term until December 2028 which was issued at the end of December 2021 were used in January 2022 to pay off a €25 million Schuldschein loan with a variable interest rate which was due to expire in July 2024. Of the Schuldschein loan issued in July 2017, only €90 million in loans remain. These will come due in July 2024. 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. In July 2021, a €20 million loan with a variable interest rate was agreed with another bank and used. The term of the loan will run until July 2024. As of the end of the year, the Group had unutilized credit facilities of €279.0 million at its disposal – in addition to cash.

There are presently no financing or liquidity shortages. Vossloh still considers the liquidity risk as a whole 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. The positive or negative impact of a potential change in the ECB base rate on cash flows is deemed to be low. The risk is therefore also still deemed to be low.

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 his 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 2021, of the financial investments and derivative financial instruments with positive market values, 61 percent were with contract partners with a rating of AA+ to AA–, 22 percent were with contract partners with a rating of A+ to A–, 11 percent were with contract partners with a rating of BBB+ to BBB–, while 6 percent 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 established provisions. 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 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. For any outstanding entitlements, Vossloh Rail Center GmbH, Hamburg, 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.

Resulting from the divestments in recent years, the 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 opportunities[1]

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 74.

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 becoming increasingly important 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. Vossloh AG is monitored by internal and external security experts on a permanent basis. The Company uses cutting edge systems to analyze and prevent potential attacks. In addition to making continuous improvements to the already high security standards within the Group, which comprise measures like hardening our infrastructure and using multifactor authentication, relevant training is provided for employees.

Other risks had no significant impact on net income in 2021. Overall, the risk is classified as low (previous year: moderate personnel risks due to the performance program).

Assessment of the risk and opportunities situation

All of the described risks and opportunities that the Vossloh Group (and thus also Vossloh AG) is 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. 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 2022 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.

Description of the essential features of the internal control and risk management system in relation to the financial reporting process/consolidated financial reporting process (Section 289 (4) and Section 315 (4) of the HGB [„Handelsgesetzbuch“: German Commercial Code])

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 risk management system was completely overhauled in fiscal year 2021 in light of the new auditing standard (PS 340 n.F.) issued by the IDW [„Institut der Wirtschaftsprüfer“: Institute of Public Auditors in Germany]. The Group auditor assesses the functional capacity of the early-warning risk control system in accordance with Section 317 (4) of the HGB. 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.

The Internal Audit department is largely responsible for the internal control system at Group level, as are the Group Controlling, Accounting, Treasury and Legal departments. 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 division also ensures that monitoring is integrated into processes.

The Supervisory Board, in particular the Audit Committee, Vossloh AG’s Internal Audit division and the locally appointed employees at the level of the management companies of the business units, are tasked with performing process-independent audits. The (Group) auditor also performs process-independent auditing activities. Both the audit of the consolidated financial statements and subject-specific audits as part of the pre-audit are considered essential process-independent monitoring activities in relation to the (Group) accounting process.

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 the Core Components, Customized Modules and Lifecycle Solutions divisions.

(Group) accounting risks
The preparation of the financial statements requires a range of assumptions and estimates. Such estimates affect the values recognized for reported assets and liabilities, as well as contingent liabilities as of the balance sheet date. They also affect how income and expenses are reported in the reporting period. The misuse of reasonable discretion can lead to (Group) accounting risks.

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 on the basis of the accounting rules laid out in the International Financial Reporting Standards as adopted by the European Union. In addition to general accounting principles and methods, it also contains provisions on specific balance sheet items, the income statement and the statement of comprehensive income, as well as information to be published in the notes in accordance with legislation applicable in the EU. The manual also governs specific formal requirements imposed on the consolidated financial statements. It establishes not only how the group of consolidated companies is defined but also lays out the components of the reporting packages to be prepared by the Group companies in detail. 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 December 2020. New and revised editions are made available directly to anyone involved in the Group accounting process via the Group intranet. The Group Accounting Manual is currently being revised and will be put online to make it more efficient and user-friendly. Any revisions or additions will then be available immediately. MS Teams will make it easier for everyone involved in the Group Accounting process to communicate.

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. 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 policies for local key divisions.

Thereafter, Vossloh AG conducts general plausibility checks on the reporting packages provided by the individual companies. They include not only the financial statements of the individual Group companies as adapted to the unified Group accounting standards, but also additional information required for the notes to the consolidated financial statements. The plausibility checks are performed by both the Controlling and Accounting departments. The financial statements are then consolidated. The correct offsetting of inter-company receivables/liabilities, income/expenses, ownership interrelationships and interim profits from deliveries or services within the Group are regularly checked in accordance with the peer review rule as well as with the application of suitable validation rules in appropriate control files.

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.

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

The Declaration on Corporate Governance is printed in the annual report, which is permanently available on the Vossloh AG website (see www.vossloh.com/en/ > Investor Relations > News and publications > Financial Publications; www.vossloh.com/en/investor-relations/financial/financial-publications/).

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 management (starting on page 31). 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. The level of sovereign debt in European countries rose significantly in the 2020 fiscal year due to the COVID-19 pandemic and remained at this high level in 2021. Significant increases in the price of materials may have a significant impact on Vossloh's cost structure and profitability in 2022 – another indirect consequence of the pandemic. However, this will be counteracted by the global trend towards sustainability, rail becoming an increasingly attractive method of transport and rail subsidy schemes, which will result in 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 October 2020. Its relevance is limited, however, due to the fact that the impact of the COVID-19 pandemic was difficult to predict accurately at the time. In order to reflect the uncertainty surrounding the long-term impact of COVID-19 on the rail industry, the study includes two scenario analyses; one based on a V-shaped pattern of future market development and the other based on a U-shaped pattern. In the V-shaped pattern, the market is expected to recover quickly, while in the U-shaped pattern, a longer recovery phase is assumed. The study believes the V-shaped pattern to be the most likely scenario. The reasons cited for this include the large number of economic stimulus packages and public aid for the rail sector as well as findings from a survey of UNIFE members. Therefore, the V-shaped pattern is discussed in more detail below. It includes all known COVID-19-related issues, such as a reduction in volume in the service market and project postponements and cancellations that have already been implemented. The annual global volume of the entire rail technology market is expected to grow from an average of €177 billion between 2017 and 2019 to an average of around €204 billion between 2023 and 2025 – an average growth rate of 2.3 percent per year. UNIFE estimates the market accessible to European providers, such as Vossloh, to be worth approximately €126 billion between 2023 and 2025. 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 €110 billion per year on average was considered accessible for the 2017–2019 period. The expected increase to €126 billion also represents growth of 2.3 percent per year.

The UNIFE study found that projected market growth varies significantly from region to region. The largest rail technology market accessible to Vossloh has been and continues to be Western Europe, with an annual volume of around €40 billion in the 2017–2019 period. Market growth of 2.1 percent per year to approximately €46 billion is anticipated between 2023 and 2025. This is followed by the NAFTA region with a current annual market volume of approximately €27 billion and future annual market volume of around €31 billion (+2.6 percent) and the Asia-Pacific region with a volume of just under €20 billion, expected to rise to around €21 billion (+1.3 percent). 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: Latin America 4.9 percent, Eastern Europe 3.6 percent, Africa/Middle East 2.5 percent and CIS 1.9 percent.

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. UNIFE estimated the volume of the globally accessible infrastructure market (excluding electrification) to be roughly €18 billion per year on average for the period between 2017 and 2019. An annual growth rate of 2.4 percent is currently forecast for the 2023–2025 period. This will provide an annual market volume of approximately €21 billion. The growth forecast for the infrastructure services sub-segment until the 2023–2025 period is 1.8 percent, meaning accessible market volume is expected to increase from the current €6.0 billion per year to €6.7 billion. In total, the accessible market relevant to Vossloh between 2017 and 2019 came to around €24 billion per year. We expect it to grow to roughly €28 billion by the 2023–2025 period (+2.2 percent).

Outlook for 2022

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 of Vossloh AG. Vossloh's revenue planning is primarily based on assumptions specific to 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 long-term decision-making processes within the framework of longer-term funding. Vossloh supports its customers as partners 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

		2021	2022 forecast
Sales	€ mill.	942.8	925 to 1,000
EBITDA margin	%	13.2	13 to 14
EBIT margin	%	7.7	7.5 to 8.5
Value added	€ mill.	9.5	5 to 20

Sales of up to €1 billion anticipated

Vossloh anticipates sales revenues of between €925 million and €1 billion for the 2022 fiscal year (2021: €942.8 million). Vossloh expects sales revenues for the Core Components division to be on a par with the previous year. The Fastening Systems business unit expects slightly higher sales overall. Lower sales, in particular in China (deliveries there being rescheduled due to the pandemic had a positive impact on sales in 2021), are expected to be more than offset mainly by higher sales contributions in Eastern Europe.
The Company expects the sales performance of the Tie Technologies business unit to return to normal in Australia after two extraordinarily strong years. Vossloh expects this sales downturn to be largely balanced out by an increase in sales in the USA. Vossloh is anticipating a slight sales increase for the Customized Modules division, largely due to an expected rise in sales in Mexico, Portugal and Turkey. The Lifecycle Solutions division expects to see a considerable increase in sales, mainly due to the acquisition of ETS Spoor.

EBITDA margin of between 13 and 14 percent and EBIT margin of between 7.5 and 8.5 percent expected

The Vossloh Group forecasts an EBITDA margin of between 13 and 14 percent for the 2022 fiscal year (2021: 13.2 percent) and an EBIT margin between 7.5 and 8.5 percent (2021: 7.7 percent). The Customized Modules and Lifecycle Solutions divisions are once again forecasting an increase in profitability, while the Core Components division expects overall stable to slightly declining profitability. Overall, Vossloh expects a further increase in EBIT for the year 2022.

Value added expected to be positive again in 2022

Average capital employed is expected to be slightly higher than in the 2022 fiscal year. Value added in the 2022 fiscal year is expected to be within the range of €5 to 20 million. The weighted average cost of capital before taxes (WACC) relevant for internal management purposes will again be set at 7.0 percent in the 2022 fiscal year.

Risks for the business performance of Vossloh arise mainly from changing material prices. Vossloh expects increased material costs to continue to have a negative impact as they can only be partially offset by passing price increases on to customers. Energy costs may also pose a risk if higher than planned. In particular, the recent geopolitical developments involve additional uncertainty and will probably also have an influence on energy prices. Rescheduling deliveries for larger projects may have a positive or negative impact on business, particularly in China. Earnings may also be impacted negatively by legal risks and factors arising from the value chain, such as materials being affected by supply bottlenecks. Please refer to the statements made in the risk report (starting on page 31 ff.) for additional information about risks that may affect the stated planning.

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. The administrative expenses of Vossloh AG in the 2022 fiscal year are expected to remain at approximately the same level as the previous year. The net financial result is dependent not only on interest expense but also heavily on the income from dividends and profit transfer agreements, as well as expenses from the assumption of losses and impairment losses recognized on financial investments. Vossloh does not expect any significant change in this area compared to 2021. The planned merger of a number of German companies in the Lifecycle Solutions division may also have a negative effect. The merger is expected to lead to a stable year-on-year development in profit after tax in fiscal year 2022, provided that it goes ahead.

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 2022 fiscal year only reflect targeted organic growth.

Nonfinancial Group statement[1]

The Group nonfinancial statement of Vossloh in accordance with Sections 315b and 315c HGB for 2021 is submitted to meet the requirements of commercial law. In preparing this statement, Vossloh used the standards of the Global Reporting Initiative (GRI, "Core" option) 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 pledge is published on the www.vossloh.com corporate website ("Investor relations" > "Sustainability" > "Sustainability management at Vossloh" section).

Vossloh's sustainability claim

enabling green mobility – for a sustainable future

Vossloh's corporate vision is "sustainable, safe and convenient rail mobility to make the world a better place". As a globally successful supplier of integrated rail infrastructure solutions with a history stretching over 135 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 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 solutions 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 successful 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 next generations. The Company 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

Significance of sustainability for the Vossloh business model

Vossloh offers products and services that enable better and 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 pages 4 et seq.

Development of a 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 claim is also reflected in Vossloh's sustainability strategy. In the 2021 fiscal year, Vossloh further developed its sustainability strategy 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 Vossloh's sustainability performance. The sustainability strategy and the guideline supporting it were adopted by the Executive Board of Vossloh AG on September 20, 2021.

At the same time, the Vossloh AG Executive Board has underlined and reaffirmed the Company's claim and focus with its commitment to sustainability 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 74.

Group-wide sustainability program

The new sustainability guideline provides the Group-wide organizational framework and set 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 are set by a materiality analysis in order to determine the sustainability issues relevant to Vossloh. Specific sustainability goals are then set in relation to these key issues. These goals are pursued through sustainability initiatives and the integration of environmental and social aspects into the Company's business and decision-making processes. Another focus of the guidelines is on internal and external communication in order to make Vossloh's sustainability performance transparent and also to further strengthen the commitment of its employees on the road to becoming a green company.

As part of its development, Vossloh has structured its sustainability management into eight areas of action, which enable a more targeted and efficient pursuit of the material issues identified in the materiality analysis. The overarching area, "Sustainability strategy and management", provides the framework for the other seven areas as well as for the Group's future approach.

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

Vossloh's sustainability organization

The Group's Executive Board bears the overall responsibility for all sustainability issues 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 a Corporate Sustainability department. Created in 2020, the new 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 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.

EU Taxonomy and external ratings

100 percent of sales revenues are taxonomy-eligible; 62 percent are taxonomy-aligned

The EU Taxonomy Regulation reporting obligations were to be implemented for the first time for the 2021 fiscal year. This is a standardized classification system for defining ecologically sustainable economic activities. Please see a brief summary of the results below. Detailed information on EU Taxonomy requirements as well as a comprehensive and detailed description of the implementation at Vossloh can be found on pages 70 et seq. As all business activities can be classified under infrastructure for rail transport (Section 6.14. of the Delegated Act on the Taxonomy Regulation of June 4, 2021), 100 percent of the sales revenues are deemed taxonomy-eligible for the year under review. The taxonomy-aligned sales revenues, which were already determined by Vossloh before the official reporting requirement and which concern sales related to electrified lines, accounted for 62 percent of the Vossloh Group's total sales in 2021.

Sustainability ratings underpin 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 ISS ESG, which places Vossloh in the top 10 percent of its sector. EcoVadis has also awarded Vossloh silver status, and the score obtained means the Company ranks among the top ten percent of all companies assessed. MSCI ESG Research has awarded Vossloh an A rating (on a scale from AAA to CCC) for its sustainability efforts. Such rankings play a special role for Vossloh: The Company was one of the first companies in Germany to place a sustainability-oriented 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.

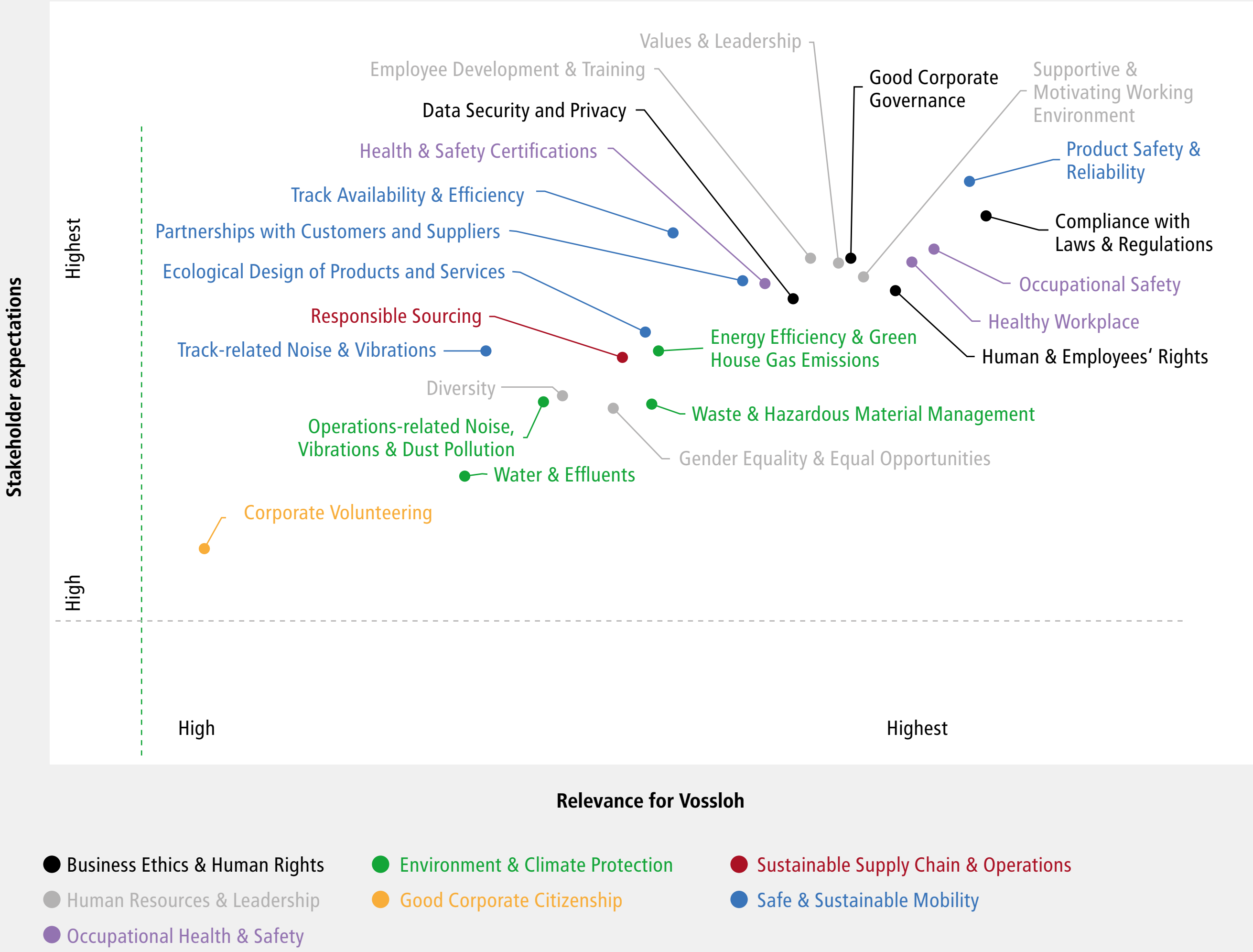
Another criterion for the assessment of Vossloh's sustainability performance is certification in accordance with internationally recognized norms and standards. The great majority of Vossloh units have certifications in at least one of the international quality, environmental, energy efficiency or occupational health and safety standards such as ISO 9001, ISO 14001, ISO 50001, ISO 45001 or its predecessor standard OHSAS 18001, or a comparable national standard, and have corresponding management systems in place. As in the previous year, 98 percent of the Vossloh workforce was employed at a unit bearing this certification as of December 31, 2021.

Materiality analysis and stakeholder engagement

Reporting on nonfinancial issues

As part of the review of its Group-wide sustainability strategy in 2021, Vossloh conducted a materiality analysis to identify key sustainability topics. 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. First, this survey asked stakeholders about what they expect from Vossloh regarding nonfinancial issues. They also assessed the relevance for Vossloh based on (i) the influence of Vossloh's activities on these focus areas and (ii) the impact on the Company's future business development. The ranking and prioritization of the sustainability topics were determined by linking stakeholders' expectations to the relevance for Vossloh in each focus area. The result was subjected to a critical review by the Group Sustainability Committee and the Executive Board, including the management perspective, activities already underway, and Vossloh's strategic alignment. Vossloh now reports on 23 material nonfinancial issues.

Sustainability areas of activity



In addition it is reported on how the Group implements the ten principles of the UN Global Compact.

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 120 et seq of the annual report). The management report contains supplementary and/or more detailed information regarding a number of the nonfinancial issues, 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" section on page 37).

New global sustainability goals and initiatives

At the end of 2021 and based on the materiality analysis conducted and the 23 topics identified as significant, Vossloh pinpointed seven key focus areas for the further sustainability efforts. These key focus areas were each assigned concrete sustainability goals. At the same time, Vossloh launched a Group-wide sustainability initiative for each goal in order to achieve the fixed company objectives.

Vossloh's seven sustainability goals are:
- CO_2 neutrality by 2030 (Scope 1 and Scope 2),
- 90 percent sustainable strategic sourcing volume by 2025,
- reduction of workplace accidents by 20 percent annually,
- introduction of the new value-based Vossloh leadership principles,
- reduction of the ecological footprint of Vossloh's products and services along the entire value chain,
- implementation of a Group-wide diversity, equality and inclusion policy in 2022; and
- implementation of a corporate volunteering program to enhance social commitment.

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. The materiality analysis and the selection of key focus areas are reviewed annually and added to as necessary.

In addition to these focus areas and goals, which apply to the entire Group, there is a wide range of other sustainability initiatives being implemented in the various business units and at the Group's sites. Company-wide, a total of 40 sustainability initiatives had been rolled out by the end of 2021 at Vossloh. In the future, a Group-wide register will ensure an overview of all initiatives and the corresponding performance measurement.

Environment and climate protection

The primary focus of the Vossloh Group is generally geared towards making efficient use of resources and minimizing environmental impact. The continuous optimization of the use of materials, energy and personnel as well as the ongoing enhancing 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 as well as 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, 2021, 83 percent (previous year: 72 percent) of the Vossloh workforce was employed at a unit bearing ISO 14001 certification.

In terms of "Environment & climate protection", Vossloh identified the five issues as relevant in the 2021 materiality analysis. In addition, a Group-wide sustainability initiative has been defined with the aim of gradually achieving climate neutrality (Scope 1 and Scope 2) by 2030. Achieving this aim is measured using the indicators CO_{2e} emissions (CO_2 equivalent), CO_{2e} intensity (CO_{2e}/sales revenues) and energy intensity (energy consumption/sales revenues). To this end, a detailed determination of energy consumption in accordance with uniform Group-wide specifications was initiated, and work began on a detailed plan of measures for reducing CO_{2e} emissions year by year. Measures are focused on concretely reducing direct and indirect CO_{2e} emissions. In addition, Vossloh is looking at a compensation program in the coming years to offset any remaining, unavoidable emissions within the Vossloh Group.

Energy efficiency and greenhouse gas emissions

With regard to the impact on climate change, Vossloh is focused on CO_2 emissions and CO_2 equivalents. All the divisions have been making investments to reduce energy consumption and boost energy efficiency for years. Exemplary measures are the conversion of lighting to LED technology or the use of lost heat from production at several sites. In addition, energy consumption is an essential decision-making criterion for investment choices and process optimization, also in view of rising energy prices.

The following tables present the consumption of significant energy sources within the Vossloh Group for the year under review and the comparative figures from 2020:

MWh (Vossloh Group)	2021	2020
Gas consumption	90,854.2	72,268.5
Electricity consumption	71,529.5	64,175.1
District heating consumption	4,586.4	4,384.2

Liters (Vossloh Group)	2021	2020
Heating oil consumption	244,403.1	228,862.0
Fuel consumption[1]	969,009.0	828,094.1

[1] This includes the fuel consumption of Vossloh's vehicle fleet.

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)	2021	2020
Gas consumption	16,643.5	13,289.4
Heating oil consumption	620.8	581.4
Fuel consumption	2,390.8	2,064.8
Scope 1	**19,655.1**	**15,935.6**

t CO_2 equivalents, scope 2 (Vossloh Group)	2021	2020
Electricity consumption	26,496.0	27,622.6
District heating consumption	1,333.4	1,315.3
Scope 2	**27,829.4**	**28,937.9**

The following table shows the energy and CO_{2e} intensity, each in relation to the Vossloh Group's sales revenues. For Vossloh, energy and CO_{2e} intensity are the key control indicators for energy efficiency and the minimization of CO_{2e} emissions, also in view of the company's growth targets.

Energy and CO_2 equivalent intensity (Vossloh Group)	2021	2020
Energy intensity (MWh/€ million)	190.7	174.8
CO_{2e} intensity (CO_{2e} tons/€ million)	50.4	51.6

CO_{2e} intensity reduced to 50.4 CO_{2e} tons/€ million

The increase in energy intensity is mainly due to the consolidation of an Indian production site – a foundry for frogs – within the Customized Modules division. In contrast, despite the overall higher energy consumption, the CO_{2e} intensity measured in CO_{2e} emissions in tons per €1 million sales revenues was noticeably reduced overall despite consolidation of the emissions-intensive Indian production site. This was due to significant efficiency improvements and savings, as well as the increased conversion of the sites to green power.

Vossloh does not as yet have sufficient data to determine the greenhouse gas emissions relating to the upstream and downstream areas (Scope 3).

The Company's operating units are working on further reducing CO_2 emissions through a wide range of measures. When it comes to energy-efficient production, the Werdohl Vossloh Fastening Systems "factory of the future" is considered a "beacon" throughout the Group. The shortest possible distances through the linear design of the individual stations, a change in the energy source of heat generation, highly efficient insulation of the heat treatment plant and the use of a high-efficiency burner, as well as modernization of the washing plant with smaller and lower-temperature baths: These are just some of the measures that have significantly reduced energy consumption per 1,000 bent rail clamps at the Werdohl site. Following the conversion, for example, the washing station operates with 25 percent greater energy efficiency than before.

The Customized Modules division completed the redesign of value flows in the frog segment in France in 2021. Certain specialized manufacturing steps taken by individual sites enable a more efficient production process with shorter throughput times, which is also reflected in lower CO_2 emissions. In 2021, the division pursued several projects to equip suitable factory buildings with solar roofs. At the Outreau foundry, for example, up to 15 percent of the energy demand is to be generated in a climate-friendly way in the future. For the Reichshoffen technology center, plans to heat water via solar collectors were put forward over the course of 2021. The solar generation facility for India's Bangalore plant was completed in 2021 and is already up and running. Several sites belonging to the Customized Modules division have wallboxes where employees can charge their e-cars for free. At the same time, the division provides financial support for employees to purchase an e-bike for their commute to work. At the Indian sites in New Delhi and Hyderabad, over 75 percent of the workforce now come to the Vossloh plant on company-sponsored e-bikes, avoiding CO_2emissions on their commute to work. This is not only good for the environment – especially in comparison with the widespread use of motor scooters – but also a healthier way to travel to work. In 2021, several units in the division switched from traditional suppliers to green electricity providers.

After Leipzig switched in 2021, all German sites started using green electricity in the Lifecycle Solutions division. Since many of the Vossloh Rail Services machines only run on diesel fuel, the business unit switched in 2021 to a fuel tariff that offsets CO_2 emissions by investing a surcharge in climate action projects. Since then, this compensation program has also been used for all of the Group's company cars in Germany.

In the Tie Technologies business unit, an internal group of experts drew up various proposals in 2021 to reduce energy consumption in the production of concrete ties at the Colorado plant. Among other things, the time that machines lay idle was reduced. In close coordination with suppliers and customers, systematic analyses and tests also began to determine how material- and energy-saving changes in the composition of the concrete and in the curing processes affect the quality of the rail ties. At the same time, a project was also set up with the aim of taking over the CarbonCure technology. In this manufacturing process, processed CO_2 from industrial waste gas streams is added to the fresh concrete; the carbon dioxide binds as a nano-mineral. This process improves the environmental impact of concrete without compromising its performance.

Operations-related noise, vibrations and dust pollution

In the manufacture of its products and in the provision of its services, the Company endeavors to keep noise and dust emissions at the relevant sites as well as the exposure of employees to oscillations and vibrations as low as possible. Vossloh Fastening Systems achieved further improvements in this area in 2021 by installing dust-preventing filters at the Anyang plant, for example. At Vossloh Skamo, the hardening plant venting was modernized while the press venting was fitted with hoods, and a wire-cutting machine was covered. At the Werdohl plant, a new manufacturing process where the tension clamps were separated further reduced the noise level. The extension of the soundproof booth to include the bending unit also had this effect.

Water and effluents

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 supply systems. The Company intends to use 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 illustrates the Vossloh Group's water consumption as determined by the water meters:

m^3 (Vossloh Group)	2021	2020
Water consumption	178,173.3	177,553.1

Water consumption was roughly at the previous year's level despite the significantly higher sales revenues and the full consolidation of the Indian production site in the Customized Modules division. This is mainly due to a lower output volume in the Tie Technologies business unit.

In the year under review, Vossloh Fastening Systems commissioned a new neutralization plant in Werdohl. With more effective pickling technology and smaller active baths, less wastewater is now produced there than in the previous plant. The wastewater treatment plant in Poland was also modernized. At Vossloh Rail Services, the Nuremberg welding plant's torch system has been operating with a closed cooling circuit since April 2021 and saving water in the process.

Waste and hazardous material management

As part of their sustainability strategy, management within Vossloh companies has set a goal of using natural resources responsibly and sparingly. Material consumption and disposal quantities are recorded and monitored in the individual units. Vossloh units use safe disposal methods that are separated according to waste types. The selected waste management companies are then reviewed regularly. Where it is technically possible and practical, closed material life cycles and reprocessing plans reduce the consumption of valuable new raw materials to a minimum.

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. For example, the Kunshan plant collects rail clamps discarded during quality control and returns them to the steel mills, which feed the material back into production. At several sites, Vossloh Fastening Systems is now using reusable transport containers. Vossloh Tie Technologies recycles steel scrap and process water on a large scale. Customized Modules further processes the packaging of the delivered raw materials in Fère-en-Tardenois. The division also launched a project in 2021 to further increase the percentage of recycled steel used in the casting of frogs from the current level of around 60 percent. Downcycling can also be a way to extend the lifecycle of the material. At Vossloh Rail Services, for example, nonreprocessable residue from grinding stones is used as an additive in slag production.

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. Greater levels of rail traffic are a core part of sustainable, environmentally and climate-friendly mobility.

In terms of safe and sustainable mobility, Vossloh identified the following five issues as relevant in the 2021 materiality analysis. A Group-wide initiative aims to reduce the environmental footprint of products and services along the entire value chain. To this end, the entire footprint will be calculated by 2023 using one example from each of the four business units and the results will be integrated into the innovation and development process for products and services as EcoDesign principles in order to minimize their impact on the environment.

Track availability and efficiency

Given the current concern about land consumption 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 (and heavier) trains. However, the higher the load on the rail infrastructure, the more important its ongoing monitoring and maintenance becomes in order to avoid failures. In this regard, Vossloh has logistics expertise ranging from rail and switch replacement to the complete overhaul of rail lines. On the other hand, when it comes to switch and rail maintenance, Vossloh covers the entire range of requirements for corrective milling and preventive grinding: In mainline and mass transit networks alike, the Company’s high speed grinding (HSG), high performance milling (VTM performance), multipurpose milling (VTM compact) and Flexis system offer solutions for every type of rail line that extend the service life and usability of rail infrastructure.

In doing so, the Group can combine the use of its innovative grinding and milling technologies with a diagnosis of the condition of the infrastructure. It is precisely in this area that digitization opens up considerable potential, especially for condition-based and, in the future, predictive maintenance. Rail and switch condition data from track-based systems are supplemented by the diagnostic data provided by the grinding machines equipped with measuring technology. Applications such as mapl-e and MR.pro will merge the collected data into the cloud-based Vossloh Analytics platform, provide a quick overview of the need for action for line (sections) and suggest appropriate measures for damage prevention or repair. The benefit is self-evident: Smart maintenance is based on the actual need for action instead of servicing at fixed intervals as in the past. At the same time, Vossloh’s grinding machines are designed to be incorporated into scheduled traffic. This means that rail lines no longer have to be closed for maintenance.

Product safety and reliability

Vossloh's products and services are subject to detailed technical specifications and standards that must be met. All the main production plants have quality management in accordance with ISO 9001 or a comparable national standard like the AAR's M1003 standard in the USA. As of the reporting date, December 31, 2021, 97 percent (previous year: 97 percent) of the Vossloh workforce was employed at a unit bearing this certification.

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" chapter from page 27).

Through the use of tailored instructions, briefings, consulting, training and seminars both before and after delivery, Vossloh ensures that its customers' employees can handle the Company's products appropriately. Sales and Technology specialists are available to handle customer questions.

To minimize possible issues jeopardizing the safety of its products and services, Vossloh is very careful in its choice of suppliers. These are chosen by the individual operating units with their specific expertise. These subject potential suppliers to a comprehensive assessment before they are commissioned for the first time, based on a self-assessment by the supplier. A key aspect is a supplier's unfailing ability to meet the quality standards stipulated by Vossloh. The keywords here include product quality, service and delivery reliability. 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.

Track-related noise and vibrations

Reducing the noise caused by rail traffic and improving track acoustics have been a focus of Vossloh's research and development work for years (see also "Research & Development" on page 27). An essential factor in effective noise reduction is combating it at the source, by optimizing the wheel-rail contact on the track, which Vossloh has prioritized. 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, called whisper switches, and rail machining technologies (grinding, milling) for restoring a smooth and, therefore, "quiet" surface. The rail and switch processing machinery can achieve noise reduction of up to 10 dB(A) by precisely removing material. The machines themselves also operate 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 70 dB(A).

In 2021, Vossloh Rail Services developed a new milling tool with which grooved rails can now also be fully deployed without prior construction works when the milling machine is in service. The use of this milling wheel facilitated a sustained noise reduction on particularly congested sections of Düsseldorf's Rheinbahn route (see also "Research & Development" chapter on page 27). The business unit's logistics unit completed the equipping of its own freight cars with whisper brakes in 2021. This is intended to reduce noise levels by up to 10 dB(A) when transporting switches and rails to construction sites.

Ecological design of products and services

For economic reasons alone, all Vossloh units have set a goal of using resources as sparingly as possible. Accordingly, sustainability criteria are already being incorporated into the development or design of new products and services in many areas within the Company. The aim now is to systematically link these approaches and harmonize them across the business units to create Group-wide operational principles that can be followed by all divisions. The first step along this path in the year under review was the development of Group-wide innovation guidelines (Innovation Playbook). It describes how development projects will be set up and implemented at Vossloh in the future, and defines the criteria and indicators to be used in the various phases of a project to assess whether it is successful or not and decide whether to continue with it. Sustainability aspects such as low energy consumption or the nonuse of problematic raw materials play a central role here. Likewise, the entire life cycle of a product, including recycling and/or disposal, is included from the outset, as are the long-term effects of a service in the form of life cycle assessments in accordance with international standards such as ISO 14040 or 14044.

In 2021, work began on identifying one suitable example from each of the four business units. In contrast to the previous development process, the focus is less on product or order-related work and more on holistic solutions to which experience from all business units contributes – so that new business models can be created at the same time. The viewpoint of the customer(s) and suppliers is also incorporated into the development process at an early stage in order to achieve a high level of compatibility at the interfaces.

Partnerships with customers and suppliers

For a long time now, customers have also repeatedly partnered up with Vossloh, in part due to long-standing business relationships, especially in the development and market launch of new products, services or business models. For example, the Core Components and Customized Modules divisions frequently carry out test installations on selected customer tracks. In the recent past, for example, the novel composite tie Engineered Polymer Sleeper (EPS) has been tested in the USA, Sweden, Romania, Finland and Germany, among other countries. The new MIM-H digitally controllable point machine was subjected to similarly thorough field tests at Track operators in several countries. Vossloh Fastening Systems currently has partnerships in place for the development of a new rail fastening system for slab tracks in cities and a customized fastening system for a rail-bound automated means of transport (people mover), among others. The grinding and milling trains belonging to the Lifecycle Solutions division also demonstrated their initial market readiness in test applications at customers. The cooperation with DB Systemtechnik GmbH, a subsidiary of Deutsche Bahn AG, forms the basis for data-based monitoring of the rail infrastructure.
The multi-year framework agreement with Trafikverket for condition monitoring of a total of 1,000 switches in Sweden can be seen as an example of another form of customer partnership. Here, the strategies for an efficient and targeted approach are developed jointly and decisions on concrete measures are made after close consultation.

The prerequisite for such close cooperation is satisfied customers, which is why the Vossloh units attach great importance to structured feedback – also in order to learn from any mistakes. The uniform Customer Relationship Management (CRM) software rolled out across the Group includes not only a tool for assessing customer satisfaction using specific questions linked to focus groups, which result in an overall score, but also a marketing tool that can be used for direct customer surveys and analyses to ensure the objectivity of this assessment. This is based on various segmentation criteria (regions, customer categories, customer classifications, service segments) and the division into buying center functions. In parallel, the net promoting score (NPS) developed at Customized Modules is used. This key indicator measures the extent to which a customer would recommend a product or service to others.

In 2021, several business units gathered customer feedback in different ways. In Germany, for instance, Vossloh Fastening Systems asked a small group of loyal customers for a review and conducted broader surveys in China and Poland. In Vossloh Switch Systems, all units were made aware of the Net Promoting Score system. Vossloh Rail Services focused its survey on the customers served by one operating unit. The results consistently showed a high level of satisfaction with Vossloh's products and services. Isolated points of criticism led to prompt improvements being implemented.

Vossloh also enters into partnerships with suppliers to ensure that their products exactly meet Vossloh's requirements. One example is CogX: The heat-treated laminated steel for frogs and point blades was developed by Vossloh Cogifer together with Arcelor Mittal. For the construction of the SF03 W-FFS rail milling train, which incorporates the highly complex technology for the complete reprofiling of rail lines in just one operation, Vossloh Rail Services is relying on its proven cooperation with Linsinger. All sensors for monitoring the switches in Sweden are supplied by a partner who, together with Vossloh, has adapted the products to the conditions prevailing there.

Occupational health and safety

Workplace safety and protecting employees' health are at the heart of Vossloh's care obligations as an employer. The Company aims to have as many units as possible certified in accordance with the internationally recognized ISO 45001 standard (see also "Health and Safety Certifications" on page 58). The standard provides the Company with suitable tools and measures to integrate occupational safety and health protection into its processes. For the top managers of the operating units, achievement 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).

In occupational health and safety, Vossloh identified the following three issues as material in the 2021 materiality analysis. A Group-wide initiative has been defined for this area, with the aim of reducing the frequency and severity of occupational accidents by 20 percent per year. Relevant key figures for goal achievement are the internationally used variables such as lost time accident frequency rate (LTAFR) and lost time accident severity rate (LTASR), as well as the number of potential accident risks reported and minimized via the SAFE+ app.

In the past year, the COVID-19 pandemic again presented Vossloh with special challenges in protecting the health of its employees and preventing the spread of the virus in the workplace. Coordinated via the COVID-19 crisis team, comprising the Chief Operating Officer, the heads of the Corporate Sustainability, Corporate Human Resources and Corporate Controlling departments, and the HSE managers of the business units, the comprehensive protective and precautionary measures introduced in the previous year were maintained and readjusted as necessary. The Group Works Council, local employee representatives and the Work Safety Committee were involved in the decisions. At all sites, Vossloh's employees were informed about the impact of vaccination against the virus. In some cases, units even conducted on-site vaccinations.

Because employees working in production were instructed to stay home and be tested at the slightest suspicion of infection, there were brief interruptions in production at several sites throughout the year. In our administrative divisions, employees worked remotely in the main. We prioritized online contact with our customers, suppliers and service providers. In 2021, 377 cases of COVID-19 were reported by Vossloh employees throughout the Group.

Occupational safety

There has been a permanent Group-wide occupational safety body within Vossloh since 2012 in the form of the Work Safety Committee. This has led to important steps being initiated to harmonize the occupational safety conditions across the various divisions in recent years. For example, a standard occupational safety policy has been developed, which is mandatory for all companies around the world. In this policy, the zero-accident strategy vision is defined. The Work Safety Committee also played a key role in the development of the Group's own SAFE+ accident prevention app.

Workplace accidents have been documented at Vossloh on the basis of uniform criteria, over and above what is required by law. The most important key figures here are the frequency and severity of accidents resulting in lost work time due to injury. Accidents resulting in lost time due to an employee's ill health are immediately reported directly to the Executive Board. The Work Safety Committee, the Group Works Council and the Corporate Sustainability Department cooperate closely in order to further reduce workplace accidents and further develop the culture of safety.

Workplace accidents (Vossloh Group)	2021	2020
Lost time accidents (LTA)[1]	118	102
Lost time accident frequency rate (LTAFR)[2]	16.4	16.2
Lost time accident severity rate (LTASR)[3]	2.8	2.6

[1] Accidents involving injury-related lost time of at least 1 hour.
[2] Frequency of accidents involving injury-related 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 hours worked.
[3] Severity of accidents involving injury-related 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 hours worked.

As in the previous year, there were no work-related fatalities in the Vossloh Group in 2021.

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 conduct-based safety inspections designed to raise safety awareness among the employees, regular safety instruction and training for all the staff, online training sessions on safety-relevant subjects, the provision of comprehensive protective equipment, safety markings at the various workstations, and awareness campaigns. Impressive videos or safety flashes (anonymized summaries) of accidents are also frequently used. The "Four seconds for safety" campaign is regularly discussed at the start of a working day or a get-together within the wide, with brief reference being made to a specific safety aspect, and not just in the production area.

Hand protection was the focus of the 2021 safety campaign at Vossloh Tie Technologies: The topic came up in various forms every week at one of the daily safety talks in order to raise awareness among all employees. At Vossloh Switch Systems, training sessions on how to avoid falls were held at the Reichshoffen and Fère-en-Tardenois sites. Two so-called cobots were installed at the Outreau foundry. These "collaborative robots" relieve their human colleagues of tiring, repetitive (and potentially hazardous) tasks such as machine loading or unloading.

An important role in minimizing potential risks – and in achieving the goal of reducing the number of occupational accidents by 20 percent annually throughout the Group – is played by the SAFE+ app, which was launched in 2020 in close cooperation with Corporate Sustainability, the Work Safety Committee and the Group Works Council, and with the support of Vossloh IT. Initially available in just German, English and French, the app is currently being rolled out to include all languages spoken within the Group. In 2021, more than 1,000 employees throughout the Group received instruction in the use of the app. In the future, all Vossloh employees will participate in the program. Following training, employees should report safety risks identified within the Company or on the tracks via the app. The aim is to systematically reduce hazardous situations at all sites and in all divisions.

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.

Healthy workplace

Vossloh's occupational health management aims to offer all employees preventive healthcare. This includes the occupational safety measures already mentioned, workplace ergonomics, driver safety training and company medical care, as well as making fruit available on a daily basis, nutritional counseling, company sports (including running groups and yoga courses), help quitting smoking, and preventive measures (including colorectal cancer screening, flu vaccinations, health screening and health tips).

In 2021, Vossloh Fastening Systems used a master's thesis prepared within the Company to find out which health protection measures employees consider particularly important. A number of key topics emerged, including musculoskeletal, as well as cardiovascular diseases, stress management and nutrition. In the Customized Modules division, employees have been receiving psychological support as required, thanks to a 24/7 telephone hotline since mid-2021. In 2021, Vossloh Rail Services tested medical exoskeletons in the welding plants to see if the back muscles of employees could be relieved.

Health and safety certifications

Vossloh attaches great importance to workplace safety and protecting its employees' health. The introduction of a corresponding management system and certification integrates current requirements into the ongoing processes of a company. The mandatory audits by independent external auditors ensure that legal obligations and requirements are met. Internationally recognized in this field is the ISO 45001 standard; it has replaced the formerly more common OHSAS 18001 (Occupational Health and Safety Assessment Series) standard. At Vossloh, almost all major production locations worldwide are certified to the ISO 45001 standard or to a lesser extent the OHSAS 18001 standard. At the end of 2021, these units employed around 88 percent (previous year: 76 percent) of Vossloh's workforce. Since November 2021, the Customized Modules division has been preparing for certification of the Bydgoszcz site to the ISO 45001 standard, with another unit in Malaysia to follow. The units that joined the Group in the year under review are to be certified to the ISO 45001 standard as quickly as possible, as are the Tie Technologies sites in North America.

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 issues 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" section on page 65). The topics of values and leadership principles were addressed with particular focus throughout the Group last year.

In the area of human resources and leadership Vossloh identified the following five issues as relevant in the 2021 materiality analysis. Two Group-wide initiatives have been defined in this area. Firstly, from 2022 onwards, the Group will introduce new, value-based leadership principles and implement them in the Company. A key element in reviewing the goals set is the People Review Process (PRP) introduced in 2020. Secondly, Vossloh intends to further roll out the Group-wide Diversity, Equality and Inclusion Policy in the 2022 fiscal year. Diversity officers, who not only act as a point of contact but also initiate and implement projects in their own business areas, have been appointed for each business unit.

Values and leadership

From centrally coordinated but flexible and independently operating units to "One Vossloh" – as a company, Vossloh has undergone fundamental changes in recent years. Following a successful restructuring, a focus on the rail track, and inclusion of sustainability in corporate values and as a key initiative in the revised corporate strategy, a new conception of the Group for internal and external communication was required: What is Vossloh's vision and mission? What are the core values that shape the Company's corporate and leadership culture?

In a structured process moderated by Corporate HR, the corporate values, mission and vision, and leadership principles were revised or redrafted together with the Executive Board, business unit management teams and the global HR Community. Among other things, the four existing corporate values – "passion," "excellence," "trust and respect" and "entrepreneurship" – will be preserved while a fifth corporate value "sustainability" will be added. In addition, three leadership principles have been established which, however, apply as guidelines not only to management but to all Vossloh employees: "We create value for Vossloh," "drive constant improvement" and "we are close to our people." Likewise, defined indicators can be used to check whether decisions are in line with these management principles in a transparent manner. The leadership principles were a central theme of the annual Leaders' Lounge in December 2021, which was attended virtually by around 100 of the Group's senior executives from around the world.

A unified talent and follow-up process was developed in 2021 and will be rolled out worldwide in 2022. Between October and November, top management worldwide received training on the vision/mission, values and leadership principles. In December, the entire workforce was informed of this training via video messages. The same process was also conducted in consultation with the representatives of the Group Works Council and presented to the Supervisory Board. Global training sessions will be held in 2022, flanked by a communications campaign.

The general rules for working at Vossloh are summarized in a Code of Conduct that each and every employee is required to sign upon joining the Company. The principles of conduct set out in the Code of Conduct form a binding yardstick and benchmark for the day-to-day activities of all employees (see the "Compliance" section on page 65).

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 HR departments. In addition, managers and employees sit down for six-monthly reviews to discuss the progress of the agreed goals and development operations.

Starting in 2022, the People Review Process (PRP) for managers and nontariff employees will not only include individual goals and development measures, i.e. WHAT, but also HOW these measures and goals can be achieved in line with the company values and leadership guidelines. In the past fiscal year, more than 80.7 percent of all managers and nontariff employees went through this process.

The large number of professional development measures for Vossloh employees covering all areas of expertise comprises external and internal training, workshops, project involvement (within or outside of a business unit) and coaching as well as increasingly digital learning opportunities. In connection with commissioning the "Factory of the Future" in Werdohl, for example, around 100 Vossloh Fastening Systems employees underwent a certified program comprising some 85 measures during the year under review. A training robot was also used in the process. As a result of the COVID-19 pandemic, however, there was a strong focus on training in online and blended learning formats in 2021 too. A total of 2,013 employees took part in 7,829 events – a decline of 10.2 percent compared to the previous year. Since not all classroom training content could be immediately digitally implemented, unfortunately, not all employee training requests could be fulfilled in 2021 either.

Vossloh also supports employees gaining qualifications on their own initiative, such as by studying alongside working. For example, since 2021, Vossloh Fastening Systems has granted employees in China undergoing further training an additional day off before exams, so they are better prepared. In addition, there is a cross-division LEAD! Program, which prepares high-potential employees for more advanced duties. In 2021, the entire program was revised and aligned with the newly developed values and leadership principles. Over a seven-day period, participants learned about the links between Vossloh's leadership principles and their implementation in practice through lectures, exercises and outdoor activities.

The Vossloh Learning Platform (VLP) is a digital environment for continuous learning ("Learn"), sharing ("Share"), and growth ("Grow") in the Company. The platform creates an inspiring and motivating culture of learning that every employee can contribute to and benefit from. The VLP is an example that learning takes place every day and in numerous ways. Learning options are divided into on-site, tailor-made and digital learning, so a suitable solution can be found quickly depending on the learning need. The VLP is available to all employees worldwide in German, English and French.

Early vocational training of young people at Vossloh in Germany in the industrial-technical and commercial sectors, also takes the form of dual offers, i.e. a combination of hands-on training and study. Despite the COVID-19 pandemic, all current training was maintained in 2021 and new training relationships were also started. Commercial apprentices were included in home office arrangements, and industrial/technical apprentices were able to complete digital learning units from home.

Supportive and motivating working

Aging societies in developed countries, a shortage of skilled workers in many parts of the world, increasingly digitalized workplaces, global competition for well-qualified engineers and the younger generation's expectations of employers – these are just some of the challenges faced by Vossloh in the area of human resources. The Company, therefore, attaches great importance to providing its employees with a motivating working environment. Being a green company in a crisis-proof industry is a vital component of employer branding.

Modern IT facilities, fresh fruit, free mineral water, surprise gifts on special occasions, i.e. Christmas, Easter – and Thanksgiving (U.S. only), sports groups and team building are all clear incentives for employees at Vossloh. The COVID-19 pandemic has further increased flexible mobile working, particularly in administrative areas. It is flanked by new communication and event formats such as virtual coffee breaks, online yoga groups and digital Christmas parties. A Group-wide agreement on mobile working has been in force since 2020, based on the Company's home office experience.

Vossloh practices a life phase-oriented HR policy. The issue of work-life balance is discussed between employee representatives and management in a constructive manner. For employees of the German arm of Vossloh, the "Career and Family" audit represented a key milestone. The instruments listed range from flexible working hours, flextime, part-time and parental leave models to mobile working, personal sabbaticals, childcare and care support services, as well as the conversion of bonus payments into free time for the family. Arrangements are in place at Vossloh's companies in France to ensure the employees do not have to be available for work during their leisure time. The Customized Modules division is currently working on a "Balance Work Private Life" arrangement.

Issues that further strengthen Vossloh's sustainability approach are also incorporated into the Company's bonus system. The continuous improvement process (CIP) already in place in some business units was also transformed into the Group-wide Fit4Future ideas program in 2021 in close cooperation with employee representatives and the Executive Board. All employees can submit ideas via an app available in several languages and support their implementation across all business units. The express aim is to reduce the use of materials and energy as well as manpower and time in all areas of the Company, thereby cutting costs. The best projects resulting from the submitted proposals are entered in an annual competition. Three projects selected by a jury will each receive the newly created Eduard Vossloh Award at the Leaders' Lounge. In 2021, projects from China, France and Germany were up for selection as finalists. Participants of the virtual Leaders Lounge were asked to choose the winner.

In the year under review, employees or teams from all business units submitted a total of over 650 ideas, of which more than 180 were implemented in 2021. 15 proposals were nominated for the prize named after the Company's founder – consisting of a cash sum as well as training and team building opportunities. A team from Vossloh Rail Services in Hamburg received the €15,000 first prize. The idea of visual remote maintenance of track processing machines with the help of data glasses was particularly attractive because of the scalability of the solution for the entire Group. The runner-up with a €10,000 prize was a team from the Vossloh Switch Systems Chinese joint venture WCRCT in Wuhu. The project resulted in the fact that for the production of several types of switch blade blanks, only the third of three molds now needs to be manufactured and replaced. Third prize, which stood at €5,000, went to a team from Switch Systems in Fère-en-Tardenois for an idea that eliminates the need to rework holes in switch backing plates.

Vossloh Group companies assess employee satisfaction by means of regular surveys regarding various focal issues. The results serve as the basis for improvement measures and changes. In 2021, employee surveys were conducted, among others, at Vossloh Fastening Systems' sites regarding health protection in Germany (see "Healthy workplace" section on page 58) and in Poland. In addition, all trainees in the business unit were asked to rate the quality of their training. The excellent result led to the Company being awarded the "Training Company 2021" seal of approval. From the administrative staff, survey Vossloh Rail Services received valuable information on potential improvements that could be made in mobile working, such as shared desks or virtual coffee breaks, but also on deficits, for example, in remote management.

Gender equality and equal opportunities

As a matter of principle, Vossloh promotes equal opportunities for men and women. The Diversity and Inclusion Policy provides the Group-wide framework for various initiatives in this area, i.e. in raising awareness among managers, selecting employees for high-potential programs, filling vacant positions or as part of the life-phase-oriented HR policy. In the Customized Modules division, the "All on track" initiative launched in 2019 is having an impact despite the constraints imposed by the COVID-19 pandemic. The initiative was given a boost by the fact that, in France, companies with more than 50 employees are obliged to publish annual figures relating to professional equality between men and women. In this Penicaud index, Vossloh Cogifer SA, management company of the division Customized Modules, achieved 84 out of a possible 100 points in 2021. In Germany, the Rail Services business unit became a corporate sponsor of proTechnicale e.V., an association that specifically promotes young women working in technology.

Diversity

As a globally acting Group, Vossloh actively promotes diversity within its workforce. In 2021, the Company employed men and women from over 46 countries and with a wide range of qualification levels, education levels, vocational training paths, career experience and service years within all of its hierarchical levels. The French Vossloh sites participate in the nationwide TREMPLIN initiative (translated: springboard; abbreviation for TRansport EMPLoi INnovation). It aims to reduce the shortage of skilled workers in the transport and logistics industry by encouraging and promoting applications from people with disabilities. Vossloh Rail Services offers internships and apprenticeships for socially disadvantaged young people as part of the NachwuchsCampus traineeship initiative. The trainees in this business unit also include several refugees. The Diversity and Inclusion Policy implemented as planned over the course of the current year will underlay the Group-wide framework for such initiatives in the future.

The following table shows some key 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)	2021	2020
Proportion of women in total workforce as a %	**14.9**	**14.9**
Age structure of employees as a %		
< 31 years	16.5	17.1
31 - 50 years	53.3	54.3
> 50 years	30.2	28.6
Length of service of employees as a %		
0 - 10 years	59.2	60.2
11 - 20 years	22.2	22.9
> 20 years	18.6	16.9
Employees by region as a %		
Germany	22.1	22.1
France	21.1	23.6
Rest of Europe	30.9	29.5
Asia	14.0	8.4
Americas	6.6	10.2
Australia	5.3	6.2

[1] Number of employees based on actual headcount.

Good corporate citizenship

Vossloh prides itself on its status as a "good citizen". As such, the Company is involved in social and charitable initiatives in the communities where it is established.

As part of its role as a good corporate citizen, Vossloh is focusing on promoting social commitment on the basis of the 2021 materiality analysis. A Group-wide corporate volunteering program is to be established in the course of 2022.

Corporate volunteering

Social issues at Vossloh have so far been the responsibility of the various operational units; accordingly, there has been no Group-wide concept so far. In addition, the contributions made to the community by the individual corporate entities at the various sites are not systematically recorded. Now, as a first step, a corporate volunteering program is to be developed and introduced in 2022. This is intended to support Vossloh's vision and values by encouraging employees to take responsibility for their communities and social environment.

Individual companies traditionally support civic society at their respective locations in a variety of ways. For example, associations, social and cultural institutions, and organizations that support disadvantaged people receive donations in cash and in kind. A number of Vossloh units release employees for voluntary work in the public interest, such as firefighting, sitting on local councils and charity work. The Lifecycle Solutions division uses funds that can be awarded to charitable organizations to promote increased participation in social, athletic, cultural or environmental areas by its employees. At Austrak, employees have a paid absence day which they can use to work for a charity organization of their own choice. At its home base, Futrifer is a key partner to schools when it comes to training young people in readiness for the job market. In 2021, around 30 Vossloh Fastening Systems employees in China organized a waste collection campaign in the neighboring town for the first time and presented local waste collection officials with gifts.

Sustainable supply chain and operations

Sustainable business 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, to their disposal or recycling. Vossloh will be devoting even greater attention to these aspects in the future.

As part of the comprehensive Sustainability Materiality Analysis 2021, "Sustainable supply chain and operations" was identified as one of seven key focus areas. The goal was set to expand sustainability in the supply chain and to increase the share of sustainably purchased procurement volume to 90 percent by 2025. As part of a responsible sourcing management system, sustainability criteria are defined and implemented in procurement, a criteria-based risk assessment of suppliers is conducted and suppliers are bound by a Group-wide Code of Conduct.

Responsible sourcing

The Group already attaches great importance to the responsible use of resources and environmental protection in its service provision and procurement activities. Vossloh units check suppliers on the basis of self-disclosure as a standard procedure before placing an order. For ongoing contracts, a performance evaluation is carried out on a regular basis. Several business units also developed their own codes of conduct for partners based on their experience in 2021. This includes committing strategic suppliers to key principles, including sustainability issues that Vossloh itself is also concerned about.

Business ethics and human rights

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

As a global enterprise with a more than 135-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 live 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 pages 30 et seq. of the annual report).

Compliance with laws and regulations

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).

The Executive Board of the Vossloh Group has established a Compliance Management System. The Vossloh Group's Rules of Procedure of the Compliance Organization govern the Compliance Organization, the assignment of responsibilities to officeholders and the reporting duties of all the different company levels. The 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 Compliance-Management-System is designed to identify compliance violation risks and to minimize them in order to prevent Vossloh and its employees from incurring damage and liability risks. Bribery in business transactions and breaches of competition law were identified as key compliance risks in a risk inventory conducted with external support in 2016 and last updated in 2021. This relates in particular to sales and all the sales-promoting activities, including intermediaries. The Compliance-Management-System addresses these risks and minimizes them with the help of suitable processes and measures.

Since 2007, Vossloh's Compliance-Management-System has been based on the Vossloh Code of Conduct. The Code of Conduct stipulates and precisely defines the values of integrity and upstanding business conduct, and interprets them as clear and straightforward rules and principles. It is currently available in 15 languages and is mandatory for all Company employees. It was most recently completely revised and further developed in 2016. There are also guidelines on the prevention of corruption, antitrust law-compliant conduct and the introduction of intermediaries as well as data protection, export control and insider guidelines (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 2021, Vossloh conducted compliance training around the world for a total of 723 participants (2020: 309).

Compliance training is also provided in the form of e-learning, which was rolled out again in a fundamentally updated form in early 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. As of December 31, 2021, the training rate stood at 95.0 percent (2020: 96.4 percent).

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 are performed both ad hoc and without there being any specific suspicions. In 2021, three compliance audits were performed. Further, compliance issues were also audited as part of the internal audit process. Additionally, the Company regularly has its Compliance-Management-System reviewed by external experts and has them make recommendations regarding its further development and improvement. The most recent review took place in 2017; the audit report has been published on www.vossloh.com under "Corporate Governance" > "Compliance" in the "Investor Relations" section. Insofar as findings and recommendations were stated regarding compliance work, these have been and will be implemented in the course of the ongoing development and improvement of the Compliance-Management-System. Vossloh also performed a stocktaking and survey of 215 managers and other employees of the Vossloh Group in 2018 which confirmed the effectiveness of the established Compliance-Management-System as well as high levels of awareness and acceptance of compliance within the Vossloh Group. In the fiscal year 2021, another Group-wide compliance risk assessment was carried out with the support of an auditing firm. The purpose of this risk assessment was to determine 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. The appropriateness of the existing Compliance-Management-System was further validated overall.

Together with an international law firm, Vossloh set up a whistle-blower hotline. 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 on three occasions in 2021 (2020: five occasions). All resulting investigations into possible compliance violations were concluded.

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 donations to political parties or similar institutions.

Human and employees' rights

Vossloh respects internationally recognized human rights in its business activities, and these are codified as binding rules for all the employees in Section 10 of the Vossloh Code of Conduct ("Protection of human and labor rights"). The Code of Conduct can be found under www.vossloh.com > „Investor Relations" > „Corporate Governance" > „Compliance". Risks that may result from the violation of human rights are recorded under "Nonfinancial risks and opportunities" on page 37.

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 2021 fiscal year (2020: 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).

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.

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 the scope for improvements, address new issues together and tackle these in projects.

Data security and privacy

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.

UN Global Compact and implementing its ten principles

Vossloh is a member of the United Nations (UN) Global Compact. By supporting the principles of the UN Global Compact, the Company is once again outlining its contribution to achieving the global Sustainable Development Goals (SDGs) by 2030. The Group focuses its commitment on the six of the total 17 SDGs:

- 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

The following table provides an overview of voluntary commitments, mission statements and management systems that help the Company integrate the principles of the UN Global Compact into its business processes:

Principle	Vossloh's statements, guidelines and management systems	Section of the nonfinancial Group statement
Human rights		
1. Companies should ensure that international human rights are supported and protected. 2. Companies should ensure that they are not complicit in human rights abuses.	- Vossloh Code of Conduct - Group-wide occupational safety policy - Group-wide travel security management - Occupational health management at Vossloh companies - Group-wide privacy policy as per GDPR	- Values and leadership - Occupational health and safety - Upholding of human rights and labor rights - Compliance with legal and regulatory requirements
Labor standards		
3. Companies should respect the freedom of association and the effective recognition of the right to collective bargaining. 4. Companies should work to eliminate all forms of forced labor. 5. Companies should advocate the abolition of child labor. 6. Companies should advocate the elimination of discrimination in employment and at work.	- Vossloh Code of Conduct - Corporate Compliance Commitment - Group-wide Compliance-Management-System - Group-wide diversity and inclusion policy - "All on Track" initiative in the Customized Modules division	- Values and leadership - Compliance with legal and regulatory requirements - Upholding of human rights and labor rights - Equality and inclusion - Diversity
Environmental protection		
7. Companies should follow the precautionary principle when dealing with environmental problems. 8. Companies should take initiatives to promote greater environmental awareness. 9. Companies should accelerate the development and dissemination of environmentally friendly technologies.	- Vossloh Code of Conduct - Group-wide environmental management system - Waste and hazardous materials management at Vossloh companies - Quality management at Vossloh companies	- Environmental and climate action - Ecological design of products and services - Fully responsible procurement
Preventing corruption		
10. Companies should work to avoid all forms of corruption, including extortion and bribery.	- Vossloh Code of Conduct - Corporate Compliance Commitment - Group-wide Compliance-Management-System - Group-wide embargo and export control policy - Group-wide policy on the use of intermediaries	- Values and leadership - Compliance with legal and regulatory requirements

EU Taxonomy and its Implementation at Vossloh

As part of the European Green Deal, 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 EU taxonomy guidelines, economic activities are "environmentally sustainable" if they
- make a substantial contribution to the achievement of one or more of the six environmental objectives referred to (substantial contribution),
- do no significant harm (DNSH) to the achievement of the five other EU environmental objectives, and
- comply with minimum regulations for occupational health and safety and human rights (minimum safeguards).

Technical screening criteria are used to determine whether an economic activity meets the first two points. These are currently only available for the first two EU environmental objectives. As a result, these two objectives alone need to be disclosed for the 2021 fiscal year.

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 screening criteria are met. Activities are taxonomy-aligned if the taxonomy-eligible activities also meet the criteria.

In accordance with the EU Taxonomy Regulation, Vossloh reported for the first time on the share of sales revenues, capital expenditures (CapEx) and operating expenses (OpEx) of taxonomy-eligible and non-taxonomy-eligible economic activities, respectively.

In the 2021 fiscal year, Vossloh launched a project to implement the taxonomy requirements in relation to the EU environmental objectives "climate change mitigation" and "climate change adaptation." The project team comprised the CFO of Vossloh AG and experts from the corporate departments Accounting, Sustainability, Controlling and Investor Relations. Procedures and interim results were reported to the full Executive Board on a regular basis.

Vossloh's business activities were initially assigned to the relevant taxonomy criteria in predefined sorting. Interviews and workshops were then held with relevant contacts and experts from the business units and key Group companies. The aim of these talks was to analyze business activities and to check whether the corresponding taxonomy criteria for the business activities are actually met (alignment test).

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 the category "Infrastructure for rail transport" (Section 6.14. of the Delegated Act on the Taxonomy Regulation of June 4, 2021). According to the regulation, this category includes, among others, the construction, modernization, operation and maintenance of railroad lines. The lion's share of Vossloh's business involves the manufacture and supply of major rail infrastructure components and systems. In addition, Vossloh offers comprehensive rail-related services, a major part of which involves the maintenance of rails and switches.

Accordingly, the Vossloh Group's shares of taxonomy-eligible sales revenues, CapEx, and OpEx are as follows.

	Absolute (in € mill.)	Taxonomy-eligible (in %)	Taxonomy-eligible (in € mill.)	Not taxonomy-eligible (in %)	Not taxonomy-eligible (in € mill.)
Sales revenues	942.8	100	942.8	0	0.0
CapEx	66.2	87	57.6	13	8.6
OpEx	45.2	96	43.4	4	1.8

Sales revenues are defined as net sales revenues in accordance with the IFRS as reported in the comprehensive income statement and therefore relate only to fully consolidated subsidiaries. Further information on sales revenues can be found on page 125 of the annual report.

CapEx comprises capital expenditure in non-current intangible or tangible assets, including those acquired through 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, respectively unscheduled amortization. For further information on CapEx, please refer to pages 135 et seq. of the annual report.

Operating expenses (OpEx) take into account non-capitalizable expenses recognized in the comprehensive 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.

In addition, Vossloh also voluntarily provides an initial indication of taxonomy-aligned sales revenues, CapEx and OpEx. The taxonomy alignment analysis was performed as follows:

- Substantial contribution: Compliance with the technical screening criteria was checked individually for each business unit.
- Do no significant harm (DNSH): The DNSH criteria mainly relate to compliance with legal requirements or, in the case of the "Transition to a circular economy" objective, to key aspects of business activity. In this regard, an assessment of DNSH compliance at business unit level was appropriate, and performed regularly. DNSH compliance with the EU environmental goal 2 "Climate change adaptation" is assessed at Group level.
- Minimum safeguards: A Group-wide approach was adopted to ensure compliance with the minimum safeguards requirements, which enables these criteria to be tracked precisely and consistently.

Vossloh's business activities contribute to an accessible and efficient rail network which is a basic prerequisite for the environmentally desirable modal shift to rail (see the comments on page 53 of this annual report). No other mode of transport is more climate-friendly than rail. For the purposes of the Taxonomy Regulation, Vossloh's business activities as a whole are to be regarded as an enabling activity for climate-friendly mobility. Therefore, Vossloh's business activities can generally be assumed to make a substantial contribution to climate change mitigation if they meet the technical screening criteria set out in the rail infrastructure category. According to the Taxonomy Regulation, Vossloh's activities are presumed to make a significant contribution to climate change mitigation only if they are performed on electrified rail lines or on lines for which an electrification plan exists. Rail lines intended only for the transportation of fossil fuels are exempt.

The electrification of rail infrastructure is not Vossloh's responsibility, and, in some cases, the locations where the products are used are not known. In analyzing whether the criteria for electrification are actually met, Vossloh followed a three-stage process. Initially, the Company assumed that all activities that took place on high-speed lines and in rail-bound urban traffic would make a significant contribution to climate change mitigation, as these lines are generally fully electrified. Secondly, Vossloh analyzed the key individual projects in terms of the electrification of the rail lines. Thirdly, the electrification rate of the relevant country was used for analyzing the remaining projects. The data come from publicly available research and information from official statistical authorities, rail companies and associations. In addition, all activities of the Core Components, Customized Modules and Lifecycle Solutions divisions globally were examined with regard to existing rail lines designed for the transport of fossil fuels. It emerged that no Vossloh activities could be associated with rail lines of this kind.

In analyzing its activities, Vossloh has focused mainly on how its operations contribute to the "climate change mitigation" environmental objective. Activities with a significant contribution to the "climate change adaptation" environmental objective were not identified.

Next, activities classified as mitigating climate change were to be assessed to determine whether they led to a significant degradation of one or more of the above environmental objectives (DNSH criteria). The criteria for the EU water quality environmental objective essentially refers to statutory and regulatory requirements with which Vossloh is obliged to comply. Many of Vossloh's business activities do not require at all the use of water as a resource, such as the milling and grinding of rails and switches, welding services, logistics or assembly work. Otherwise, the resource is mainly used in Vossloh factories 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 in such a way that it meets the discharge standards of the public water supply at a minimum (see also the comments on page 52).

With regard to the "transition to a circular economy" environmental goal, Vossloh products meet long durability and longevity requirements, as most components are designed for a particularly long service life and can be recycled and reused at the end of their useful life. In addition, the Lifecycle Solution division's service portfolio extends the service life of rails and switches.

Vossloh also complies with the EU environmental goal of "preventing and reducing environmental pollution." In addition, a large number of Vossloh products and services contribute to the reduction of track noise and vibrations (see also the "Track-related noise and vibrations" section on page 54).

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 56 et seq. and 64 et seq. in this report.

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

	Absolute (in € mill.)	Taxonomy-aligned (in %)	Taxonomy-aligned (in € mill.)
Sales revenues	942.8	62	584.5
CapEx	66.2	60	39.6
OpEx	45.2	64	29.1

Limited assurance report of the independent practitioner regarding the nonfinancial statement

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 2021 (hereafter referred to as "nonfinancial statement").

Responsibilities of the Executive Directors
The executive directors of the Company are responsible for the preparation of the nonfinancial statement in accordance with Section 315c in conjunction with Sections 289c to 289e HGB and Article 8 of Regulation (EU) 2020/852 of the European Parliament and 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 thereon, as well as with their own interpretation of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon, as is presented in section "EU Taxonomy and its Implementation at Vossloh" of the nonfinancial statement.

These responsibilities of the executive directors of the Company include the selection and application of appropriate methods regarding the nonfinancial statement and the use of assumptions and estimates for individual nonfinancial disclosures of the Group 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 nonfinancial statement that is free from material misstatement due to fraudulent behaviour (manipulation of the nonfinancial statement) or error.

Some of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon are still subject to considerable interpretation uncertainty and have not yet been officially clarified. Therefore, the executive directors have laid down their own interpretation of the EU Taxonomy Regulation and of the delegated acts adopted thereon in section "EU Taxonomy and its Implementation at Vossloh" of the 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 nonfinancial statement is subject to inherent restrictions resulting from the manner in which the data was collected and calculated as well as from 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 firm applies the national statutory rules and professional announcements – particularly of the "Professional Charter for German Public Auditors and German Sworn Auditors" (BS WP/vBP) and of the IDW Quality Assurance Standard "Quality Assurance Requirements in Audit Practices" (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW) and does therefore maintain a comprehensive quality assurance system comprising documented regulations and measures in respect of compliance with professional rules of conduct, professional standards, as well as relevant statutory and other legal requirements.

Responsibilities of the Practitioner
Our responsibility is to express a conclusion on the 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", adopted 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 nonfinancial statement of the Company, with the exception of the external sources of documentation or expert opinions referenced therein, 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 thereon, as well as with the interpretation by the executive directors presented in section "EU Taxonomy and its Implementation at Vossloh" of the 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 judgment.

Within the scope of our limited assurance engagement, which we performed primarily during the months from January to February 2022, we performed, among others, the following procedures and other work:

- 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 involved about the process of preparation, about the system of internal control relating to this process, as well as about the disclosures contained in the nonfinancial statement,
- Identification of probable risks of material misstatements in the nonfinancial statement,
- Analytical evaluation of selected disclosures contained in the nonfinancial statement,
- Cross validation of selected disclosures and the corresponding data in the consolidated financial statements as well as in the group management report,
- Evaluation of the presentation of the nonfinancial statement,
- Evaluation of the process to identify taxonomy-eligible economic activities and the corresponding disclosures in the nonfinancial statement.

The determination of the disclosures pursuant to Article 8 of the EU Taxonomy Regulation requires the executive directors to make interpretations of indefinite legal concepts. As there is the inherent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation, and hence our related examination, is prone to uncertainty.

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 of the Company for the financial year from 1 January to 31 December 2021 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 thereon, as well as with the interpretation by the executive directors presented in section "EU Taxonomy and its Implementation at Vossloh" of the 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 promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was performed for the purposes of the Company and the report is solely designed for informing the Company about the findings of the assurance engagement. Therefore, it may not be suitable for another than the aforementioned purpose. Hence, this report should not be used by third parties as a basis for any (asset) decision.

We are liable sole to the Company. However, we do not accept or assume liability to third parties. Our conclusion was not modified in this respect.

Düsseldorf/Germany, 28 February 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: René Kadlubowski Wirtschaftsprüfer (German Public Auditor)	Signed: Dr. Matthias Schmidt

Financial statements of Vossloh AG as of December 31, 2021

Income statement for the period from January 1 to December 31, 2021

€ mill.	2021	2020
Sales revenues	7.6	7.5
Cost of sales	(7.2)	(7.5)
Gross profit	**0.4**	**0.0**
General administrative expenses	(18.5)	(19.8)
Other operating income	0.5	12.3
Other operating expense	(1.6)	(3.5)
Operating result	**(19.2)**	**(11.0)**
Income from investments	17.6	15.0
thereof from affiliated companies: €17.5 million (previous year: €15.0 million)		
Income from profit transfer agreements	12.5	13.1
thereof from affiliated companies: €12.5 million (previous year: €13.1 million)		
Income from other securities and loans	3.0	4.8
thereof from affiliated companies: €3.0 million (previous year: €4.7 million)		
Other interest and similar income	6.7	9.6
thereof from affiliated companies: €6.3 million (previous year: €8.7 million)		
Write-downs of financial assets and securities classified as current assets	0.0	(47.0)
Expenses from losses absorbed	0.0	(28.6)
thereof to affiliated companies: € – million (previous year: €28.6 million)		
Interest and similar expenses	(12.8)	(8.9)
thereof to affiliated companies: €0.1 million (previous year: €0.1 million)		
thereof to hybrid capital investors: €5.1 million (previous year: € – million)		
Net financial result	**27.0**	**(42.0)**
Income taxes	(0.1)	0.0
Result after taxes/net income (loss) for the year	**7.7**	**(53.0)**

Balance sheet

Assets in € mill.	12/31/2021	12/31/2020
Internally generated industrial property rights and similar rights and assets	0.5	–
thereof intangible assets under development: €0.5 million (previous year: € – million)		
Purchased concessions, industrial and similar rights and assets including licenses to such rights and assets	3.5	0.7
Advance payments	–	2.5
Intangible assets	**4.0**	**3.2**
Other plant, factory and office equipment	0.4	0.3
Property, plant and equipment	**0.4**	**0.3**
Shares in affiliated companies	503.9	470.3
Loans to affiliated companies	61.0	132.5
Investments	0.1	0.1
Long-term securities	0.1	0.1
Financial assets	**565.1**	**603.0**
Fixed assets	**569.5**	**606.5**
Receivables from affiliated companies	344.5	283.7
Other assets	3.9	4.9
Receivables and other assets	**348.4**	**288.6**
Cash on hand and in the bank	0.0	0.0
Current assets	**348.4**	**288.6**
Prepaid expenses	**0.7**	**0.7**
	918.6	**895.8**

Equity and liabilities in € mill.	12/31/2021	12/31/2020
Capital stock	49.9	49.9
Additional paid-in capital	201.4	201.4
Retained earnings		
Other revenue reserves	170.7	170.7
Unappropriated surplus	68.3	78.1
Equity	**490.3**	**500.1**
Provisions for pensions and similar obligations	16.8	15.9
Other provisions	12.0	9.8
Provisions	**28.8**	**25.7**
Bonds	150.0	–
Liabilities to banks	210.7	332.8
Trade payables	1.9	3.6
Liabilities to affiliated companies	30.4	25.7
Other liabilities	6.5	7.9
thereof from taxes: €0.2 million (previous year: €0.8 million)		
thereof relating to social security and similar obligations: €0.0 million (previous year: €0.0 million)		
Liabilities	**399.5**	**370.0**
	918.6	**895.8**

Schedule of changes in fixed assets (appendix to the notes)

€ mill.	Historic cost					Accumulated amortization/ depreciation/write-downs				Carrying amounts	
	As of 1/1/2021	Additions	Disposals	Transfers	As of 12/31/2021	As of 1/1/2021	Depreciation in the fiscal year	Disposals	As of 12/31/2021	As of 12/31/2021	As of 12/31/2020
Intangible assets											
Internally generated industrial property rights and similar rights and assets	–	0.4	–	0.5	0.9	–	0.4	–	0.4	0.5	–
Purchased concessions, industrial and similar rights and assets, and licenses to such rights and assets	8.1	1.2	(0.1)	2.0	11.2	7.4	0.4	(0.1)	7.7	3.5	0.7
Advance payments	2.5	–	–	(2.5)	–	–	–	–	–	–	2.5
	10.6	**1.6**	**(0.1)**	**–**	**12.1**	**7.4**	**0.8**	**(0.1)**	**8.1**	**4.0**	**3.2**
Property, plant and equipment											
Land, leasehold rights and buildings including buildings on nonowned land	0.1	–	–	–	0.1	0.1	0.0	–	0.1	0.0	0.0
Other plant, factory and office equipment	1.1	0.2	0.0	–	1.3	0.8	0.1	0.0	0.9	0.4	0.3
	1.2	**0.2**	**0.0**	**–**	**1.4**	**0.9**	**0.1**	**0.0**	**1.0**	**0.4**	**0.3**
Financial assets											
Shares in affiliated companies	517.3	33.6	0.0	–	550.9	47.0	0.0	0.0	47.0	503.9	470.3
Loans to affiliated companies	132.5	–	(71.5)	–	61.0	–	–	–	–	61.0	132.5
Investments	0.1	–	–	–	0.1	–	–	–	–	0.1	0.1
Long-term securities	0.1	–	–	–	0.1	–	–	–	–	0.1	0.1
Other loans	–	–	–	–	–	–	–	–	–	–	–
	650.0	**33.6**	**(71.5)**	**–**	**612.1**	**47.0**	**0.0**	**0.0**	**47.0**	**565.1**	**603.0**
Total	**661.8**	**35.4**	**(71.6)**	**–**	**625.6**	**55.3**	**0.9**	**(0.1)**	**56.1**	**569.5**	**606.5**

Notes

General information

Vossloh Aktiengesellschaft, Vosslohstraße 4, 58791 Werdohl, Germany, entered under registry number HRB 5292 at the Iserlohn district court, is a large stock corporation within the meaning of Section 267 (3) Sentence 2 of the German Commercial Code (HGB) in conjunction with Section 264d HGB.

The annual financial statements of Vossloh AG for the 2021 fiscal year were prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG). The income statement has been prepared using the cost-of-sales method according to Section 275 (3) HGB. Accounting policies were unchanged from the previous year, unless there are further explanations.

Recognition and valuation principles

Recognition and measurement are based on the following principles: purchased intangible assets and property, plant and equipment are measured at cost. Amortizable/depreciable assets are amortized/depreciated by applying declining-balance or straight-line depreciation. Internally generated intangible fixed assets for which the option pursuant to Section 248 (2) HGB is exercised are measured at cost. Impairment losses are recognized if the fair value is permanently less than the amortized cost. Intangible assets are amortized over useful lives of one to five years. In the case of buildings, the useful life is five to fifty years, while for factory and office equipment, the useful life is one to twenty years.

For all independently usable movable assets whose cost is over €250 but not more than €1,000, an annual compound item is recognized and depreciated over five years. All independently usable movable assets with a cost of up to €250 are immediately recognized as expense in the year of addition.

Loans to affiliated companies are recognized at nominal value. Shares in affiliated companies and investments, as well as long-term securities, are carried at the lower of cost or fair value in the case of expected permanent impairment. In order to determine the fair value of the investments, a valuation method based on IDW RS HFA 10 “Application of the principles of IDW S 1 in the valuation of shareholdings and other company shares for the purpose of a commercial annual financial statement” in connection with IDW S 1 of 2008 “Principles for the performance of business valuations” of the Institut für Wirtschaftsprüfer in Deutschland e.V., Düsseldorf, is applied according to the version valid as of the reporting date, provided that no current market prices are available. Future free cash flows, derived from the respective current planning with a time horizon of three years, are calculated and discounted with the weighted average cost of capital. The risk-free base rate amounts to 0.12 percent and the market premium is 7.00 percent. Taking into account country-specific risk factors and growth factors, the present value determined in this way is compared with the net carrying amount. If there is a permanent impairment, the asset is written down to the fair value.

Receivables and other assets, as well as cash and cash equivalents are recognized at nominal value or at the lower fair value.

Receivables and liabilities denominated in a foreign currency are translated and recognized at the mean spot rate at the date of initial entry or at the less favorable exchange rate at the balance sheet date. In the case of a remaining term of one year or less, the translation is principally made at the mean spot rate as of the balance sheet date, if no hedging exists. If the receivables or liabilities are hedged, the mean spot rate valid at the time of issue is applied.

Deferred taxes are recognized for the differing carrying amounts for commercial and tax purposes of assets, liabilities, accruals and deferrals, which will result in future taxable charges or credits, as well as for loss carryforwards and interest carryforwards, which are expected to be utilized in the next five years. Deferred tax assets and liabilities are netted for the balance sheet presentation. Based on differences between the commercial and tax values of "pension provisions" and "other provisions" as well as deferred taxes on loss and interest carryforwards, a net deferred tax asset results by applying a tax rate of 31.98 percent. Vossloh AG does not exercise the accounting option under Section 274 (1) Sentence 2 HGB to recognize deferred tax assets.

Performance obligations on pension plans and similar obligations are measured using the projected unit credit method. The mortality tables 2018 G (RT2018G) of Prof. Dr. Klaus Heubeck are used as a basis for this. According to the German Regulation on the Discounting of Provisions, the discount rate published by the Deutsche Bundesbank as of December 31, 2021, for obligations with a 15-year average remaining term in the amount of 1.87 percent is applied as actuarial interest, whereby the average market interest rate with matching maturities is determined on the basis of the last ten fiscal years, as in the previous year. As additional calculation parameters, a wage and salary increase of 3.00 percent, an expected increase in pension payments of 1.80 percent and an average fluctuation rate of 6.00 percent are applied.

Assets that are protected from creditors and serve solely to fulfill the pension liabilities (covered funds) are measured at fair value and are netted against these obligations.

Thereby, the provisions for pensions were reduced by €10.0 million (previous year: €10.2 million). Income and expenses from these assets are offset against the interest expense from the discounting of the respective obligation and shown in the financial result.

For further risk or obligations in the personnel area, for example, vacation claims, provisions are recognized according to principles of commercial law. Tax provisions and other provisions are recognized in the settlement amount that is required under the principles of prudent commercial judgment. Expected price and cost increases are considered. Provisions with a remaining term of more than one year are principally discounted with the average market interest rate over the last seven years corresponding to their term, as determined and published by the Deutsche Bundesbank, provided the provisions are not attributable to the pension obligations. In the case of anniversary provisions, a flat remaining term of 15 years is assumed in exercising the option pursuant to Section 253 (2) Sentence 2 HGB. Interest rates corresponding to the respective term are used for provisions for pre-retirement part-time employment.

Liabilities are recognized at the settlement amount.

Derivative financial transactions are utilized solely for hedging purposes; if the conditions are met, they are combined with the underlying transaction to form a valuation unit. To the extent that the hedging relationship of the respective valuation unit is effective, the compensating changes in value of the underlying and hedging instrument are not recognized. The result from exchange contracts concluded to hedge currencies is first recognized upon maturity. To the extent that a hedge is ineffective, the total remaining loss is immediately recognized in the income statement. A total remaining gain, however, is not taken into account.

Notes to the balance sheet

Classification and movements of fixed assets are detailed in the schedule of changes in fixed assets on page 80.

Purchased concessions, industrial and similar rights and assets, and licenses to such rights and assets mainly comprise the acquisition costs and incidental acquisition costs for the SAP S/4HANA software (€2.6 million). The adaptation of the ERP system to the requirements of the Vossloh Group began in the reporting year, and so the software is not yet operational. As a result, no depreciation was charged in the reporting year.

Advance payments made in the previous year consisted of licenses for S/4HANA (€1.9 million) and other digitalization projects (€0.6 million). For reasons of proper disclosure, these amounts have been reclassified in the reporting year to internally generated intangible assets (€0.6 million) and purchased intangible assets (€1.9 million). The internally generated industrial and similar rights and assets relate to the development of an algorithm in the context of condition-based monitoring of switch systems in Sweden.

Additions to intangible assets mainly resulted from the acquisition of licenses for SAP S/4HANA (€0.7 million).

The capitalization of internally generated intangible assets results in amounts blocked from distribution in accordance with Section 268 (8) HGB in the amount of €0.4 million (previous year: €0.4 million).

Additions of shares in affiliated companies resulted from the capital increase in Vossloh International GmbH (€33.6 million).

List of shareholding

	€ mill.	Footnote	Shareholding in %	at	Consoli-dation[1]	Equity[2]	Result[2]
(1)	**Vossloh Aktiengesellschaft, Werdohl**						
(2)	Vossloh International GmbH, Werdohl		100.00	(1)	(k)	133.1	(0.7)
(3)	Vossloh US Holdings, Inc., Wilmington, USA		100.00	(2)	(k)	92.8	(1.3)
(4)	Vossloh Australia Pty. Ltd., Sydney, Australia		100.00	(1)	(k)	22.1	4.4
	Core Components division						
	Fastening Systems business unit						
(5)	Vossloh Fastening Systems GmbH, Werdohl	3	100.00	(1)	(k)	32.1	0.4
(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)	(n)	2.1	1.2
(8)	Vossloh Sistemi S.r.l., Cesena, Italy		100.00	(5)	(k)	17.4	2.2
(9)	Vossloh Skamo Sp.z o.o., Nowe Skalmierzyce, Poland		100.00	(5)	(k)	6.5	0.0
(10)	FÉDER-7 Rugógyártó Kft., Sárkeresztes, Hungary		100.00	(5)	(n)	0.4	0.0
(11)	Vossloh Fastening Systems America Corp., McGregor, USA		100.00	(3)	(k)	0.3	(1.6)
(12)	Vossloh Fastening Systems (China) Co., Ltd., Kunshan, China		68.00	(5)	(k)	46.9	23.6
(13)	Vossloh-Werke International GmbH, Werdohl		100.00	(5)	(k)	30.0	2.1
(14)	Beijing China-Railway Vossloh Technology Co., Ltd., Beijing, China		49.00	(5)	(n)	2.1	1.2
(15)	Vossloh Fastening Systems Southern Africa Proprietary Ltd., Cape Town, South Africa	6	100.00	(79)	(n)	0.0	0.0
(16)	TOO Vossloh Fastening Systems (Kazakhstan), Kapshagay, Kazakhstan		50.00	(13)	(e)	0.0	0.0
(17)	Suzhou Vossloh Track Systems Co., Ltd., Suzhou, China		100.00	(13)	(k)	1.1	0.1
(18)	AO Vossloh Fastening Systems RUS, Engels, Russia		50.00	(5)	(e)	0.0	0.0
(19)	Vossloh Fastening Systems Australia Pty. Ltd., Sydney, Australia	4	100.00	(4)	(k)	1.5	0.4
(20)	OOO Vossloh Bahn- und Verkehrstechnik, Moscow, Russia		99.00/1.00	(2)/(1)	(k)	3.0	0.5
(21)	Vossloh Maschinenfabrik Deutschland GmbH, Werdohl		100.00	(5)	(n)	(1.7)	(0.1)
(22)	Vossloh Fastening Systems India Private Ltd., New Delhi, India		99.99/0.01	(5)/(13)	(k)	0.5	0.4
(23)	Vossloh (Anyang) Track Material Co., Ltd., Anyang, China		51.00	(13)	(k)	27.4	(0.1)
(24)	Kunshan Vossloh Railway Materials Trading Co., Ltd., Kunshan, China		100.00	(13)	(k)	1.0	0.0
	Tie Technologies business unit						
(25)	Rocla International Holdings, Inc., Wilmington, USA		100.00	(3)	(k)	5.8	0.0
(26)	Rocla Concrete Tie, Inc., Lakewood, USA		100.00	(25)	(k)	86.5	(1.4)
(27)	RCTI de Mexico, S. de R. L. de C. V., Mexico City, Mexico		99.998/0.002	(26)/(3)	(k)	24.4	2.0
(28)	RocBra Participacoes e Empreendimentos Ltda., São Paulo, Brazil	6	100.00	(25)	(n)	3.9	0.5
(29)	Cavan Rocbra Industria E Comercio De Pre Moldados De Concreto S/A, São Paulo, Brazil	6	20.00	(28)	(n)	17.9	2.3
(30)	Austrak Pty. Ltd., Brisbane, Australia		100.00	(4)	(k)	38.2	6.0
(31)	Vossloh Tie Technologies Canada ULC, Vancouver, Canada		100.00	(26)	(k)	(5.4)	(1.7)
	Customized Modules division						
	Switch Systems business unit						
(32)	Vossloh France SAS, Rueil-Malmaison, France		100.00	(1)	(k)	152.7	13.7
(33)	Vossloh Cogifer SA, Rueil-Malmaison, France		100.00	(32)	(k)	149.7	22.6
(34)	Jacquemard AVR SA, St. Jean Bonnefonds, France		100.00	(33)	(k)	1.3	1.8
(35)	Vossloh Cogifer Finland Oy, Salo, Finland		100.00	(36)	(k)	5.6	1.0
(36)	Vossloh Nordic Switch Systems AB, Ystad, Sweden		100.00	(33)	(k)	15.2	9.1
(37)	Vossloh Cogifer KIHN SA, Rumelange, Luxembourg		89.21	(33)	(k)	15.2	1.5
(38)	Vossloh Laeis GmbH, Trier		100.00	(37)	(k)	(11.4)	(1.2)
(39)	Futrifer-Indústrias Ferroviárias SA, Lisbon, Portugal		61.00	(33)	(k)	14.1	(0.1)
(40)	Amurrio Ferrocarril y Equipos SA, Amurrio, Spain		50.00	(33)	(e)	28.4	0.8
(41)	Montajes Ferroviarios, S. L., Amurrio, Spain	6	100.00	(40)	(n)	0.2	0.0
(42)	Burbiola SA, Amurrio, Spain		50.00	(40)	(n)	1.8	0.2
(43)	Vossloh Cogifer UK Ltd., Scunthorpe, United Kingdom		100.00	(33)	(k)	3.9	2.1
(44)	Vossloh Cogifer Italia S.r.l., Milan, Italy		100.00	(33)	(k)	5.8	4.8
(45)	Vossloh Cogifer Polska Sp.z o.o., Bydgoszcz, Poland		96.99	(33)	(k)	9.1	0.4

€ mill.		Footnote	Shareholding in %	at	Consolidation[1]	Equity[2]	Result[2]
(46)	ATO-Asia Turnouts Ltd., Bangkok, Thailand		51.00	(33)	(e)	1.6	(0.2)
(47)	Vossloh Cogifer Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia		100.00	(33)	(k)	(1.1)	0.4
(48)	VOSSLOH MIN SKRETNICE DOO ZA Proizvodnjui Montazu Skretnica i Opreme Nis, Niš, Serbia		100.00	(33)	(k)	6.4	0.7
(49)	Vossloh Beekay Castings Ltd., New Delhi, India	5	58.48	(33)	(k)	11.2	0.4
(50)	Vossloh Cogifer Turnouts India Private Ltd., Hyderabad, India	5	100.00	(33)	(k)	3.6	0.6
(51)	Vossloh Cogifer Signalling India Private Ltd., Bangalore, India	5	100.00	(33)	(k)	1.2	0.2
(52)	Vossloh Cogifer Australia Pty. Ltd., Castlemaine, Australia		100.00	(4)	(k)	15.0	1.7
(53)	Vossloh Cogifer Kloos BV, Nieuw-Lekkerland, the Netherlands		100.00	(33)	(k)	(0.2)	0.1
(54)	Wuhu China Railway Cogifer Track Co., Ltd., Wuhu, China		50.00	(33)	(e)	26.1	2.6
(55)	Vossloh Cogifer Southern Africa Proprietary Ltd., Cape Town, South Africa	6	100.00	(79)	(n)	0.0	(0.1)
(56)	Vossloh Cogifer do Brasil Administracao de Bens e Participacoes Ltda., Sorocaba, Brazil		19.00	(33)	(n)	0.0	0.0
(57)	Vossloh Cogifer do Brasil Metalúrgica MBM SA, Sorocaba, Brazil		100.00	(56)	(n)	1.1	0.0
(58)	Vossloh Infrastructure Systems LLC, Moscow, Russia		90.00/10.00	(37)/(48)	(n)	0.0	0.0
	Lifecycle Solutions division						
	Rail Services business unit						
(59)	Vossloh Rail Services GmbH, Hamburg	3	100.00	(1)	(k)	23.1	0.0
(60)	Vossloh Rail Center GmbH, Hamburg	3	100.00	(59)	(k)	18.5	0.0
(61)	Vossloh Rail Inspection GmbH, Leipzig	3	100.00	(60)	(k)	0.1	0.0
(62)	Alpha Rail Team GmbH & Co. KG, Berlin	3	100.00	(60)	(k)	13.9	(3.6)
(63)	Alpha Rail Team Verwaltungs GmbH, Berlin		100.00	(60)	(k)	0.0	0.0
(64)	Vossloh Logistics GmbH, Hanover	3	100.00	(59)	(k)	7.6	0.1
(65)	VOSSLOH Turkey Demiryolu Sistemleri Ltd. Ştí., Istanbul, Turkey		100.00	(68)	(k)	1.5	0.6
(66)	Vossloh Rail Maintenance GmbH, Hamburg	3	100.00	(59)	(k)	(2.0)	0.2
(67)	Vossloh Mobile Rail Services GmbH, Leipzig	3	100.00	(60)	(k)	1.1	0.0
(68)	Vossloh Rail Services International GmbH, Hamburg	3	100.00	(59)	(k)	2.3	0.7
(69)	Vossloh Rail Services Scandinavia AB, Örebro, Sweden		100.00	(68)	(k)	5.4	0.6
(70)	Vossloh Rail Services North America Corporation, Denver, USA	4	100.00	(3)	(k)	0.0	0.0
(71)	Beijing CRM-Vossloh Track Maintenance Technology Co., Ltd., Beijing, China		47.00	(68)	(e)	23.1	2.1
(72)	Vossloh Rail Services Kunshan Co., Ltd., Kunshan, China		100.00	(68)	(k)	3.3	0.4
(73)	Vossloh Rail Services Finland Oy, Kouvola, Finland		100.00	(68)	(k)	6.6	1.1
(74)	Rhomberg Sersa Vossloh GmbH, Föhren		50.00	(59)	(e)	1.4	0.1
(75)	Vossloh Services France SAS, Rueil-Malmaison, France		49.90/50.10	(33)/(68)	(k)	0.4	0.2
(76)	Vossloh Rail Services Italia Srl, Cesena, Italy	4	100.00	(68)	(k)	0.0	0.0
(77)	Vossloh ETS BV, Purmerend, the Netherlands	4	100.00	(68)	(k)	12.4	(0.2)
(78)	ETS International BV, Purmerend, the Netherlands	4	100.00	(68)	(k)	0.4	0.0
	Other companies						
(79)	Vossloh Southern Africa Holdings Proprietary Ltd., Johannesburg, South Africa	6	100.00	(2)	(n)	0.0	0.0

[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 average exchange rate as of the balance sheet date and profits or losses are translated at the annual average 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 financial statements available.

Receivables and other assets

As in the previous year, receivables and other assets are due in full within one year. All receivables are due from affiliated companies.

Capital stock

Vossloh AG's capital stock of €49,857,682.23 (previous year: €49,857,682.23) is divided into 17,564,180 (previous year: 17,564,180) no-par-value shares. Only shares of common stock are issued. One no-par-value share represents a notional interest of €2.84 in the capital stock.

Authorized capital

By resolution of the Annual General Meeting on May 27, 2020, new authorized capital of up to €24,928,841.11 was created with the option to exclude shareholders' subscription rights ("Authorized Capital 2020"). The authorization to increase the capital stock on the basis of Authorized Capital 2020 is limited until May 26, 2025.

Conditional capital

The Company has no conditional capital.

Additional paid-in capital

The additional paid-in capital of €201,443,508.42 (previous year: €201,443,508.42) includes the premiums from issuing Vossloh AG stocks.

Other revenue reserves recognized under retained earnings totaled €170,671,697.46 (previous year: €170,671,697.46).

Provisions

In the 2021 fiscal year, the amount required to settle pension obligations came to €26,750 thousand (previous year: €26,102 thousand). The fair value of the covered funds offset against this settlement amounted to €9,983 thousand (previous year: €10,156 thousand).

Pension provisions would have been €1,939 thousand (previous year: €2,539 thousand) higher if the market interest rate with matching maturities had been based on the past seven fiscal years rather than the past ten fiscal years. The same amount is subject to a restriction on distribution in accordance with Section 253 (6) Sentence 2 HGB.

The fair value of covered funds corresponds to the budgeted unearned premium reserve from the employer's pension liability insurance contract, plus the credit balance from premiums refundable (irrevocably creditable capital bonus). This value is also consistent with the asset value for tax purposes. Amortized cost totaled €4,904 thousand (previous year: €5,446 thousand).

The distribution block in accordance with Section 268 (8) HGB amounts to €5,079 thousand (previous year: €4,710 thousand) and results entirely from the difference between the fair value and the amortized cost of the covered funds.

In the income statement, expenses of €2,056 thousand (previous year: €2,018 thousand) were offset by income from cover assets of €369 thousand (previous year: €402 thousand) in the net financial result.

Of the other provisions of €12,035 thousand (previous year: €9,775 thousand), €4,876 thousand (previous year: €3,238 thousand) are attributable to the personnel area and €4,900 thousand (previous year: €4,947 thousand) for selling the shares of subsidiaries and related consultancy expenses.

Liabilities and contingent liabilities

Liabilities due to credit institutions recognized on the balance sheet amount to €210,727 thousand (previous year: €332,751 thousand), including €40,000 thousand (previous year: €135,000 thousand) due within one year and €170,727 thousand (previous year: €197,751 thousand) due in more than one year. As in the previous year, all other liabilities have maturities of up to one year.

A €150 million subordinated bond (hybrid bond) with infinite duration was issued in February 2021. This bond can only be canceled by Vossloh AG, and not before February 23, 2026. The interest rate of the bond is 4.0 percent.

In July 2017, Schuldschein loans with terms of four years amounting to €135 million and seven years amounting to €115 million were issued by Vossloh AG. All Schuldschein loans are held by banks. For the seven-year maturities, a partial amount of €90 million has a fixed interest rate of 1.763 percent and the remaining amount of €25 million, 120 basis points above Euribor. A floor of 0.0 percent is applicable to the reference value. Vossloh AG repaid the Schuldschein loan maturing in July 2021 as planned from the funds of the €150 million hybrid bond placed in February 2021. In addition, 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 percent per year was issued at the end of 2021. In January 2022, Vossloh AG used these inflows to prematurely pay off the Schuldschein loan with a variable interest rate in the same amount with an original term until July 2024.

At the end of November 2017, a syndicated loan of €150 million was concluded with eight banks. After exercising the two options to extend in November 2018 and November 2019 for one year each, the financing agreement now has a term until November 2024. 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 upon here. If the maximum agreed threshold of this key figure is breached, this 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 (basis points above Euribor). Up to date this has been 0.9 percent. As of the balance sheet date, the credit line had been utilized in the amount of €35.7 million (previous year: €82.8 million) by way of cash loans and €6.3 million (previous year: €3.1 million) by way of guarantees and utilizing credit lines granted to subsidiaries. Compliance with the covenant is verified every six months and was affirmed as of the half-year and as of the end of the year.

Furthermore, in July 2021, Vossloh AG raised a loan of €20 million with DZ Bank AG with a term until July 2024 and a margin of 0.75 percent above the 3-month-Euribor. A floor of 0.0 percent is applicable to the reference value.

A short-term loan of €15 million was also taken out with Bayerische Landesbank under a nonbinding loan commitment at 0.55 percent.

In the reporting year, as in the previous year, liabilities to affiliated companies are comprised entirely of other liabilities and are in both years due in full within one year.

All trade payables have a term of up to one year in the current year as well as in the previous year.

The maximum liability guarantees total €320,397 thousand (previous year: €292,579 thousand). In 18 cases, the guarantees do not have a stipulated ceiling and, at year-end, are included in the contingent liabilities under guarantees at €30.6 million. The contingent liabilities under guarantees amount to €165,240 thousand (previous year: €255,070 thousand) and €114,974 thousand (previous year: €154,009 thousand) relates to obligations to affiliated companies and associated companies. In all cases, the obligations can be fulfilled by the companies concerned. The risk of a claim is considered unlikely for all of the listed contingent liabilities.

Since the affiliated companies are believed to be able to settle the liabilities covered by such guarantees, no liabilities were recognized.

There are no apparent reasons for a overwhelming likely claim under the liability obligation. We are led to this conclusion based on the lack of claims under long-standing commitments. The circumstances prevailing at the balance sheet date and the situation up to financial statement preparation do not indicate any such enforcement, either.

Furthermore, there are other financial obligations of €74 thousand (previous year: €107 thousand) exclusively to third parties. Of these other financial obligations, €48 thousand (previous year: €83 thousand) is due within one year and €26 thousand (previous year: €24 thousand) in the period between one and five years.

Notes to the income statement

Sales revenues in 2021 primarily related to rendered services of €7,620 thousand (previous year: €7,542 thousand), thereof €7,620 thousand to affiliated companies (previous year: €7,541 thousand).

Sales revenues were generated entirely in Germany with the following exceptions: Sales revenues in France of €2,217 thousand (previous year: €2,800 thousand), in the USA of €620 thousand (previous year: €692 thousand) and in China of €266 thousand (previous year: €200 thousand).

The functional expenses break down into cost of sales and general administrative expenses. Cost of sales primarily includes internal and external expenses for the provision of management services.

The personnel expenses of Vossloh AG are included in general administrative expenses. Personnel expenses amounted to €11,956 thousand in the reporting year (previous year: €11,640 thousand). €11,093 thousand of this (previous year: €10,634 thousand) is allocable to wages and salaries, another €863 thousand (previous year: €1,007 thousand) to social security, pension expense and related employee benefits. In the reporting year, income of €62 thousand was recognized for pensions due to the reversal of provisions for pensions. In the previous year, pension expenses amounted to €230 thousand.

In addition, administrative expenses cover expenses for legal and management consulting. Other operating income totaled €529 thousand (previous year: €12,349 thousand) and comprises income from the reversal of provisions not relating to the period in the amount of €394 thousand (previous year: €378 thousand) and income from foreign exchange gains in the amount of €135 thousand (previous year: €272 thousand). In the previous year, other operating income also included income from the subsequent purchase price component, the sale of Vossloh Kiepe GmbH in the amount of €5,999 thousand, and income from the disposal of financial assets from the sale of Vossloh Locomotives GmbH in the amount of €5,699 thousand.

Research and development costs in the fiscal year under review amounted to €0.4 million (previous year: €0.5 million) and, as in the previous year, related in full to internally generated intangible assets under development.

As in the previous year, other operating expenses of €1,648 thousand (previous year: €3,560 thousand) in the current year consist exclusively of foreign exchange losses.

The net financial result of €27,042 thousand (previous year: €(42,034) thousand) includes dividends of €15,000 thousand (previous year: €15,000 thousand) paid by Vossloh France SAS, Rueil-Malmaison, France and €2,510 thousand (previous year: €0 thousand) by Vossloh Australia Pty. Ltd., Sydney, Australia. In the previous year, this also included expenses from losses absorbed from Vossloh Rail Services GmbH and Vossloh Locomotives GmbH totaling €28,659 thousand. The €1,687 thousand interest portion (previous year: €1,616 thousand) for the change in pension provisions was recognized under the line item "Interest and similar expenses".

Vossloh AG employed an average of 65 employees (previous year: 60); thereof 55 in full-time and 10 in part-time employment.

The employee bonus program 2021 offered employees of German Vossloh companies the option of acquiring either three Vossloh AG shares at no cost or 12 shares at a discount of 50 percent of the issue price of €47.10 determined as the market price as of the share transfer date. In the reporting year, Vossloh AG employees were granted a total of 222 shares free of charge under this program. The expense to the Group for granting shares was €11 thousand.

In 2020, the employee bonus program was still suspended due to existing uncertainties arising from the COVID-19 pandemic.

Remuneration of Executive Board members (excluding pension expenses) for the 2021 fiscal year totaled €4,560 thousand (previous year: €2,168 thousand), including €1,250 thousand (previous year: €667 thousand) of fixed and €3,256 thousand (previous year: €1,473 thousand) of variable compensation plus €54 thousand (previous year: €28 thousand) for payments in kind.

Former Executive Board members received a total of €1,184 thousand in the reporting year (previous year: €2,732 thousand). Pension obligations to former Executive Board and management members and their surviving dependents amounted to €24,011 thousand. Employer pension liability insurance policies totaling €9,983 thousand are pledged in each beneficiary's favor and recognized as cover assets.

The total Supervisory Board fees for the reporting year came to €420 thousand (previous year: €457 thousand) and were exclusively fixed components.

For further disclosures on the remuneration system of the Supervisory Board members, please refer to the disclosures in the remuneration report on pages 181 et seq. of the annual report and at www.vossloh.com/en/investor-relations/corporate-governance/remuneration/.

Vossloh AG's business operations are exposed to exchange and interest rate risks that are contained or eliminated by contracting derivative financial instruments. Vossloh AG's Treasury Management controls and manages exchange and interest rate risks across the Group.

Vossloh AG enters into foreign currency forwards with banks to cover currency risks from the operations of subsidiaries and to hedge currency loans extended to subsidiaries.

All hedged underlying transactions are initially valued and revalued at the mean spot rate valid at the time of issue. The difference between the spot exchange rate on the day of issue and the hedged forward rate, multiplied by the nominal volume of the receivable, is accounted for under other liabilities. This corresponds in total to a pro rata write-up or write-down of the euro-denominated carrying amount of the foreign currency receivable from the spot rate when issued until the hedged forward rate. Since the net hedge presentation method is used, compensating changes in value of the underlying and hedging instruments arising from the hedged risk are not recognized.

The nominal volumes and fair values of these hedges are listed below:

Derivative financial instruments

€ mill.	2021		2020	
	Fair value	Nominal volume	Fair value	Nominal volume
Currency hedging transactions				
Foreign currency forwards	(3.7)	99.2	(4.3)	129.4
	(3.7)	**99.2**	**(4.3)**	**129.4**

The method of determining fair values to value derivatives depends on the type of instrument. The fair values of foreign currency forwards are calculated on the basis of the mean spot rate applicable on the balance sheet date, taking into account forward premiums and discounts for the respective remaining term of the contract compared to the contracted forward rate and were determined on the basis of the hedging rate at the reporting date.

Foreign currency forwards of €88.8 million and of €3.6 million relate to the hedging of recognized receivables and the hedging of recognized liabilities respectively. €3.4 million was attributable to foreign currency forwards concluded for subsidiaries, which were concluded internally in the same amount with the corresponding subsidiaries.

Valuation units to hedge the foreign exchange risk and the interest rate risk

Derivative financial instruments are concluded to hedge cash flow risks and, where the criteria are met, are combined with the underlying into valuation units. The resulting cash flows therefore balance each other out. The majority of the existing foreign currency forwards amounting to €98.6 million had a term of up to one year. The remaining foreign currency forwards amounting to €0.6 million had a term of 1.5 years.

If a valuation unit cannot be formed, negative fair values are recognized as provisions for impending losses from underlying transactions under other provisions, while income from fair values exceeding cost are not recognized. In 2021, all derivative financial instruments were combined as hedging instruments with the related underlying transactions. These are exclusively micro-hedges whose future effectiveness is assessed and which are fully effective in terms of matching maturities and volumes, i.e. on the basis of a critical term match.

Due to the match of the designated value-critical parameters of the underlying and hedging instruments, Vossloh AG’s foreign exchange hedging is entirely effective.

Underlying transactions include firmly contracted purchase orders or shipments at fixed dates, as well as currency loans. The contracted cash flow is hedged by buying or selling foreign currency forwards, thus also closing the currency positions of subsidiaries for their account. As of December 31, 2021, foreign currency positions in the Australian dollar (AUD), Swiss franc (CHF), Chinese renminbi (CNY), Polish zloty (PLN) and US dollar (USD) were hedged.

Related party transactions

To the extent that related party transactions were carried out, the contracts were concluded at arm’s length basis.

In November 2021, 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 the stockholders on Vossloh's website at https://www.vossloh.com/en/investor-relations/corporate-governance/.

Declaration of conformity pursuant to Section 161 of the German Stock Corporation Act (AktG)

The German Securities Trading Act (WpHG) obligates investors whose voting interests in listed corporations cross certain thresholds to notify the issuer accordingly. Vossloh AG received the following voting-interest notifications relevant in the 2021 fiscal year under the terms of Section 33 of the German Securities Trading Act (WpHG):

Notifications pursuant to the German Securities Trading Act

Notifying party	Date of notification	Date of change	Affected threshold	New voting interests		thereof attributable	
				in %	Absolute	in %	Absolute
Mrs. Nadia Thiele, Germany	3/25/2021	2/23/2021	Above 50%	50.09	8,797,090	50.09	8,797,090
Mr. Robin Brühmüller, Germany	5/18/2021	5/17/2021	Above 50%	50.09	8,797,090	50.09	8,797,090

Pursuant to Section 34 (1) Sentence 1 No. 1 WpHG, voting rights held by KB Holding GmbH, Grünwald, Germany, are attributable to TIB Vermögens- und Beteiligungsholding GmbH.

Pursuant to Section 34 (1) Sentence 1 No. 1 WpHG, voting rights held by KB Holding GmbH and TIB Vermögens- und Beteiligungsholding GmbH are attributable to Stella Vermögensverwaltungs GmbH.

The voting rights of KB Holding GmbH, TIB Vermögens- und Beteiligungsholding GmbH and Stella Vermögensverwaltungs GmbH are attributable to Mrs. Nadia Thiele pursuant to Section 34 (1) Sentence 1 No. 1 WpHG and to Mr. Robin Brühmüller (as executor of the estate of the deceased Heinz Hermann Thiele) pursuant to Section 34 (1) Sentence 1 No. 6 WpHG.

In a letter dated April 20, 2021, Mrs. Nadia Thiele informed us of the following with reference to the notification of voting rights pursuant to Sections 33, 34 WpHG dated March 25, 2021:

„I. Purposes of the acquisition of voting rights (Section 43 (1) Sentences 1 and 3 WpHG)

1. The notifying party's indirect interest in Vossloh AG is attributed to the notifying party as a result of the acquisition of the deceased Heinz Hermann Thiele's shares in Stella Vermögensverwaltungs GmbH by way of inheritance. The indirect acquisition of the voting rights in Vossloh AG by the notifying party therefore serves neither the implementation of strategic objectives nor the achievement of trading profits.

2. Within the next twelve months, the notifying party does not intend to directly or indirectly purchase or otherwise acquire further voting interests in Vossloh AG.

3. The notifying party does not seek to exert influence on the staffing of the Vossloh AG executive, management or supervisory boards.

4. The notifying party does not aspire to any significant change in the capital structure of Vossloh AG, particularly regarding leverage (debt-equity ratio) and dividend policy.

II. Origin of funds used to acquire voting rights (Section 43 (1) Sentence 4 WpHG)

Neither debt nor equity was used to acquire the voting rights. The (indirect) acquisition was by way of inheritance."

In a letter dated May 28, 2021, Mr. Robin Brühmüller informed us of the following with reference to the notification of voting rights pursuant to Sections 33, 34 WpHG dated May 18, 2021:

„I. Purposes of the acquisition of voting rights (Section 43 (1) Sentences 1 and 3 WpHG)

1. The notifying party's indirect interest in Vossloh AG is attributable to the notifying party as a result of the acceptance of the office of executor over the shares of the deceased Heinz Hermann Thiele in Stella Vermögensverwaltungs GmbH. The indirect acquisition of the voting rights in Vossloh AG by the notifying party therefore serves neither the implementation of strategic objectives nor the achievement of trading profits.

2. Within the next twelve months, the notifying party does not intend to directly or indirectly purchase or otherwise acquire further voting interests in Vossloh AG.

3. The notifying party currently does not seek to exert any influence on the appointment of members to the Vossloh AG executive, management or supervisory boards beyond exercising voting rights in any resolutions of the Annual General Meeting concerning the election of Supervisory Board members.

4. The notifying party does not currently aspire to any significant change in the capital structure of Vossloh AG, particularly regarding leverage (debt-equity ratio) and dividend policy.

II. Origin of funds used to acquire voting rights (Section 43 (1) Sentence 4 WpHG):

Neither debt nor equity was used to acquire the voting rights. The (indirect) acquisition took place within the scope of the execution of the will over the estate of the deceased Heinz Hermann Thiele."

No other voting rights notifications were submitted in 2021.

Auditor fees

The services rendered by Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Düsseldorf, in the 2021 fiscal year consisted mainly of services relating to the audit of the financial statements. The auditor also reviewed interim financial statements and provided a small number of other individual services in the areas of sustainability reporting and board compensation. The total fee calculated for the auditors for the fiscal year is not disclosed with reference to the Group clause.

Executive Board of Vossloh AG

Oliver Schuster, born 1964, Düsseldorf
Chairman of the Executive Board (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 France SAS: President (until 5/31/2021)
- 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: 10/31/2023
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 (since May 31, 2021)

Jan Furnivall, born 1976, Meerbusch
Chief Operating Officer (COO)
First appointment: 11/1/2020, appointed until: 10/31/2023
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 CEO 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 RIB Software SE, Stuttgart
- Non-Executive Member of the Administrative Board of Deufol SE, Hofheim (Wallau)
- Chairman of the Supervisory Boards of Bombardier Transportation Germany GmbH, Berlin, and Bombardier Transportation (Bahntechnologie) Holding Germany GmbH, Berlin
- Chairman of the Supervisory Board of Vantage Towers AG, Düsseldorf
- Member of the Supervisory Board of AVW Immobilien AG, Hamburg

Ulrich M. Harnacke[2,3,4], Former Chairman, Mönchengladbach, Independent Auditor,
Tax Advisor and Management 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 and Chairman of the Audit Committee of Brenntag SE, Essen
- Member of the Advisory Board of Zentis GmbH & Co. KG, Aachen

Dr. Roland Bosch[3,4], Königstein im Taunus, Managing Director of WOLFF & MÜLLER Holding GmbH & Co. KG
(Member of the Supervisory Board since 5/27/2020)
- Chairman of the Supervisory Board of Danzer Holding AG, Dornbirn/Austria
- Chairman of the Supervisory Board of Erbud S.A., Warsaw (Poland)

Dr. Bettina Volkens[2,4], Königstein im Taunus, independent 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

Marcel Knüpfer[1], Zwenkau, Technical Manager and Shift Leader
(Member of the Supervisory Board since 6/1/2020)

Andreas Kretschmann[1,2,3], Neuenrade, Social Security Employee, Chairman of the
Works Council of Vossloh Fastening Systems GmbH and Chairman of the Group Works Council
(Member of the Supervisory Board since 8/30/2017)

[1]Employee representative
[2]Member of the Personnel Committee
[3]Member of the Audit Committee
[4]Member of the Nomination Committee

Events after the reporting period

There were no significant events after the balance sheet date.

Proposed dividend

In accordance with German GAAP, the financial statements for the 2021 fiscal year show a net income of €7,766,125.97 and, after including the profit carryforward of €60,552,737.59, net profit retained of €68,318,863.56.

The Executive Board and Supervisory Board will propose to the Annual General Meeting that a dividend of €1.00 per share be paid out on the dividend-bearing capital stock of €49,857,682.23 and that the remaining amount of €50,754,683.56 be carried forward. The total dividend amount is €17,564,180.00.

Proposed profit appropriation

€	
Profit carried forward as of January 1, 2021	60,552,737.59
Net profit 2021	7,766,125.97
Withdrawal from other revenue reserves	0.00
Unappropriated surplus as of December 31, 2021	**68,318,863.56**
Proposed profit appropriation	
Appropriation	(17,564,180.00)
Carryforward to new account	**50,754,683.56**

Werdohl, Germany, February 28, 2022

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 annual financial statements present a true and fair view of the Company's net assets, financial position and results of operations, and the combined management report gives a true and fair view of the Company's performance and the overall position of the Company, as well as the significant risks and opportunities associated with the Company's expected development.

Werdohl, Germany, February 28, 2022

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 annual financial statements and of the combined management report

Audit Opinions
We have audited the annual financial statements of Vossloh Aktiengesellschaft, Werdohl/Germany, which comprise the balance sheet as at 31 December 2021, and the statement of profit and loss for the financial year from 1 January to 31 December 2021, and the notes to the financial statements, including the presentation of the recognition and measurement policies. In addition, we have audited the combined management report for the Company and the group of Vossloh Aktiengesellschaft, Werdohl/Germany, for the financial year from 1 January to 31 December 2021. 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 our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at 31 December 2021 and of its financial performance for the financial year from 1 January to 31 December 2021 in compliance with German Legally Required Accounting Principles, and
- the accompanying combined management report as a whole provides an appropriate view of the Company's position. In all material respects, this combined management report is consistent with the annual 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 corporate governance statement, including the further reporting on corporate governance included therein, and of the consolidated nonfinancial statement referred to above.

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 annual financial statements and of the combined management report.

Basis for the Audit Opinions
We conducted our audit of the annual 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 Annual Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the Company 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 annual financial statements and on the combined management report.

Key Audit Matters in the Audit of the Annual Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the annual financial statements for the financial year from 1 January to 31 December 2021. These matters were addressed in the context of our audit of the annual 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 the shares in affiliated companies, 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 annual financial statements)
b) auditor’s response

Recoverability of the shares in affiliated companies

a) The annual financial statements of Vossloh Aktiengesellschaft as at 31 December 2021 disclose shares in affiliated companies of mEUR 503.9. These thus count for a share of 54.9% of the balance sheet total. The shares in affiliated companies thus materially affect the assets and liabilities of the Company.

   Long-term financial assets are measured at acquisition cost or, in case of a presumably permanent impairment in value, at lower fair value. The executive board checks the recoverability of the shares’ book values recognised within the annual financial statements using a discounted cash flow valuation method. The cash flows used within the valuation model are based on internal cash flow plannings by the executive directors of the companies agreed upon with the executive board of Vossloh Aktiengesellschaft and cover the three years following the balance sheet date. They are updated with assumed long-term growth rates. The fair value is determined by discounting the plan cash flows by means of the weighted cost of capital. The corporate value (equity value) that arises from this computation after deduction of the net debt is compared with the book value of the shares as at the balance sheet date under consideration of the equity investment. In case the (proportional) equity value is lower than the book value, it is checked by means of qualitative and quantitative criteria if the impairment is presumably of permanent nature. A write-down to the lower fair value of the shares is made in case of a permanent impairment in value.

   The assumptions made when measuring the shares in affiliated companies are highly dependent on the estimates and assessments made by the executive board and are thus subject to significant estimation uncertainties. This particularly applies to the adequate assessment of the future cash flows and growth rates, the adequate determination of risk-equivalent weighted cost of capital rates as well as the assessment of the permanence of the impairment. Already minor changes of the applied discount rate may significantly affect the amount of the determined equity value. Against this background, this issue was classified as key audit matter within the scope of our audit.

   The Company’s disclosures on the shares in affiliated companies are included in the chapters “Accounting and valuation methods” as well as “Notes to the balance sheet” of the notes to the financial statements.

b) In auditing the fair value of the shares in affiliated companies, we also consulted our valuation experts and have, amongst others, understood the systematic approach of the valuation made by the executive board, assessed whether the valuation model correctly presents the conceptional requirements of the relevant valuation standards, and evaluated the determination of the weighted cost of capital. We have furthermore assessed whether the cash flow plans underlying the valuations are based on adequate and justifiable assumptions and whether they are in line with the group planning for the year 2022, which has been approved by the supervisory board, and with the group planning for the years 2023 and 2024, which has been approvingly acknowledged by the supervisory board. Our assessment of the outcome of the evaluation was based, amongst others, on a comparison with general and industry-specific market expectations and we convinced ourselves of the material assumptions of the planning by means of interviews of the executive board. We have furthermore checked the parameters used in determining the applied discount rate, including the weighted cost of capital, and assessed the appropriateness of the computation scheme.

Other Information

The executive board is responsible for the other information. The other information comprises:

- 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 in accordance with Section 315b HGB, which is included in the combined management report, and
- the executive board's confirmation regarding the annual financial statements and the combined management report pursuant to Section 264 (2) sentence 3 and Section 289 (1) sentence 5 HGB.

The executive board and the supervisory board are responsible for the statement according to Section 161 German Stock Corporation Act (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. Otherwise the executive board is responsible for the other information.

Our audit opinions on the annual 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 annual 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 Annual Financial Statements and the Combined Management Report

The executive board is responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles. In addition, the executive board is responsible for such internal control as it, in accordance with German Legally Required Accounting Principles, has determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, the executive board is responsible for assessing the Company'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, provided no actual or legal circumstances conflict therewith.

Furthermore, the executive board is responsible for the preparation of the combined management report that as a whole provides an appropriate view of the Company's position and is, in all material respects, consistent with the annual 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 Company's financial reporting process for the preparation of the annual financial statements and of the combined management report.

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

Our objectives are to obtain reasonable assurance about whether the annual 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 Company's position and, in all material respects, is consistent with the annual 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 annual 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 annual 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 annual 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 for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- obtain an understanding of internal control relevant to the audit of the annual 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 of the Company.
- 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 Company'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 annual 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 Company to cease to be able to continue as a going concern.
- evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles.
- evaluate the consistency of the combined management report with the annual financial statements, its conformity with German law, and the view of the Company'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 related safeguards.
From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the annual 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 Annual 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 annual financial statements and of the combined management report (hereinafter referred to as "ESEF documents") prepared for publication, contained in the provided file, which has the SHA-256 value 2EFE9C9102234EB4EBDD92810ACBA2792E15A6E69A8183C87E7ECAF7C 27D8D11, 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 annual 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 annual financial statements and of the combined management report prepared for publication contained in the provided 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 annual financial statements and on the accompanying combined management report for the financial year from 1 January to 31 December 2021 contained in the "Report on the Audit of the Annual 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 annual financial statements and of the combined management report contained in the provided 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 (10.2021)). Our responsibilities in this context are further described in the "Auditor's Responsibilities for the Audit of the ESEF Documents" section. Our audit firm has applied the IDW Standard on Quality Management: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the Executive Board and the Supervisory Board for the ESEF Documents
The executive board of the Company is responsible for the preparation of the ESEF documents based on the electronic files of the annual financial statements and of the combined management report according to Section 328 (1) sentence 4 no. 1 HGB.

In addition, the executive board of the Company 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.

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 provided 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 annual financial statements and to the audited combined management report.

Further Information pursuant to Article 10 of the EU Audit Regulation
We were elected as group auditor by the general meeting on 19 May 2021. We were engaged by the supervisory board on 9 September 2021. We have been the 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 annual financial statements and the audited combined management report as well as with the audited ESEF documents. The annual financial statements and the combined management report converted into the ESEF format – including the versions to be published in the Federal Gazette – are merely electronic reproductions of the audited annual 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 René Kadlubowski.

Düsseldorf/Germany, 28 February 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: René Kadlubowski	Signed: Christian Siepe
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

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