ANNUAL REPORT 2021

RHEINMETALL

KEY FIGURES 2021 I RHEINMETALL GROUP

Key figures 2021

		2021	2020[1]	2019	2018	2017[2]	2016	2015
SALES/EARNINGS								
Sales	€ million	5,658	5,405	6,255	6,148	5,896	5,602	5,183
Of which generated abroad	*%*	*65.9*	*64.4*	*68.9*	*72.3*	*75.9*	*76.5*	*73.7*
Operating result	€ million	594	446	505	491	400	353	287
Operating margin	%	10.5	8.3	8.1	8.0	6.8	6.3	5.5
EBIT	€ million	608	398	512	518	385	353	287
EBIT margin	%	10.8	7.4	8.2	8.4	6.5	6.3	5.5
EBT	€ million	582	367	477	485	346	299	221
Earnings from continuing operations	€ million	432	284	-	-	-	-	-
Earnings from discontinued operations	€ million	(100)	(283)	-	-	-	-	-
Earnings after taxes	€ million	332	1	354	354	252	215	160
Return on capital employed (ROCE)[3]		19.0	11.8	15.4	17.1	13.8	12.3	10.6
CASH FLOW								
Cash flow from operating activities	€ million	690	453	602	242	546	444	339
Cash flow from investments	€ million	(271)	(237)	(288)	(277)	(270)	(283)	(310)
Operating free cash flow	€ million	419	217	314	(35)	276	161	29
Of which continuing operations	*€ million*	*458*	*230*	-	-	-	-	-
Of which discontinued operations	*€ million*	*(38)*	*(13)*	-	-	-	-	-
STATEMENT OF FINANCIAL POSITION (12/31)								
Equity	€ million	2,620	2,053	2,272	2,173	1,870	1,781	1,562
Total assets	€ million	7,734	7,267	7,415	6,759	6,101	6,150	5,730
Equity ratio	%	33.9	28.2	30.6	32.1	30.7	29.0	27.3
Cash and cash equivalents	€ million	1,039	1,027	920	724	757	616	691
Total assets less cash and cash equivalents	€ million	6,695	6,240	6,496	6,035	5,344	5,534	5,039
Net financial debt (-)/Net liquidity (+)[4]	€ million	118	4	(52)	(30)	230	19	(81)
HUMAN RESOURCES (12/31)								
Germany	FTE	11,979	11,592	11,587	11,077	10,394	10,181	10,070
Foreign	FTE	11,966	11,675	12,193	11,822	11,216	10,812	10,606
Rheinmetall Group	FTE	23,945	23,268	23,780	22,899	21,610	20,993	20,676
Of which continuing operations	*FTE*	*20,185*	*19,500*	-	-	-	-	-
Of which discontinued operations	*FTE*	*3,760*	*3,768*	-	-	-	-	-
SHARE								
Stock price (12/31)	€	83.06	86.58	102.40	77.16	105.85	63.90	61.48
Earnings per share from continuing operations	€	9.04	5.93	-	-	-	-	-
Earnings per share from discontinued operations	€	(2.32)	(6.55)	-	-	-	-	-
Earnings per share	€	6.72	(0.62)	7.77	7.10	5.24	4.69	3.88
Dividend per share	€	3.30	2.00	2.40	2.10	1.70	1.45	1.10

1) The previous year's figures for the comparative period 2020 have been restated accordingly, applying IFRS 5

2) Carrying amounts adjusted due to the change in measurement of operating land

3) EBIT/average capital employed

4) Financial liabilities less cash and cash equivalents

RHEINMETALL 2021 – AT A GLANCE

1 RHEINMETALL	5 DIVISIONS	5.7 SALES € BIL
139 CUSTOMER COUNTRIES	133 LOCATIONS WORLDWIDE	23,945 EMPLOYEES

WE
ARE ALL OVER THE WORLD

42 GERMANY

Düsseldorf (Headquarters) · Aschau am Inn · Berlin · Bonn · Bremen · Bergisch Gladbach · Dormagen · Düren Flensburg · Gera · Hallbergmoos Hamburg · Hartha · Harzgerode (Silberhütte) · Heilbronn · Ismaning Jena · Kassel · Koblenz · Kiel · Krefeld Langenhagen · Lohmar · Mainz Meckenbeuren · Munich · Neckarsulm · Neuenburg · Neuenstadt Neuss · Oberndorf · Papenburg Rostock · Röthenbach (Pegnitz) Schneizlreuth (Fronau) · St. Leon-Rot · Stockach · Tamm · Trittau Unterlüß · Walldürn · Wedel

45 EUROPE

BELGIUM · Brussels · **FRANCE** Le Blanc-Mesnil · Meyzieu · Paris Roissy (Villepinte) · Thionville **ITALY** · Domusnovas · Ghedi · Lanciano · Livorno · Pescara · Rome **LITHUANIA** · Vilnius · **NETHERLANDS** · Ede · Hengelo · **NORWAY** Nøtterøy · **AUSTRIA** · Schwanenstadt · Vienna · **POLAND** · Gliwice Warsaw · **ROMANIA** · Campia Turzi · Sibiu · **RUSSIAN FEDERATION** · Moscow · **SWEDEN** · Stockholm · **SWITZERLAND** · Altdorf Bern · Lohn-Ammannsegg · Studen Wimmis · Zurich · **SPAIN** · Abadiano · Amorebieta · **CZECH REPUBLIC** · Koprivnice · Chabařovice Trmice · Ústí nad Labem · **HUNGARY** Budapest · **UNITED KINGDOM** Bovington · Bristol · Isle of Wight Kirtlington · London · Swindon Telford · Washington

08 AUSTRALIA

AUSTRALIA · Adelaide · Benalla Canberra · Maryborough · Melbourne Redbank · Wensleydale · **NEW ZEALAND** · Wellington

15 AMERICAS

BRASIL · Nova Odessa · **CANADA** Ottawa · Saint-Jean-sur-Richelieu **MEXICO** · Celaya · Mexico-City **USA** · Auburn Hills/MI · Biddeford /ME · Dover/DE · East Camden/AR · Greensburg/IN · Greenville/SC · Marinette/WI · Stafford/VA Sterling Heights/MI · Wilmington/DE

18 ASIA

CHINA · Chongqing · Kunshan · Beijing · Shanghai · Yantai · **INDIA** Mumbai · Pune (Takwe) · Supa **JAPAN** · Hiroshima (Takaya) · Odawara (Kanagawa) · **MALAYSIA** Malacca · **SAUDI ARABIA** · Riyadh **SINGAPORE** · Singapore · **SOUTH KOREA** · Seoul · **TURKEY** · Ankara Istanbul · **UAE** · Abu Dhabi · SAIF Zone, Sharjah

05 AFRICA

SOUTH AFRICA · Boskop · Maitland · Potchefstroom (Boksburg) Somerset West · Wellington

CONTENTS

About this annual report

This report contains the key financial and non-financial information to enable our stakeholders to make a thorough assessment of our performance.

Reporting structure

In February 2021, the Executive Board of Rheinmetall AG announced a new Group structure as part of a strategic realignment. The previous organizational separation into the Automotive and Defence sectors was discontinued. The new structure comprises five divisions – Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade – which are managed directly by the Executive Board of Rheinmetall AG. The former Pistons unit has been managed as a discontinued operation since the start of May 2021. All segment disclosures and information in this annual report follow this structure.

Accounting and data

Rheinmetall AG is the parent company and the management holding company of the Rheinmetall Group and has its registered office at Rheinmetall Platz 1, Düsseldorf (Germany, Düsseldorf Commercial Register, HRB 39401). The consolidated financial statements of Rheinmetall AG have been prepared in accordance with the regulations of section 315e(1) German Commercial Code ("HGB") and the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU). The Group management report is combined with the management report of Rheinmetall AG. Unless stated otherwise, the presentation of business development, the situation and the outlook regarding indicators relevant to management relate to the Rheinmetall Group. Information that applies to Rheinmetall AG only is indicated as such. In the economic report, information in accordance with the German Commercial Code (HGB) that relates to Rheinmetall AG is presented in a separate chapter. Furthermore, the non-financial statement of the Group pursuant to section 315 of the German Commercial Code is integrated in the group management report. There is no requirement at present for Rheinmetall AG to issue a separate non-financial statement. In accordance with IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations), the key financial figures are stated for continuing operations, unless indicated otherwise. The previous year's figures have been restated accordingly.

The fiscal year of Rheinmetall AG and the financial statements of subsidiaries included in the consolidated financial statements is the calendar year. This report was published on March 17, 2022. The consolidated financial statements are presented in euro (€). Unless indicated otherwise, all amounts – including those for the previous year – are reported in millions of euro (€ million). All figures have been rounded on a standalone basis. This can result in minor deviations when adding figures together or stating them as percentages. To make it easier to read, we may sometimes use the generic masculine in this annual report. The annual report of Rheinmetall AG is available in German (original version) and English (non-binding translation). Both versions are available to download at www.rheinmetall.com.

Statements on the future business development and forecasts

This report contains statements and forecasts referring to the future development of the Rheinmetall Group which are based on assumptions made by the management. Many factors are beyond Rheinmetall's control and influence the business strategy, success and results of the company. Statements regarding the future are based on current plans, targets and forecasts and only take into account findings made before the preparation date this report. If the underlying assumptions do not materialize, the actual figures may differ from the forecasts. Uncertain factors include changes in the political and economic environment, changes to national and international laws, market fluctuations, the development of global market prices for commodities, exchange rate and interest rate fluctuations, the impact of rival products and competitive prices, the acceptance of and demand for new products, and the effect of changes to customer structures and to the business strategy. Rheinmetall does not intend, nor does it undertake a particular commitment, to update statements referring to the future or to adjust these to events or developments after this report goes to press.

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Letter to shareholders
Report of the Supervisory Board

Cooperation between the Supervisory Board and the Executive Board

Before presenting in detail the activities of the Supervisory Board (in accordance with section 171(2) of the German Stock Corporation Act (AktG)) of the Rheinmetall Group in fiscal 2021, I would like to take a brief look back at the year, which was the second in a row to be dominated by the coronavirus pandemic. The continuing momentum of the COVID-19 pandemic once again influenced the economic conditions in some of the company's key markets and caused ongoing major challenges that the Rheinmetall Executive Board and the company's management had to deal with. The Executive Board keep to its decisive and prudent course of action, systematically taking the steps required to protect the health of all employees, secure supply chains and protect liquidity. Rheinmetall managed to maintain the impressive resilience and operational strength already demonstrated in the previous year, enabling it to absorb the impact of the global pandemic on the company to a large extent again in fiscal 2021.

The Supervisory Board monitored and accompanied the Executive Board's work conscientiously and continuously in fiscal 2021. This was done in accordance with the legal regulations, the Articles of Association and the Rules of Procedure on the basis of differentiated written and verbal reports by the Executive Board and other managers at the company. The documents to help us prepare for our meetings were received in good time, meaning that we always had enough opportunity to critically assess the reports, presentations and proposed resolutions, to question them specifically and to check them for plausibility in the plenary assembly and in the committees. Based on this detailed information, we intensively discussed the operational, economic and organizational performance of the company and its strategic further development. At the Supervisory Board and committee meetings, the Executive Board discussed all relevant matters and provided comprehensive answers to our questions. The Executive Board explained in detail all deviations from the projected figures and thoroughly discussed the reasons for this and the steps taken with the Supervisory Board. The Executive Board comprehensively took account of the requirements of good corporate governance and the Supervisory Board's expectations for the content, scope and depth of reporting. Our own analyses and our own suggestions were taken into account in depth before, following thorough examination and discussion, passing resolutions on transactions or measures submitted by the Executive Board, where our approval was required in accordance with the law, Articles of Association or Rules of Procedure.

Where required, preparation for Supervisory Board meetings takes place in separate discussions between employee and employer representatives and the members of the Executive Board. These preliminary discussions can also take place without the Executive Board in attendance. In the past fiscal year, I engaged in regular close dialog with the CEO again. At numerous face-to-face meetings and during telephone conversations, we addressed subjects including the planned business strategy, the context regarding decisions to be made and significant transactions of importance to the assessment of the situation and the company's development. I also maintained close contact with the members of the Supervisory Board outside the Supervisory Board meetings. In the past fiscal year, these discussions again focused on the activities and measures the company was taking to protect the health of employees and contain the economic impact of the COVID-19 pandemic.

Cooperation between the Supervisory Board and Executive Board was characterized by trust, openness and constructive dialog again in 2021. The Supervisory Board was involved directly and at an early stage in all decisions of key importance to the Rheinmetall Group. Based on our intensive work and reviews, we are convinced of the legality, appropriateness and propriety of the Executive Board's work and of the organization's performance.

Composition of the Supervisory Board

In the past fiscal year, there were two personnel changes on the Supervisory Board, which related to the shareholder representatives. As a result of the departure of two Supervisory Board members, successors needed to be found, taking account of the skills profile resolved in 2020 and the targets for the board's composition. Dr. Britta Giesen, Chairwoman of the Executive Board of Pfeiffer Vacuum Technology AG, took over from Professor Marion A. Weissenberger-Eibl, who left the Supervisory Board as of May 11, 2021. Professor Sahin Albayrak, who holds the chair in Agent Technologies in Business Applications and Telecommunication at the Technical University of Berlin, took over the mandate of Detlef Moog, who also left our Supervisory Board as of May 11, 2021. Following extensive discussions in the Nomination Committee regarding the process for seeking candidates and the resumes and skills of the candidates found, and based on the committee's explicit recommendation, I made the proposal for these two changes on the Supervisory Board at the Supervisory Board meeting on March 17, 2021 and they were then implemented following the corresponding resolutions of the Annual General Meeting on May 11, 2021. At the Annual General Meeting, which was held virtually again, Dr. Britta Giesen and Professor Sahin Albayrak introduced themselves to the participating shareholders of our company in video messages. On behalf of the Supervisory Board, I would like to take this opportunity to thank Professor Marion Weissenberger-Eibl and Detlef Moog again for their good teamwork on the Supervisory Board and their professional, dedicated and solution-focused work on our board and its committees on behalf of the company.

At the Supervisory Board meeting on March 17, 2021, the proposal to re-elect the Supervisory Board Chairman Ulrich Grillo and Klaus-Günter Vennemann was explained and substantiated, as these existing mandates were also due to expire as of the date of the 2021 Annual General Meeting. This decision also followed a recommendation by the Nomination Committee, in which it was discussed thoroughly and substantiated in detail. At the constituent meeting of the Supervisory Board on May 11, 2021 after the Annual General Meeting, which approved both of these proposed re-elections, the Chairman of the Supervisory Board was re-elected unanimously.

Following the departure of Detlef Moog and the decision to expand the Strategy Committee by one member each from the employer and the employee side, Dr. Britta Giesen and Professor Sahin Albayrak on the employer side and Sven Schmidt on the employee side were also newly elected to the Strategy Committee. The committee now consists of eight members rather than the previous six. As a result of Professor Marion A. Weissenberger-Eibl's departure from the Supervisory Board, Professor Andreas Georgi was elected as a member of the Mediation Committee.

For codetermined Supervisory Boards with equal numbers of shareholder and employee representatives at listed companies, the German Stock Corporation Act prescribes a binding quota for the representation of women of at least 30%. In terms of the proportion of men and women, the Supervisory Board complies with the legally prescribed minimum quotas in accordance with section 96(2) sentences 1, 3 and 4 of the German Stock Corporation Act. The shareholders and employee representatives alike resolved that, under consideration of regulations as per section 96(2) sentence 3 of the German Stock Corporation Act, the minimum quota of 30% for women and the minimum quota of 30% for men for members of the Supervisory Board shall be fulfilled separately.

The following overview provides information on the composition of the Supervisory Board and its committees as of the end of the reporting period.

Members of the Supervisory Board

Representatives	Practised Profession	First appointed appointed until*	Membership of Committees Chairman	Membership in Supervisory Boards
Dipl.-Kfm. Ulrich Grillo Chairman of the Supervisory Board Mülheim an der Ruhr Year of birth 1959 Nationality German	▪ Chairman of the Board of Grillo-Werke AG ▪ Chairman of the Management Board of RHEINZINK GmbH & Co.KG	May 10, 2016 » 2025	Audit committee **Personnel committee** **Strategy committee** **Nomination committee** **Mediation committee**	E.ON SE Grillo Zinkoxid GmbH** Zinacor S.A.**
Prof. Dr. Dr. h.c. Sahin Albayrak Berlin Year of birth 1958 Nationality German/Turkish	▪ Professor at the Technical University of Berlin, Germany ▪ Head of the Department of Agent Technologies in Business Applications and Telecommunications at the Technical University of Berlin	May 11, 2021 » 2024	Strategy committee	No mandates in other Supervisory Boards
Dr.-Ing. Dr. Ing. E. h. Klaus Draeger Munich Year of birth 1956 Nationality German	▪ Former member of the Board of Management of BMW AG	May 9, 2017 » 2022	Strategy committee	TÜV Süd Chairman of the Supervisory Board
Prof. Dr. Andreas Georgi Starnberg Year of birth 1957 Nationality German	▪ Professor of Leadership and Control Problems in Enterprises, Ludwig-Maximilians-University in Munich ▪ Executive Advisor	June 6, 2002 » 2022	**Audit committee** Personnel committee Mediation committee	Felix Schoeller Holding GmbH & Co. KG
Dr. Britta Giesen Essen Year of birth 1966 Nationality German	▪ Chairwoman of the Board of Pfeiffer Vacuum Technology AG	May 11, 2021 » 2024	Strategy committee	No mandates in other Supervisory Boards
Prof. Dr. Susanne Hannemann Bochum Year of birth 1964 Nationality German	▪ Professor of General Business Management, specializing in business tax law and auditing, Bochum University of Applied Sciences	May 15, 2012 » 2022	Audit committee	No mandates in other Supervisory Boards
Dr. Franz Josef Jung Eltville am Rhein Year of birth 1949 Nationality German	▪ Lawyer and notary ret.	May 9, 2017 » 2022	Nomination committee	No mandates in other Supervisory Boards
Klaus-Günter Vennemann Waidring, Austria Year of birth 1954 Nationality German	▪ Consulting Engineer	May 10, 2016 » 2025	Nomination committee	No mandates in other Supervisory Boards

* Term of office ends at the close of the respective Annual General Meeting
** Internal mandates of Grillo-Werke AG on facultative supervisory boards

Members of the Supervisory Board

Representatives	Practised Profession	First appointed appointed until*	Membership of Committees	Membership in Supervisory Boards
Dr. Daniel Hay Deputy Chairman of the Supervisory Board Essen Year of birth 1979 Nationality German	▪ Scientific Director of the Institute for Codetermination and Corporate Governance (I.M.U.) of the Hans-Böckler-Stiftung	May 7, 2014 » 2022	Audit committee Personnel committee Strategy committee Mediation committee	No mandates in other Supervisory Boards
Ralf Bolm Reinbek Year of birth 1964 Nationality German	▪ Chairman of the Works Council of Rheinmetall Waffe Munition GmbH, Nico Trittau branch ▪ Chairman of the General Works Council of Rheinmetall Waffe Munition GmbH ▪ Chairman of the Works Council of the Defence sector of Rheinmetall AG ▪ Member of the Group Works Council of Rheinmetall AG	July 1, 2020 » 2022	Audit committee	No mandates in other Supervisory Boards
Dr. Michael Mielke Berlin Year of birth 1964 Nationality German	▪ Head of the Actuators Division Pierburg GmbH, Berlin plant	Sept. 1, 2010 » 2022		No mandates in other Supervisory Boards
Reinhard Müller Wabern Year of birth 1960 Nationality German	▪ Chairman of the Works Council of Rheinmetall Landsysteme GmbH, Kassel ▪ Deputy Chairman of the General Works Council of Rheinmetall Landsysteme GmbH ▪ Member of the Works Council of the Defence sector of Rheinmetall AG ▪ Member of the Group's Works Council of Rheinmetall AG ▪ Chairman of the European Works Council	May 9, 2017 » 2022	Personnel committee Mediation committee	No mandates in other Supervisory Boards
Dagmar Muth Bremen Year of birth 1961 Nationality German	▪ Chairwoman of the Works Council of Rheinmetall Electronics GmbH ▪ Member of the Works Council of the Defence Sector of Rheinmetall AG ▪ Vice Chairwoman of the Group's Works Council Rheinmetall AG	July 1, 2015 » 2022	Strategy committee	Rheinmetall Electronics GmbH Vice Chairwoman
Barbara Resch Stuttgart Year of birth 1975 Nationality German	▪ Secretary for Collective Bargaining at IG Metall Baden-Württemberg	July 1, 2020 » 2022		ElringKlinger AG Schaeffler AG
Markus Schaubel Lauffen am Neckar Year of birth 1963 Nationality German	▪ Chairman of the Works Council of Rheinmetall Automotive AG, KS Kolbenschmidt GmbH, MS Motorservice International GmbH ▪ Chairman of the Subordinate Works Council of Rheinmetall Automotive AG ▪ Vice-Chairman of the Group Works Council of Rheinmetall AG	July 1, 2014 » 2022	Strategy committee	Rheinmetall Automotive AG KS Kolben-schmidt GmbH Vice Chairman
Sven Schmidt Wiesloch Year of birth 1975 Nationality German	▪ Chairman of the Works Council of KS Gleitlager GmbH, St. Leon-Rot ▪ Chairman of the General Works Council of KS Gleitlager GmbH ▪ Vice-Chairman of the Subordinate Works Council of Rheinmetall Automotive AG ▪ Chairman of the Group Works Council of Rheinmetall AG	July 1, 2014 » 2022	Audit committee Strategy committee	No mandates in other Supervisory Boards

* Term of office ends at the close of the respective Annual General Meeting

Principal topics discussed by the Supervisory Board

During the period under review, the plenary assembly of the Supervisory Board held five scheduled and six extraordinary Supervisory Board meetings in which it examined the company's political and economic environment in detail. In addition to the development of the Rheinmetall Group as a whole, our attention was particularly focused on the development in the Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade divisions, which are directly accountable to the Executive Board in the new Group structure. In this context, we addressed topics including upcoming projects and major orders, the ongoing business development of the divisions and the current earnings and financial position in depth. Political, economic and regulatory conditions, forecasts and challenges in the international competitive environment and the trends, opportunities and risks in regional growth markets were also covered. In addition, the Supervisory Board discussed strategic, operational and technological priorities and targets, along with their economic significance and expected impact on Rheinmetall's financial situation. In particular, the Group's corporate orientation and the further development of the new Group structure were analyzed in depth. Our discussions also focused on opportunities and methods to ensure the competitiveness and future viability of the company, especially with a view to the continuing impact of the global COVID-19 pandemic. We also dealt with potential acquisition projects and with actual and potential risks to the company, as required.

The Supervisory Board was supported reliably and effectively by the different committees again in 2021. At each of the subsequent plenary assembly meetings, the chairs of the committees reported on their preparations for the relevant agenda items, their general deliberations and the decisions they had taken, and provided comprehensive answers to all questions asked by the Supervisory Board members.

Information about the individual meetings and what was discussed, in chronological order:

At the extraordinary Supervisory Board meeting held as a video conference on **February 8, 2021**, the appointments of Armin Papperger and Helmut P. Merch were extended beyond the end of the contract term at the end of December 2021 by a unanimous vote in each case. The extension of Helmut P. Merch's term of office by another year allows for an orderly succession for the CFO position. Armin Papperger was confirmed in his position as Chairman of the Executive Board of Rheinmetall AG for another five years. It was agreed to prepare an orderly succession plan for him, too, and to develop options for his retirement. In addition to these personnel decisions, I used this extraordinary Supervisory Board meeting to report on the talks with major investors regarding the key aspects of the new remuneration system for the Executive Board resolved in December 2020, which met with widespread approval.

The extraordinary meeting of the Supervisory Board on **February 23, 2021**, which was also held as a video conference, focused on the results of the Audit Committee and the Personnel Committee. It was confirmed again that the revision of the Executive Board remuneration system was well received in further talks with investors. After an intensive content-focused review by the Personnel Committee of the text version for the remuneration system, whose basic features were already resolved in December 2020, the corresponding proposed resolutions were adopted unanimously. It was also established that the company had made considerable progress on reporting on corporate social responsibility (CSR) and the relevant KPIs in this context, and this was to be pursued further over the course of the year.

One agenda item at the annual accounts meeting that took place on **March 17, 2021**, and also had to be held as a video conference, was discussion of the single-entity and consolidated financial statements of Rheinmetall AG as of December 31, 2020, issued with an unqualified auditor's opinion by Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Düsseldorf branch, together with the combined management report including the non-financial statement for Rheinmetall AG and the Rheinmetall Group and the Executive Board's proposal for the appropriation of net income for the year. The Executive Board presented the company's performance and results for fiscal 2020 in detail and also looked more closely at important individual issues in the divisions in this context. The auditors described the scope of their assignment, their audit methods and the main areas of the audit, and reported in detail on the material findings and results of their audits. Both the Executive Board and the auditor provided comprehensive answers to our questions.

Taking into account the company's financial situation and the expectations of shareholders and the capital market, we approved the Executive Board's proposal for appropriation of net income to distribute a dividend for 2020 of €2.00 per participating share.

We also discussed the Supervisory Board's report to the Annual General Meeting and deliberated in detail on the proposed resolutions to be presented to the 2021 Annual General Meeting, which we approved. The proposed resolution on the election of Supervisory Board members on the shareholder side was also approved unanimously with one abstention.

Later in the meeting, the Executive Board presented its report on the current business situation and gave its outlook on the anticipated economic development in fiscal 2021.

The extraordinary meeting of the Supervisory Board held as a video conference on **March 29, 2021** focused on the changes on the Executive Board in connection with the strategy project ONE Rheinmetall, in which context the intermediate holding company Rheinmetall Automotive AG was dissolved and all divisions were assigned directly to the Executive Board as a whole. After intensive discussion, we resolved unanimously that the company's Executive Board should be scaled down from a four-person to a three-person board, after Jörg Grotendorst, who had been responsible for the Automotive sector on the Rheinmetall Executive Board until then, asked the Supervisory Board to relieve him of his duties in view of the transformation of the Group structure due to the strategic realignment.

At the extraordinary meeting of the Supervisory Board held as a video conference on **April 22, 2021**, the cancellation of the employment contract in place between Rheinmetall AG and Jörg Grotendorst was addressed and specified further. Following in-depth discussion of the relevant matters, it was resolved unanimously to approve the proposed cancellation agreement.

At the Supervisory Board meeting on **May 10, 2021**, again held as a video conference, reports from the previous meetings of the Audit Committee and the Personnel Committee were heard. We unanimously approved the Executive Board contracts of Armin Papperger and Helmut P. Merch that had been put forward for a decision. This decision was subject to the condition of the Annual General Meeting on the following day approving the new remuneration system presented to it. In addition, Peter Sebastian Krause's secondary employment as Chairman of the Employers' Association Arbeitgeberverband Metall- und Elektroindustrie Düsseldorf und Umgebung e.V. was approved without opposing votes or abstentions, subject to the condition that he must give priority to the business concerns of Rheinmetall AG.

Later in the meeting, the Executive Board looked at the development in the divisions as part of its comments on the business situation in the first quarter of 2021. The company achieved the best operating free cash flow for a first quarter in its entire history. Taking account of the technical adjustments triggered by the classification of the pistons business as a discontinued operation as defined in IFRS 5 from May 1, 2021 onward, the outlook for 2021 as a whole was confirmed.

The Executive Board then provided information on the preparations for the virtual Annual General Meeting to be held on the following day and on the use of intellectual property rights in the Rheinmetall Group.

At the constituent meeting of the Supervisory Board on **May 11, 2021**, held as a video conference, the members were called upon to make various voting decisions. The Chairman of the Supervisory Board was re-elected unanimously. As a result of Professor Marion A. Weissenberger-Eibl's departure from the Supervisory Board, Professor Georgi was elected unanimously as another member of the Mediation Committee. In addition, an amendment to the committee's rules of procedure from August 31, 2017 – the proposal to expand the Strategy Committee from six to eight members – was put to the vote and accepted unanimously. Since that date, the Strategy Committee has consisted of the Chairman and Deputy Chairman of the Supervisory Board plus three shareholder members of the Supervisory Board and three employee members of the Supervisory Board. As a result of the departure of Detlef Moog, another position on the committee also needed to be staffed. We unanimously elected Dr. Britta Giesen and Professor Sahin Albayrak to the Strategy Committee as shareholder representatives and Sven Schmidt as another employee representative.

On **August 18, 2021**, it was possible to hold a Supervisory Board meeting in person again for the first time in the year under review. The Chairman of the Audit Committee reported on a record operating result for the first half of 2021 and on the impairment relating to the discontinued pistons business, which was published by way of precaution in an ad-hoc release that was received neutrally by the market. The implementation of financing measures in 2021 was discussed in depth. We approved the proposed measures unanimously without abstentions. In addition, it was shown that the company's IT department was making good progress with the insourcing of services previously performed externally. We unanimously approved the proposed resolution to conclude the Executive Board contract with Peter Sebastian Krause based on the same system as the contracts with Armin Papperger and Helmut P. Merch. In addition, information was provided on the non-financial targets for the short-term incentives in 2021 and the associated measures. In this context, the Executive Board commented on the topics of CO_2 reduction and improvements in health management, and the status quo here was then discussed in the Supervisory Board. In particular, the company vaccination programs for employees led to a high rate of first and second vaccinations at the company.

The Group's business performance in the first half of 2021 that was presented by the Executive Board at the Supervisory Board meeting was pleasing. The operating result was the best half-year result in the company's history. The order backlog will extend over the next six to eight years in terms of its impact on sales. All divisions displayed good cost management. We also addressed the relevance of price increases for the company's divisions and the effects of shortages of various materials that impacted the sales performance in some individual areas but did not fundamentally disrupt the growth trend or the generally positive operational performance. The previous outlook for fiscal 2021 was confirmed. In addition, the order potential for the next twelve months was presented and discussed, as well as the intended financing measures in 2021. We unanimously accepted the resolutions proposed in this context. In addition, we unanimously agreed to submit the declaration of conformity in accordance with section 161 AktG in the existing form. The status quo of the sale process for the pistons segment was briefly outlined by the Executive Board and discussed in the Supervisory Board.

At the extraordinary meeting on **November 11, 2021**, we held a video conference to discuss the planned acquisition of a blocking minority in the company 4iG in Hungary, which – supplemented with additional documents – was to be decided upon during a subsequent meeting on November 26. In addition, the Executive Board put the acquisition of the business operations of EMT Ingenieursgesellschaft Penzberg GmbH to the vote. After thorough examination, the proposed resolution was accepted unanimously.

At the video conference convened for **November 26, 2021**, the acquisition of a blocking minority in the Hungarian company 4iG was discussed in depth. Following an extensive presentation of the project by the Executive Board, we approved this acquisition. A due diligence review and a compliance check had previously been performed. They did not identify any risks to the Group for which sufficient precautions had not been taken. An external fairness opinion was also obtained from KPMG AG Wirtschaftsprüfungsgesellschaft, which found the finally agreed transaction price to be appropriate.

At the last video conference of the year on **December 8, 2021**, the Executive Board informed the Supervisory Board about the development of the fiscal year up to the end of October 2021 and provided an outlook for the anticipated development up to the end of the fiscal year. In addition, the business planning for 2022 to 2024 and the associated medium-term targets were presented by the Executive Board. After subsequent discussion and review of the plausibility of the assumptions and expectations and the opportunities and risks, we acknowledged the corporate planning and approved the proposed investment plan for fiscal 2022.

Another topic of the Supervisory Board meeting was succession for the position of CFO, which is to become vacant at the end of 2022. We also discussed the short-term and long-term incentive programs for 2022 in detail and approved the proposed resolutions for them. Finally, the Executive Board provided an overview of the planned agenda for the Annual General meeting on May 10, 2022.

Committee meetings

The Supervisory Board prepares its work in five committees. There is a Strategy, Audit, Personnel, Nomination and Mediation Committee, and their composition is shown in the overview above. The primary task of these committees is to prepare a structure for complex and time-consuming topics prior to plenary assembly meetings and to examine proposed resolutions submitted by the Executive Board in advance. In individual cases, in legally permitted circumstances, they can also make decisions in place of the Supervisory Board, provided special decision-making powers have been transferred to them by the Supervisory Board.

The Chairman of the Supervisory Board presides over all committees with the exception of the Audit Committee. Further information on the duties and responsibilities of the committees can be found in the corporate governance statement in the section on corporate governance. The chairs of the committees report to the Supervisory Board on a regular and extensive basis on the work of the committees and topics discussed.

The **Strategy Committee** met in March and July in the year under review. The general external conditions presented by the Executive Board and the associated challenges and potential disruptions were discussed at length. Topics that were addressed in depth included relevant market-related and technological trends that hold potential for further profitable growth, the expansion of strategic core areas of expertise and technological positions, potential new areas of business, initiatives for expansion into emerging markets and regions, and the future positioning of the divisions and the resulting targets and measures.

In this context, the Executive Board looked at the findings of internal strategy meetings with the individual divisions. The strategic and business alignment of the Sensors and Actuators division and the Materials and Trade division and the courses of action to be derived from this were presented in detail. In the divisions primarily focusing on security technology, the strategic highlights were also presented, as well as the resulting growth plans and financial targets at division level. In this context, the Executive Board also described the key points from a discussion with the leadership of the German Ministry of Defence on the topics of EU sustainability taxonomy, environmental social governance, government-to-government procurements, export, and the role and importance of land forces, taking the German army as an example. The Executive Board also provided information on key technologies advanced internally in the Vehicle Systems division, such as autonomous systems, electrification and connectivity. In the Electronic Solutions divisions, the Executive Board reported on the strategic initiatives in the new key market of Hungary and the development of sustainable “green” radar systems, while in the Weapon and Ammunition division it reported on strategic initiatives in the field of protection systems. In the Materials and Trade division and the Sensors and Actuators division, these initiatives were focused firstly on thermo modules and on new products and enhancements in the field of “green” hydrogen technology, and secondly on cooling systems and the use of biometric sensors. Another topic at the meetings was the planned sale of the Pistons unit.

Turning to the strategy for the Chinese economic region, the vision, the mission statement based on the vision and the associated operational and economic targets were discussed. With regard to research and technology, the Executive Board outlined the now established technology management system and provided information on current innovation projects. It was also explained in this context how the divisions were now working together on technology development, too, and were growing closer, along with the positive synergies to be derived from this.

In the past fiscal year, the **Audit Committee** met in February, March, May, August, November and December. In addition to a preparatory examination of the single-entity and consolidated financial statements, on which it issued a recommendation to the plenary assembly of the Supervisory Board on the passing of a resolution in accordance with section 171 of the German Stock Corporation Act, it dealt in particular with the monitoring of the accounting process, the effectiveness and further development of the internal control system, the risk management system, the internal auditing system and the compliance management system, including data protection management. Prior to their publication, the quarterly and semi-annual results were discussed in detail with the Executive Board. The auditors of the financial statements participated in the Audit Committee meetings in February, March and December 2021.

In addition to the discussion of specific individual issues in the divisions, other subjects addressed in the meetings included asset liability management, the EMIR statutory audit, the findings of the shareholder structure analysis and suitable methods to review the quality of auditing. There was also information and discussions on the topics of data protection, the IT security concept, the risk management process and M&A topics. ESG was defined as part of the equity story and the problems relating to a potential ESG deduction for Rheinmetall were discussed.

Additionally, the KPIs relating to corporate social responsibility (CSR) were reviewed by the Audit Committee. In future, the plan is to shift from annual to continuous data reporting in order to increase the transparency and quality of the CSR information.

In addition, the members of the Audit Committee looked at the material organizational and oversight duties required of companies with respect to related party transactions under ARUG II. We also had the Executive Board inform us of the situation regarding major projects that are in the bidding and performance phase. Furthermore, the members of the Audit Committee discussed the status of preparations for the virtual Annual General Meeting to be held on May 11, 2021 and the dividend proposal.

The Audit Committee also made a decision concerning agreements with the auditor, specifically the audit engagement, setting focal points of the audit and arranging fees. The Executive Board provided information regularly on the scope of non-auditing services, which are not legally allowed to exceed 70% of the end-of-year auditing services.

The members of the Audit Committee also discussed the working capital, liquidity and financing situation of the Rheinmetall Group and the implications of the coronavirus pandemic and supply bottlenecks in certain sectors.

At meetings during the year, the members of the Audit Committee were also informed by managers at the company about the Group function Legal, compliance and tax compliance, risk management, internal auditing and insurance coverage in the Rheinmetall Group. Along with the standard processes put in place, individual topics within these areas were also discussed. The members of the Audit Committee gained a more in-depth picture of existing structures and organizations, workflows and rules and had the opportunity to ask questions about and comment on developments that were presented and the planned improvement measures in these areas. They concluded that Rheinmetall AG has appropriate, adequate and effective systems and control mechanisms in these areas and that it reviews these on an ongoing basis and is systematically and consistently expanding them.

Three members of the Audit Committee have particular knowledge and experience in the application of accounting principles and internal control processes (financial experts). Professor Susanne Hannemann, Professor Andreas Georgi and Ulrich Grillo are independent and are not former members of the Executive Board of the company.

The **Personnel Committee** met eight times in February, March, April, May, August, November and December 2021 and prepared topics for the Supervisory Board plenary assembly, including the content and structure of the target agreements, the extent to which targets were achieved for fiscal 2020, and the setting of targets, ranges and the calculation basis for Executive Board variable remuneration in 2021 and 2022. The discussions in the Personnel Committee also covered the setting of ESG targets in the context of the long-term incentives for 2022 to 2025. In addition, the text for the resolution on the approval of the remuneration system for the Executive Board at the 2021 Annual General Meeting was discussed and adopted unanimously.

Another topic was the cancellation of the employment contract between Rheinmetall AG and Jörg Grotendorst. In addition, the committee dealt with the extension of Armin Papperger's appointment as Chairman of the Executive Board of Rheinmetall AG by another five years and of Helmut P. Merch's appointment as CFO for one more year, beyond December 31, 2021, and with successor planning for the CFO position from 2023 onward. The process for an orderly succession from Armin Papperger was also covered in the discussions. In addition, the change in the Executive Board contracts in line with the new Executive Board remuneration system from 2022 onward was discussed in detail.

The **Nomination Committee** met in January 2021 to discuss the agenda item regarding the nomination of Supervisory Board members on the shareholder side, as presented to the Annual General Meeting in 2021. The process for seeking candidates was also reported on in this context. In addition, the resumes and skills profiles of the candidates found were discussed in depth. The members of the committee got to know the new candidates – Dr. Britta Giesen and Professor Sahin Albayrak – in longer video conferences. The proposal to reappoint Ulrich Grillo and Klaus-Günter Vennemann, whose mandates were to end after the Annual General Meeting on May 11, 2021, was also discussed at the meeting and substantiated extensively, including in terms of the skills profile for the Supervisory Board. Due to changes in the voting rights consultants' expectations, the original recommendation by the Nomination Committee to extend the two mandates by five years each was reduced to a mandate term of four years in the final recommendation to the Supervisory Board. The members are thus to be elected until the close of the Annual General Meeting that resolves on fiscal 2024.

It was also proposed that Dr. Britta Giesen should replace Professor Marion Weissenberger-Eibl and that Professor Sahin Albayrak should replace Detlef Moog, with the aim of covering the strategic areas of expertise relating to technology, and particularly digitalization/IT, even more extensively in future for the further development of the company. They are to be elected until the close of the Annual General Meeting that approves the actions of the Supervisory Board for fiscal 2023.

The **committee pursuant to section 27(3) of the German Codetermination Act**, which is required under statutory law, did not convene in the past fiscal year.

Composition of the Executive Board

In view of the transformation of the Group structure due to the strategic realignment, Jörg Grotendorst has asked the Supervisory Board to relieve him of his duties. The Group's Executive Board structure was adjusted in line with the upcoming challenges in relation to the strategic realignment. After the dissolution of the automotive holding company and the resulting direct management of all divisions by the Executive Board, from April 22, 2021 onward the Executive Board was made up of only three members instead of the previous four: Armin Papperger, Chairman of the Executive Board of Rheinmetall AG, and the Executive Board members Helmut P. Merch (CFO) and Peter Sebastian Krause (HR).

Corporate governance

The further development of the fundamental principles and regulations concerning corporate governance at the company – in particular, the application of the recommendations of the German Corporate Governance Code (GCGC) – are regularly monitored by the Supervisory Board. In August 2021, the Executive Board and Supervisory Board issued and published their declaration of conformity with the GCGC. We are following the recommendations contained in the latest version of the code dated December 16, 2019, with just one exception (age limit for Executive Board members). The complete wording of the current and previous declarations of conformity with the code can be viewed on the company's website under the heading "Corporate Governance."

No indications of any actual conflicts of interest involving members of the Executive Board or Supervisory Board within the meaning of principle 19, items E.1 and E.2 of the GCGC were identified in the past fiscal year. No former members of the Executive Board of the company are members of the Supervisory Board.

The members of the Supervisory Board take their own initiative to undertake any training that may be required. Where required, they are supported in their efforts by the company.

The Supervisory Board regularly carries out an assessment of its activities, evaluating aspects such as Supervisory Board process flows, the allocation of responsibilities, the flow of information between the Supervisory Board and its committees, the routing of information from the Executive Board and the interaction of the two boards. The results of past efficiency reviews, which were performed either as self-assessments or with external input, were consistently positive. The workflows and processes of the Supervisory Board were classed as target-oriented and efficient, and any knowledge obtained is incorporated into the Supervisory Board's work. After the Supervisory Board targets were updated and a skills profile for the entire Supervisory Board was adopted at the meeting in August 2020, a separate evaluation was not undertaken in fiscal 2021.

The corporate governance statement in accordance with section 315d of the German Commercial Code in conjunction with section 289f of the German Commercial Code in the section “Corporate governance – corporate governance statement” contains the wording of the aforementioned declaration of conformity. The working methods of the Executive Board, Supervisory Board and the committees are also described. In addition, information is provided about the gender quota and diversity concept for the Executive Board and Supervisory Board. The corporate governance statement is published on the company’s website.

The participation quota of members in discussions on the plenary assembly and on the committees remained at a high level at 98%. Members that were prevented from attending meetings were involved in decision-making through submission of a proxy vote.

Corporate governance roadshow

In February 2021, the Supervisory Board Chairman Ulrich Grillo and the Chairman of the Audit Committee, Professor Andreas Georgi, supported a corporate governance roadshow at a total of four events. The discussions held at these events particularly addressed the dividend policy, Executive Board remuneration including ESG targets, the independence of the Supervisory Board and particularly of the Audit Committee, diversity in terms of topics such as gender and internationality, and sustainability with regard to the environment and social responsibility.

Individual attendance of the members of the Supervisory Board at meetings in fiscal 2021

	Chair | Member		Attendance | Meetings	Attendance in %
Plenary assembly	Ulrich Grillo		11 | 11	100%
	Prof. Dr. Dr. h.c. Sahin Albayrak	(since May 11, 2021)	5 | 5	100%
	Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger		10 | 11	91%
	Professor Dr. Andreas Georgi		11 | 11	100%
	Dr. Britta Giesen	(since May 11, 2021)	5 | 5	100%
	Professor Dr. Susanne Hannemann		11 | 11	100%
	Dr. Franz Josef Jung		11 | 11	100%
	Detlef Moog	(until May 11, 2021)	6 | 6	100%
	Klaus-Günter Vennemann		11 | 11	100%
	Univ.-Prof. Dr. Marion A. Weissenberger-Eibl	(until May 5, 2021)	5 | 6	83%
	Ralf Bolm		11 | 11	100%
	Dr. Daniel Hay		11 | 11	100%
	Dr. Michael Mielke		11 | 11	100%
	Reinhard Müller		11 | 11	100%
	Dagmar Muth		11 | 11	100%
	Barbara Resch		10 | 11	91%
	Markus Schaubel		11 | 11	100%
	Sven Schmidt		11 | 11	100%
Strategy Committee	Ulrich Grillo		2 | 2	100%
	Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger		2 | 2	100%
	Detlef Moog	(until May 5, 2021)	1 | 1	100%
	Prof. Dr. Albayrak	(since May 11, 2021)	1 | 1	100%
	Dr. Giesen	(since May 11, 2021)	1 | 1	100%
	Dr. Daniel Hay		2 | 2	100%
	Dagmar Muth		2 | 2	100%
	Markus Schaubel		2 | 2	100%
	Sven Schmidt	(since May 11, 2021)	1 | 1	100%
Audit Committee	Professor Dr. Andreas Georgi		6 | 6	100%
	Ulrich Grillo		6 | 6	100%
	Professor Dr. Susanne Hannemann		6 | 6	100%
	Ralf Bolm		6 | 6	100%
	Dr. Daniel Hay		5 | 6	83%
	Sven Schmidt		6 | 6	100%
Personnel Committee	Ulrich Grillo		8 | 8	100%
	Prof. Dr. Andreas Georgi		8 | 8	100%
	Dr. Daniel Hay		7 | 8	87%
	Reinhard Müller		8 | 8	100%
Nomination Committee	Ulrich Grillo		1 | 1	100%
	Dr. Franz Josef Jung		1 | 1	100%
	Klaus-Günter Vennemann		1 | 1	100%
Mediation Committee	Ulrich Grillo		0 | 0	
	Univ.-Prof. Dr. Marion A. Weissenberger-Eibl	(until May 5, 2021)	0 | 0	
	Prof. Dr. Georgi	(since May 11, 2021)	0 | 0	
	Dr. Daniel Hay		0 | 0	
	Reinhard Müller		0 | 0	

Audit of the annual financial statements

Following our proposal, on May 11, 2021, the Annual General Meeting elected Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Düsseldorf branch, as the auditor of the financial statements for fiscal 2021.

The single-entity financial statements prepared by the Executive Board in accordance with German GAAP as of December 31, 2021, and the consolidated financial statements prepared on the basis of section 315e of the German Commercial Code in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU, together with the combined management report, including the non-financial statement, for Rheinmetall AG and the Rheinmetall Group, including the accounts, were audited by Deloitte, in accordance with statutory regulations and were issued with an unqualified auditor’s opinion. The auditor conducted the audit in accordance with German generally accepted standards for the audits of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW).

The members of the Supervisory Board received the single-entity and consolidated financial statements documentation, the proposed resolution on the appropriation of net income and the audit reports prepared by the auditors in good time in order to ensure an in-depth, thorough review. This financial statement documentation was discussed in detail during the Audit Committee’s meeting on March 14, 2022, and at the annual accounts meeting of the Supervisory Board on March 16, 2022, in the presence of the auditors and following the presentation of the auditors’ report. They provided information on the scope, focal points and key results of their audit, answered all questions without reservations and also offered additional information.

We examined the single-entity and consolidated financial statements, the combined management report and the proposal for the appropriation of net income for the year. There were no objections. We concurred with the results of the audit performed by the auditors. We approved the single-entity and consolidated financial statements presented by the Executive Board for fiscal 2021 at today’s Supervisory Board meeting. The financial statements are thus adopted under the terms of section 172 of the German Stock Corporation Act. We concurred with the Executive Board’s proposal for the appropriation of net income, which provides for the distribution of a dividend of €3.30 per entitled share for the year under review, taking into account the company’s results of operations and financial position, investment planning and the interests of stakeholders.

As a result of the coronavirus pandemic, there were extraordinary challenges to be faced again in the year under review, which placed huge demands on all those involved. Tackling all of the associated tasks and additional difficulties requires motivation, flexibility, resilience, courage and tenacity. Also on behalf of my colleagues on the Supervisory Board, I would like to thank the members of the Executive Board, the managers and all employees. In these tumultuous times, you again made Rheinmetall’s success possible in 2021, against all odds, with your hard work and your considerable personal dedication. To our customers, shareholders and business partners, I would like to thank you for the trust that you have often placed in Rheinmetall over many years, and particularly during these challenging times.

Düsseldorf, March 16, 2022

On behalf of the Supervisory Board
Ulrich Grillo
Chairman

ARMIN PAPPERGER *Chairman of the Executive Board*

Dear Shareholders,

Fiscal 2021 was also impacted by the fight against the global coronavirus crisis to a greater extent than we had anticipated. Despite all the challenges, the progress achieved in the global vaccination campaign gives us confidence that the threat from the coronavirus will soon be averted and the economic consequences can be fully surmounted. In addition to the coronavirus crisis, the year 2021 was dominated for Rheinmetall by the biggest change process in the company's recent history. The strategy program ONE Rheinmetall, launched in 2016, has entered a crucial stage: We have removed the division between the Automotive and Defence sectors, which previously operated separately, and completed the development into an integrated technology group in organizational terms. Rheinmetall is now the one strong, distinctive and globally recognized brand with which we will successfully manage our business.

With the new, uniform brand presence, we will further expand our technology leadership in promising key markets. This applies both in security technology, which will gain further importance in the coming years, and in the growth sector of environmentally friendly e-mobility. But we also want to expand into other application areas with our technologies and move into new growth markets. For example, in the field of hydrogen technology, where we successfully secured initial major orders with fuel cell systems last year and now want to get started properly. Or with regard to the megatrend of digitalization, which will play a key role for us strategically in the coming years.

We demonstrate our commitment to our corporate responsibility with reliable, far-reaching corporate governance, which focuses not only on economic growth and value enhancement, but also on fair working conditions, conservation of natural resources and strict adherence to corporate governance and compliance rules. Meeting the high ESG standards for sustainable, social and responsible management is an integral part of our business processes. And we have set ourselves a high target: We aim to achieve climate neutrality at Rheinmetall by 2035.

The good news for our shareholders, customers and employees is that our key figures back up the path we have taken. Despite all the constraints due to the pandemic, we served our customers reliably in 2021 and maintained our profitable growth trajectory. What is more, with an operating result of €594 million, we achieved a new record in the company's history.

In civilian business, we managed to significantly increase our sales again. With a growing share of sales attributable to alternative drive technologies, we are well on track to handle the transformation of the industry and leverage new growth potential. With regard to security technology products, we benefited from growing budgets. Influenced by the war in Ukraine, the German government also announced a significant increase in spending on national security. Security – as shown by the current conflict – is the bedrock of our life in peace and freedom. Rheinmetall has a special obligation here.

With our new organizational positioning and uniform brand presence as an integrated technology group, we have created excellent conditions to help shape the transformation of the markets and achieve our ambitious medium-term targets for sustainable profitable growth.

Sincerely,

A. Papperger

HELMUT P. MERCH *Finances*

PETER SEBASTIAN KRAUSE *Human Resources*

The coronavirus pandemic represented a major stress test for our operating business and administrative areas again in fiscal 2021. This makes it all the more pleasing that Rheinmetall closed 2021 with sales growth of 4.7% and a considerably improved operating result. With an operating profit of €594 million, we are even well above the high level from before the coronavirus crisis. And the operating margin of 10.5% for the Group as a whole is in double digits for the first time. In addition to sales growth, this development is particularly thanks to the strict cost and investment management that we introduced back in 2020 in response to the coronavirus pandemic.

We also performed well in terms of operating free cash flow last year: At € 419 million, we improved by over €200 million compared to the previous year and thus clearly exceeded our target range for this key figure.

The positive overall development of Rheinmetall should give us and all our shareholders confidence for the years ahead. For this reason, we revised and raised our medium-term targets for 2025 last year. By the middle of the decade, we aim to significantly increase our sales. The German government's recent announcement of a drastic hike in defence spending comes with considerable additional growth opportunities for us. The operating margin is then intended to reach a sustained level of at least 10%, and we have raised our target for operating free cash flow to between 3% and 5% of sales.

We have also increased the dividend payout ratio, i.e. the dividend in relation to earnings per share, which is to come to between 35% and 40% in future rather than between 30% and 35% as in the past.

If the coronavirus crisis has shown one thing, it is that Rheinmetall stands out as a highly resilient company. This is what has enabled us to get through the past two years so well and successfully in economic terms. Our management team and all of our employees adapted to the new conditions with great flexibility and motivation.

Right from the start, we have kept track on a daily basis of the effects of the pandemic at all of our sites worldwide and along our supply chains, so that we can react quickly and appropriately where necessary, Wherever possible, we switched to remote working. We rapidly changed our meeting culture from in-person to online events. And in 2021 and the first few months of the current year, we offered vaccinations on a broad basis on our premises and vaccinated a large share of the workforce on site. All of this helped to keep infection risks and sickness rates low overall and to keep our operating business running. We all feel proud of this together.

But we are also proud of the fact that we are becoming more attractive as an employer each year. In 2021 we received over 145,000 applications internationally, more than ever before. In the ranking of young professionals in engineering, we have moved up a few places again and are now in a very good 25th place in Germany.

We are also among the front-runners when it comes to vocational training. At our German locations alone, we trained over 400 young people last year. By supporting young staff and offering attractive employment conditions, we are countering the growing shortage of specialists successfully so far.

Rheinmetall on the capital markets

Capital markets reach new highs in 2021

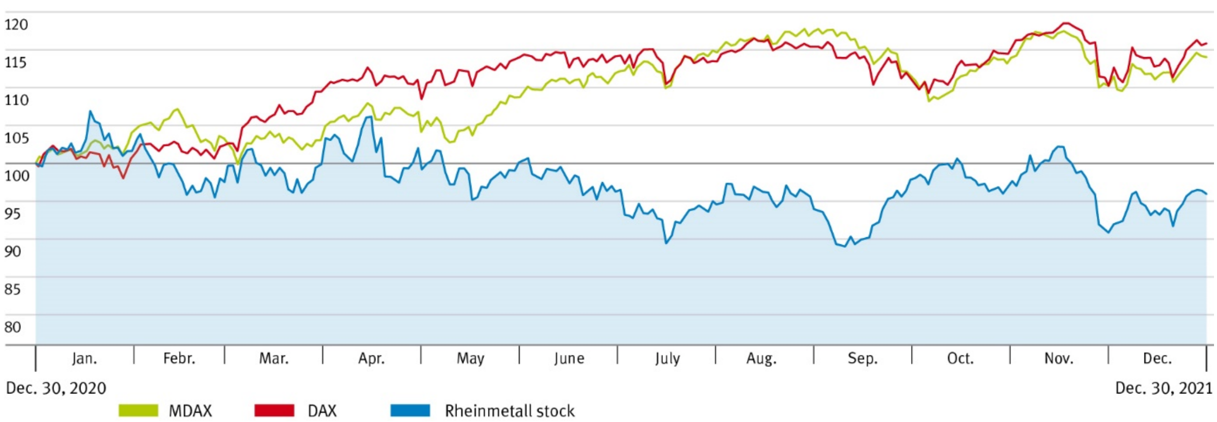
The positive trend on the capital markets that began toward the end of the volatile stock market year 2020 also continued in 2021. After the slump caused by the coronavirus pandemic, the economy initially recovered very rapidly. The rapid development of testing capacity and the large-scale vaccination campaigns launched in many countries around the start of the year led to growing hopes of a quick end to the pandemic and positive price trends on the stock markets. There was also support from the positive development of the US economy. After the US presidential elections and the change in government, huge stimulus packages were put together there, which even led to a shortage of workers in some individual areas.

Despite the positive development of vaccination campaigns around the world, the economic recovery over the course of the year was also accompanied by ongoing and in some cases new uncertainties. In the second half of 2021 in particular, economic growth was curbed by global supply chain problems. Companies struggled with the availability of semiconductors and raw materials, for example, and the associated rising prices. These difficulties and bottlenecks as a result of the pandemic also drove up inflation. In view of the jump in inflation, the US Federal Reserve held out the prospect of earlier and faster interest rate hikes. In addition, the emergence of the new virus variant Omicron toward the end of 2021 unsettled the stock markets.

Over the course of the year, the DAX repeatedly reached new highs. The German benchmark index was also expanded by 10 stocks in September 2021 and thus grew from 30 to 40 companies. The DAX reached its peak for 2021 at 16,251 points on November 17, 2021. It declined again somewhat toward the end of the year and closed 2021 at 15,884 points, up 15.2% on the end of 2020. The MDAX mid-cap index also posted new record highs over the course of 2021, reaching its peak of 36,276 points on September 2, 2021 and closing the year with an increase of 14.1% at 35,123 points.

Rheinmetall stock price trend in comparison to development of the DAX and MDAX

December 30, 2020 (100%) through December 30, 2021



The Rheinmetall share failed to match this positive overall trend in 2021. Generally speaking, uncertainty over the outcome of the federal elections in Germany and possible pressure on global defence budgets after the coronavirus crisis in particular had a negative impact on Rheinmetall's market environment and thus on its share price performance. Furthermore, economic growth in the second half of 2021 was influenced by the limited availability of raw materials and the lack of semiconductor components, which had negative effects on the production figures at many automotive manufacturers. This consequently led to lower delivery call-offs by some of our customers and reduced growth momentum in the Rheinmetall divisions that mainly supply the automotive sector. The share ended 2021 at a level of €83.06. Compared with the closing price of 2020, this is a decrease of around 4.1%.

According to Deutsche Börse AG's ranking, at the end of December 2021 Rheinmetall AG was in 61st place in terms of market capitalization out of all listed companies in Germany.

Annual General Meeting

In light of the COVID-19 pandemic and based on the conviction that this was the right move to ensure maximum protection of all participants, we decided to hold the Rheinmetall AG Annual General Meeting on May 11, 2021, as a purely virtual event again without the shareholders being present. Despite the unusual format, 59.20% of the share capital was represented. Unlike in the years before the pandemic, our shareholders could not direct their questions personally to the company's Executive Board. But to ensure that a dialog was still possible, shareholders who were interested had the opportunity to submit their questions online via the shareholder portal before the Annual General Meeting. This right was utilized extensively. A total of 89 questions were answered by the CEO and the Chairman of the Supervisory Board over the course of the virtual Annual General Meeting.

The shareholders approved the proposal by the Executive Board and Supervisory Board to distribute a dividend of €2.00 per share for 2020. The payout ratio, i.e. the dividend in relation to earnings per share, came to 34% and was thus higher than the previous year's ratio of 31%. Based on the closing price on the day of the Annual General Meeting, the dividend yield was 2.3%.

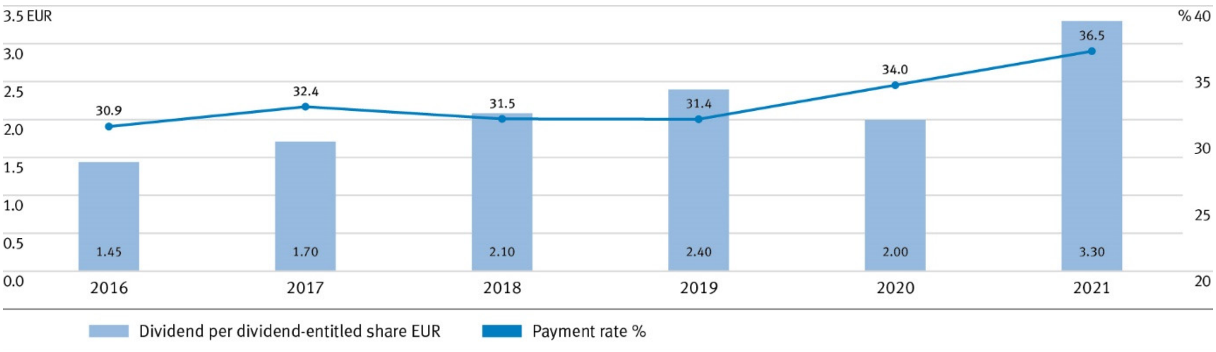
Dividend proposal for fiscal 2021

Our dividend policy is earnings-oriented and designed to ensure that our shareholders receive an adequate share in the Group's profit on an ongoing basis. The dividend amount is based on business performance and a payout ratio geared towards Rheinmetall AG's business results. We take care to ensure that the dividend is widely accepted by shareholders and that it represents an attractive investment criterion, especially for investors geared towards long-term investment. In fiscal 2021, we raised our target for the payout ratio to be achieved from the previous range of 30% to 35% to an annual dividend of 35% to 40% of the earnings attributable to shareholders after taxes on income and revenue.

At the Annual General Meeting on May 10, 2022, the Executive Board and Supervisory Board will propose a dividend payment of €3.30 per dividend-entitled share. The payout ratio thus corresponds to 36.5% and the total amount paid out will therefore be around €144 million.

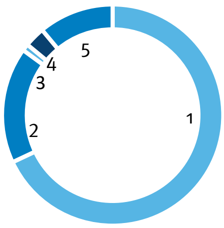
Subject to approval by shareholders, the payment of the dividend is due on the third business day following the Annual General Meeting resolution in accordance with section 58(4) sentence 2 of the German Stock Corporation Act.

Dividend per dividend-entitled share €



Shareholder structure

Rheinmetall AG's group of shareholders comprises a relatively stable and high number of institutional investors and has changed only slightly over the past few years. An external institute that we commissioned analyzed our shareholder structure at the end of the reporting period on December 31, 2021. This analysis was based on, among other things, publications from investment companies and the other institutional shareholders. Our shareholder structure is dominated by investors from the Anglo-American region.



Shareholder structure as at December 31, 2021

%	2021	2020
1 Institutional investors	68	66
Europe	*23*	*29*
North America	*42*	*36*
Rest of world	*3*	*1*
2 Private shareholders	17	17
3 Rheinmetall Treasury Stocks	1	1
4 Other	3	3
5 Not identified	11	13

Voting rights notifications

The Federal Financial Supervisory Authority (BaFin) not only monitors the reporting thresholds for ownership of shares (section 21 of the German Securities Trading Act), but also requests notification when financial and other instruments are acquired that entitle the holder to purchase shares (sections 25 and 25a of the German Securities Trading Act). Rheinmetall AG notified the capital markets of this in accordance with section 26 of the German Securities Trading Act and also informed the general public on its website.

As of December 31, 2021, the following voting rights notifications in accordance with section 33 of the German Securities Trading Act had been submitted by shareholders with a voting rights share greater than or equal to 3%:

Voting rights notifications in accordance with section 33 of the German Securities Trading Act

Shareholders	Total voting rights in %	Publication Rheinmetall
BlackRock, Inc., Wilmington, DE, USA	4.64	08/10/2021
FMR LLC, Wilmington, DE, USA	4.99	06/07/2021
LSV Asset Management, Wilmington, DE, USA	3.08	11/01/2021

December 31, 2021

Research coverage

The Rheinmetall share continues to be analyzed by several analysts. The equity research market is currently still undergoing a phase of consolidation. Since 2017, research institutes have been under greater pressure to merge, and this trend is set to continue. In this context, however, analysts' coverage of the Rheinmetall share remains at a high level, confirming the high level of interest shown by the capital market in our company. At the end of 2021, 16 equity research analysts published their analyses of the current development at the Rheinmetall Group and their assessments and recommendations regarding its shares. All analysts who covered Rheinmetall AG in their studies as of the end of the reporting period advised buying the Rheinmetall share. The average price target was €115. The highest price was €134 and the lowest estimate was €83. A regularly updated overview of investment recommendations is available on the Investor Relations pages of our website.

Investment recommendations for Rheinmetall shares

Institution	Headquarters	Institution	Headquarters
Agency Partners	London	HSBC	Düsseldorf
Alpha Value	Paris	KeplerCheuvreux	Frankfurt am Main
Bank of America	London	Stifel (MainFirst)	Frankfurt am Main
Berenberg Bank	London	Metzler Research	Frankfurt am Main
Deutsche Bank	Frankfurt am Main	Morgan Stanley	London
DZ Bank	Frankfurt am Main	Oddo BHF	Frankfurt am Main
Exane BNP Paribas	Paris	UBS	Frankfurt am Main
Goldman Sachs	London	Warburg	Hamburg

December 31, 2021

Regular dialog with the capital market

Communication is particularly important in times of crisis. We therefore maintained close contact with the capital market again in fiscal 2021. The aim is to create the right conditions for a fair assessment of the Rheinmetall share and enable investors to make a realistic estimate of the Rheinmetall Group's future development. We communicate our business development and corporate strategy continuously and reliably, which strengthens investor confidence in our company and ensures a fair valuation of our shares on the capital market over the long term.

The Executive Board and the Investor Relations team have been engaged in continuous dialog with investors and analysts over the past months. Despite the restrictions on social contact due to the pandemic and the constraints of global travel warnings, capital market communication was continued at a high level. Investor conferences and roadshows were no longer held in person, but exclusively in digital format. During the period under review, we had around 877 investor contacts. A large proportion of these took place at a total of 27 virtual investor conferences and roadshows. The focus was on the major financial centers in Europe and the US. In addition to these activities, we conducted numerous telephone calls with investors, analysts and private investors. Because of the pandemic, exchanges with private investors at the Annual General Meeting were possible only to a very limited extent again in the year under review. Detailed and up-to-date information about the Group and our shares can be found at https://ir.rheinmetall.com under "Investor Relations."

In fiscal 2022, too, we will be showcasing our company at a host of roadshows and capital market events. The dates of these events can be found in our financial calendar on the Rheinmetall website under "Investor Relations."

Rheinmetall share basic information

	2021
Share class	Bearer shares
ISIS | WKN	DE 0007030009 | 703000
Stock exchange	Xetra and all German stock exchanges
Deutsche Börse admission segment	Prime Standard | Regulated Market
Sector	Industrial products
Indices	MDAX, EURO STOXX 600
Bloomberg ticker symbols | Reuters	RHM | RHMG.DE

Rheinmetall share key figures

		2021	2020	2019	2018	2017
Equity as of year-end						
Share capital	€ million	111.51	111.51	111.51	111.51	111.51
Issued shares	Thousands of units	43,559	43,559	43,559	43,559	43,559
Free float (incl. treasury stocks)	Percent	100	100	100	100	100
Treasury stock	Percent	0.6	0.8	1.1	1.3	1.6
Shares						
Share price at end of fiscal year (Xetra)	€	83.06	86.58	102.40	77.16	105.85
Performance over the year	Percent	(4)	(15)	+33	(27)	+66
Market capitalization at year-end	€ billion	3.5	3.8	4.5	3.4	4.6
Average sales per trading day (Xetra)	**Thousands of units**	**140**	**198**	**146**	**179**	**156**

Money and capital market financing

Thanks to the good liquidity situation in the Rheinmetall Group, the commercial paper program of €500 million in place since 2002 did not have to be used for working capital financing peaks at all throughout fiscal 2021. Other forms of money market and capital market financing such as bilateral credit facilities, promissory note loans and bonds were used only for a few cases of very short-term overnight borrowing.

23 COMBINED MANAGEMENT REPORT

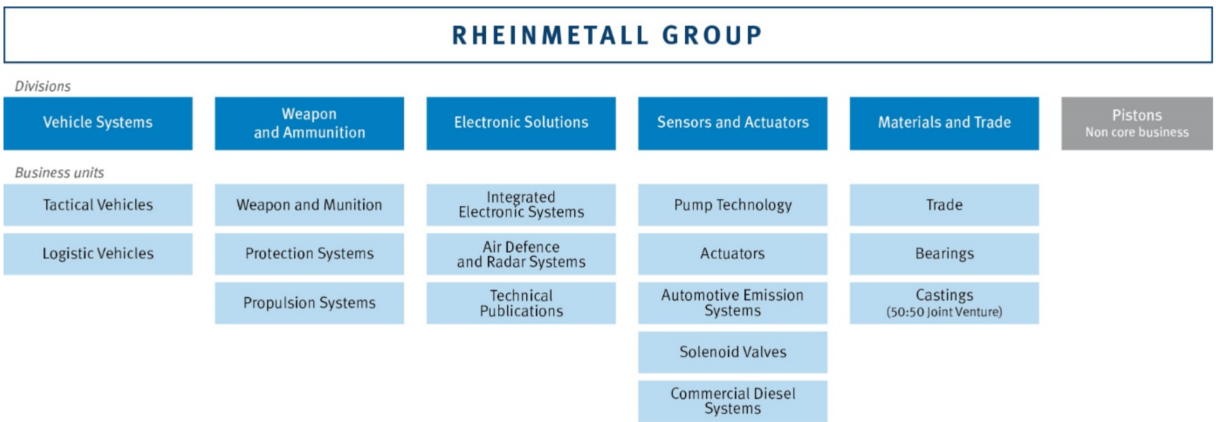
Basic information on the Rheinmetall Group
Structure of the Rheinmetall Group

The Rheinmetall Group comprises Rheinmetall Aktiengesellschaft, a listed stock corporation established under the laws of Germany and entered in the commercial register of the District Court of Düsseldorf under the number HRB 39401, and its subsidiaries. The Articles of Association of the company were last amended on May 11, 2021.

Rheinmetall AG is the parent company of the Rheinmetall Group and has its registered office in Düsseldorf, Germany, at the Group headquarters. As the management holding company, it defines long-term strategic orientation and corporate policy of the Rheinmetall Group. It also performs control and governance functions and provides services to the Group companies. Its most important tasks include specifying targets and guidelines, optimizing the investment portfolio, central financing, risk management and filling management positions in the Group. Support and service functions, such as finances, HR, corporate communications, law, taxation, information technology, internal auditing, compliance, corporate social responsibility and mergers & acquisitions, are performed at Group level. Rheinmetall AG ensures that there is a Group-wide, standardized planning, control and management process in place, and within the context of the compliance management system it monitors the Group-wide implementation of laws, guidelines and regulations in accordance with a set of uniform criteria.

As a result of the strategic realignment of the company and its positioning as an integrated technology group, Rheinmetall adjusted the Group structure in February 2021. In this context, the previous organizational separation into the Automotive and Defence sectors was discontinued. The new structure comprises the five divisions of Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade. It aims in particular to promote the transfer of technology between the individual parts of the Group and encourage the focus on future-driven technologies and business areas with large potential for a sustained increase in value.

The Rheinmetall Group's corporate structure



December 31, 2021

Our market and customer-oriented approach is an important factor in Rheinmetall's success. Lasting relationships with customers have formed the basis of Rheinmetall's business activities in the environmentally friendly mobility and threat-appropriate security sectors for more than a century. The activities are consistently aligned towards the economic regions of Europe, America, Asia and Australia. In the year under review, sales were generated with customers in 139 countries. The business activities of the companies in the Rheinmetall Group have a strong international focus. Rheinmetall is represented at 42 locations in Germany, a further 45 in Europe (excluding Germany), 15 on the American continent, 18 in Asia, 5 in Africa and 8 in Australia. In 2021, the international share of sales was 66% (previous year: 64%). Rheinmetall employs 12.787 staff abroad (previous year: 12,454 employees), which represents 48.9% of our total workforce (previous year: 49.2%).

Rheinmetall AG has direct or indirect holdings in 200 companies in Germany and abroad (previous year: 197) that are part of the Rheinmetall Group. The scope of consolidation includes 165 subsidiaries (previous year: 160). A total of 32 companies are carried at equity (previous year: 34). The Group also holds 3 joint operations (previous year: 3). The scope of consolidation is presented in the list of shareholdings in the notes to the consolidated financial statements.

Business activities and markets

Rheinmetall is an international group, active in various markets with technologically leading products and services. The sales focus is on the security technology and mobility segments. Globalization, protectionism, digitalization as well as disruption and transformation in various sectors and industries – particularly in the automotive sector – as well as the increasing frequency and intensity of conflicts and military disputes are leading to a growing need for mobility and security. With its five divisions, whose portfolios of products and services are essentially active in the areas of security and mobility, Rheinmetall fulfills these basic key needs of modern society.

Division	Areas of activity
Vehicle Systems	Armored tracked vehicles
	CBRN protection systems
	Turret systems
	Wheeled logistics vehicles
	Wheeled tactical vehicles
Weapon and Ammunition	Large- and medium-caliber weapons and ammunition
	Weapon stations
	Protection systems
	Propellants and powder
Electronic Solutions	Air defence systems
	Soldier systems
	Command, control and reconnaissance systems
	Fire control systems
	Sensors
	Simulation for the army, air force, navy and civilian applications
Sensors and Actuators	Emissions reduction
	Actuators
	Solenoid valves
	Water, oil and vacuum pumps
Materials and Trade	Engine blocks, structural components and cylinder heads
	Plain bearings and bushes
	Global replacement parts business

Business activities of the Rheinmetall Group's divisions

The Vehicle Systems, Weapon and Ammunition and Electronic Solutions divisions are among the defence and security industry's leading suppliers of innovative products for the German and international armed and security forces. They provide system and subsystem solutions as well as a broad portfolio of services for capabilities in the areas of mobility, reconnaissance, command and control, C4I and protection. They also develop customized training and simulation solutions and provide services in the field of mission logistics.

As a European systems supplier for armed forces technology, Rheinmetall has many years of experience and innovation in armored vehicles, weapon systems and ammunition, as well as in the areas of air defence and electronics. Rheinmetall also serves the requirements of the navy and air force and for internal security. Whether for requirements specific to different branches of the armed forces or overall requirements, whether for external or internal security, the divisions have a wide product portfolio of platforms and components, which are offered as individual and connected system solutions. This makes Rheinmetall an important partner in this field to the German armed forces, their allies and friendly armies, along with civil national security forces.

All development, production and service activities are geared towards ensuring the best possible protection for soldiers. The activities continuously set new technological standards here: from vehicle, protection and weapon systems, through infantry equipment and air defence, to the networking of function sequences, electro-optics and simulation.

The activities of the Sensors and Actuators and Materials and Trade divisions comprise development services, manufacturing and replacement parts supply. The divisions' core areas of expertise lie in the reduction of emissions, pollutants and fuel consumption, as well as cooling and thermal management and reduction of weight and friction in relation to internal combustion engines. This applies to not only passenger cars, but also light- and heavy-duty commercial vehicles.

In addition, there are an increasing number of alternative drive system products in hybrid, electric and fuel cell vehicles. This includes electric drive units comprising a motor and power electronics as well as complete and efficient thermal management modules. Furthermore, these divisions are intensively engaged in applications of their product and service range in non-automotive market segments, such as the hydrogen economy or renewable energies.

Defence and security technology markets

In the field of defence technology, the world in the 21st century occasionally faces very tense security situations as well as complex and new threats. This is currently most clearly expressed in the war that Russia is waging against Ukraine. But blurred boundaries between peace and war, military interventions, latent trouble spots, uncontrolled refugee and migrant flows and the collapse of state structures in individual countries elsewhere are also shaping world events and demanding new answers in the fields of external and internal security.

Rheinmetall's range of products and capabilities in the area of security technology is tailored to central defence technology requirements that result nationally and internationally from many armed forces' substantial ongoing need for technical modernization and replacements and from new military deployment scenarios requiring armies to have an increased ability to react and to take action as well as increased readiness for duty and deployability, both in national and alliance defence and in connection with international peacekeeping and stabilization missions.

The market potential for the Vehicle Systems, Weapon and Ammunition and Electronic Solutions divisions is essentially derived from the defence budgets of customer countries. Rheinmetall is still in an international growth market in the medium term, even though national defence budgets fluctuate to varying degrees, depending on the security situation and political circumstances. In light of the war in Ukraine, it can be assumed that the general trend toward increased spending will solidify and continue to accelerate in European countries in particular. This is due in part to complex existing and new geostrategic challenges in terms of security and defence policy, as well as to the continuing significant need for modernization in the armed forces of many countries and the demand for new military applications. It is also the result of calls to increase governments' resilience to internal and external threats, ability to take military action and the need to guarantee stable and secure supplies in periods of peace and war.

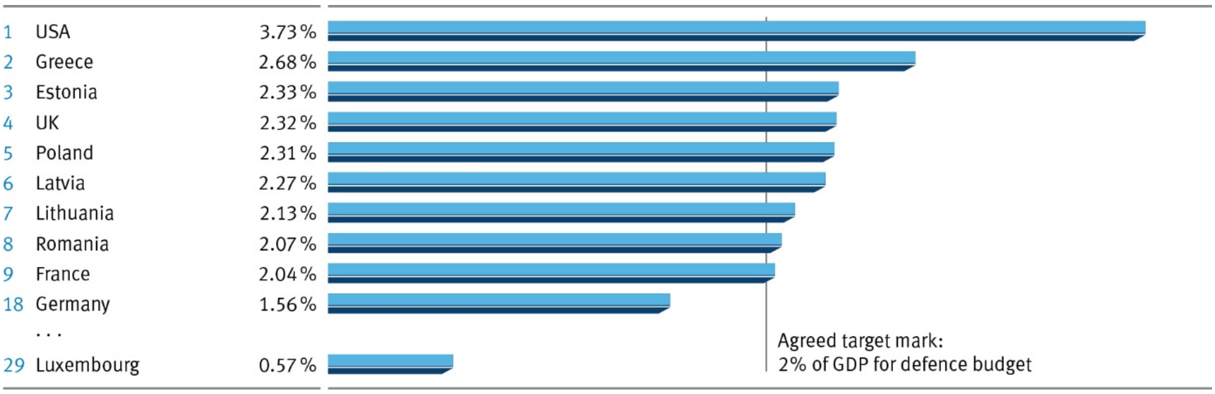
Global defence spending continues to increase

This has already led to a trend reversal in defence spending in recent years, which has risen to its highest level since 1988 on a global scale. This trend is set to continue in the future. In particular, the great powers such as the US and China, but also most NATO countries, are prepared to invest more in their own security and are continuing to modernize their armed forces. The current conflict in Ukraine will lend this development additional momentum. Even the higher level of public debt in a number of countries as a result of the pandemic will not alter this general direction. On the contrary, many nations are reasserting their plans to keep their defence budgets static or increase them. International defence markets find themselves in a long-term cycle that is characterized by comparatively high budgets and new procurement. For those Rheinmetall divisions, whose product ranges are primarily geared towards security and defence technology, this will continue to give rise over the coming years to excellent growth prospects, which are to be leveraged as part of their strategic further development.

According to the target set at the NATO summit in Wales in 2014, each NATO member state is to spend at least 2% of its gross domestic product (GDP) on defence by 2024, with 20% of this sum being invested in new armaments and research projects. This second target could create additional opportunities for Rheinmetall, particularly with respect to procurement projects in the European and German market. Based on the NATO Secretary General's report from March 2021, 11 out of 29 NATO countries met or exceeded this investment target in 2020.

While in 2014 just three out of 29 NATO member states achieved the 2% target according to the study "The Role of NATO for Europe's Security" published by the German Institute for International and Security Affairs in November 2019, by 2018 this figure had risen to seven countries. For 2020, NATO says this group of countries expanded to 11. NATO allies including Poland, Latvia, Lithuania and Romania already have laws and agreements specifying this target. While European NATO countries and Canada were spending 1.47% of their GDP on defence in 2013, NATO estimates put this figure at 1.73% of GDP in 2020.

Defence spending of selected NATO member states as a proportion of gross domestic product in 2020



Source: NATO press release, March 2021

Focus on defence of nations and alliances

After many years of spending cuts in the defence sector, since 2014 there has been a significant increase in the defence budgets of EU member states. The German defence budget has also been rising continuously for years, from €33.1 billion in 2014, through €45.2 billion in 2020 to €46.9 billion in 2021. Originally, the defence budget for fiscal 2022 was to be further increased to €50.3 billion. Due to the creation of a "special armed forces fund" announced by the German government at the end of February 2022 and the declared intention to spend at least 2% of gross domestic product on defence, considerably higher defence spending can currently be expected in 2022. This additional spending is intended in particular to clear the existing investment backlog and provide the German armed forces with significantly better equipment on the whole over the coming decade, with a stronger focus on the defence of nations and alliances. The German armed forces, guided by its capability profile must be able to meet its sworn international commitments as a reliable partner. This trend is also being driven by Germany's role as a Framework Nation Concept for the military capabilities and structures of smaller allies, which requires the German armed forces to have a broad mix of military capacities. This is in addition to the German armed forces' responsibility as the lead nation in NATO's Very High Readiness Joint Task Force for protection of the eastern border within the alliance. The two combined, and the German armed forces' role as a troop supplier for international crisis management, will lead to significantly increased demand over the next few years for new and additional equipment for land forces in particular.

Strategically important markets in Eastern Europe, Great Britain and Australia

In the export business in the area of security and defence technology, the markets in Great Britain, Australia, Hungary, the US and various Eastern European NATO member states remain of particular strategic importance.

In Eastern Europe, a number of NATO states will over the coming year be modernizing their still largely Russian-made equipment and adapting to the standards required in the western defence alliance. As a result of the military conflict between Russia and Ukraine, this development is likely to increase in scope and speed up considerably. This will offer new opportunities for Rheinmetall to establish itself over the coming years as a long-term partner, especially for equipping armies.

In Hungary, a decisive step was taken in this context in 2020 with the order for the new Lynx infantry fighting vehicle. Integration of the Lynx will take place in a local joint venture led by Rheinmetall and is linked to the leveraging of local value added. In addition, Rheinmetall will supply Hungary with radar systems from its Canadian subsidiary as well as munitions.

Our strategic approach to develop new home markets for Rheinmetall (home market strategy) by creating local value added and becoming a preferred partner for national armed forces has already proven successful in Australia, where long-term customer relations have been established through the acquisition of major orders for military trucks, wheeled armored vehicles and munitions. Rheinmetall's Military Vehicle Center of Excellence in the state of Queensland has become operational. It will include not only development capacity but also production and maintenance capacity. In the medium to long term, the Military Vehicle Center of Excellence will also be able to handle export orders.

In Great Britain, the joint venture with BAE Systems, in which Rheinmetall holds a majority stake of 55%, was awarded a large order in 2020 to equip the British armed forces with Boxer wheeled armored vehicles, as well as an order in 2021 to modernize the British Challenger main battle tank fleet. Rheinmetall has thus established itself as a key equipment partner to the British armed forces. At the same time, the formation of the joint venture represents another step toward consolidation of the European land systems industry.

In general, Rheinmetall will continue to press ahead with the expansion of its systems business. The aim of this strategy is to increase the number of Rheinmetall platforms and systems employed by international armed forces in order to generate from this follow-up business with maintenance, modernization and service. Furthermore, this will help to improve prospects for successfully marketing Rheinmetall's system-independent key components such as electronics, weapon systems, munitions and protection packages.

As an important provider of military land systems, Rheinmetall remains committed to playing an active and formative role as part of further industry consolidation. This is why Rheinmetall will continue to monitor potential for strategically and economically expedient partnerships and acquisitions and, if necessary, enter into such partnerships.

Markets for civilian products and mobility applications

The business performance of the divisions operating with civilian products primarily in the area of mobility is largely determined by the production trends of international customers in the automotive industry. This applies to not only existing customer contracts, but also future projects relating to customers' technological requirements. The technologies of tomorrow are largely determined by the ongoing strong trends toward the more efficient use of fuels, the reduction of emissions and alternative drive technologies.

The Sensors and Actuators divisions hold a “tier 1” position in the value-added chain of automotive production because they generally supply automotive manufacturers directly rather than via other suppliers/system integrators. This also applies to large parts of the Materials and Trade division’s product range. Despite a relatively small number of international automotive manufacturers, the customer portfolio of both divisions is highly diversified; this also applies at regional level. With production sites in the key economic areas of Western Europe, USMCA and Asia, the divisions can meet customer requirements for local or international production.

The global replacement parts business serves, among others, the automotive manufacturers directly – in this case, the manufacturers’ service units. The core business, however, involves supplying a strongly diversified customer base in the segment covering independent service providers. A number of different sales channels such as websites, apps, call centers and online catalogs are used for this. In addition to its own products under the Pierburg and Kolbenschmidt brands, the division sells products from third-party providers with a view to acting as a one-stop shop for customers and, in turn, strengthening customer loyalty and the cross-selling of its own products.

Technological upheavals in automotive manufacturing

As demand for mobility continues to rise, the automotive industry is set to experience significant technological upheavals in the coming years. New mobility concepts will gain in importance. Combined with increasing digitalization and a gradual transition to partially and fully autonomous driving, tighter industrial policy targets and measures are accelerating the shift to alternative drive technologies.

The discussion about the global future of combustion and in particular diesel technology in the passenger car segment is not yet over, but in the past two years it has been overshadowed by the coronavirus pandemic and the subsequent crisis regarding the supply of semiconductors, which led to a decline in global automotive production. Electrified vehicles gained market shares worldwide as the automotive industry gradually recovered after the first phase of the pandemic. The shift away from the combustion engine as a drive system toward partly or fully electric drives has accelerated considerably, and this trend is expected to continue in the coming years. All major automotive manufacturers launched further offensives for electric vehicle models in 2021. This trend is further supported in many countries by government assistance measures for alternative drive forms. Rheinmetall has strategically prepared for these developments – developments that will lead to a structural decline in the number of conventional combustion engines.

To this end, the product portfolio has been tailored to the strict emission regulations in recent years and the product range has been successively expanded in terms of hybrid technology, all-electric drive systems and fuel cell technology for heavy commercial vehicles. In addition, efforts to make the product range less dependent on the passenger-car-only engine business were further intensified.

Rheinmetall has now acquired orders for alternative passenger car drive systems totaling around €840 million (term volume). This strategy will be continued by concentrating resources on development. In the medium term, the aim is for the Sensors and Actuators division to generate around a third of its sales with alternative drive system products and derive a significant part of its future growth from this product range.

In addition, Rheinmetall wants to direct its expertise in areas such as thermal management, media control and hydrogen technology towards non-automotive applications and leverage sales potential in new markets. In addition, we will apply our breadth of expertise in the areas of sensor technology and artificial intelligence that Rheinmetall has gained from military applications to new mobility concepts with semi-autonomous control units.

Regulatory environment

Legal regulations on exports of military equipment – The Federal Republic of Germany has one of the strictest export control systems in the world. German military equipment exports are governed by the Grundgesetz (GG – German Basic Law), the Gesetz über die Kontrolle von Kriegswaffen (KrWaffKontrG – German War Weapons Control Act) and the Außenwirtschaftsgesetz (AWG – Foreign German Trade and Payments Act) in conjunction with the Außenwirtschaftsverordnung (AWV – German Foreign Trade and Payments Regulation). The “Political Principles Adopted by the Government of the Federal Republic of Germany for the Export of War Weapons and Other Military Equipment” of June 26, 2019, provide the licensing authorities with guidelines.

European and German exports of military equipment are being restricted by numerous bans, licensing and reporting requirements at EU and national level. These restrictions allow the authorities to check critical exports and other foreign trade dealings with respect to arms control objectives. EU law takes precedence over national law, including German law. Nonetheless, according to Article 346 TEU (Treaty on the Functioning of the European Union), all member states can take measures they consider necessary for the protection of their essential national security interests. Decisions on the production of or trade in arms, munitions and war materials are therefore up to the respective national lawmakers.

War weapons – Article 26(2) of German Basic Law states that the manufacture, transportation and marketing of war weapons requires a license from the German government. The details are specified in a federal law, the German War Weapons Control Act (KrWaffKontrG). An annex to the KrWaffKontrG, the War Weapons List, lists all items that are definitively regarded as war weapons. War weapons include not only devices such as battle tanks, armored combat support vehicles and machine guns, but also certain types of ammunition such as tank or artillery ammunition. As well as complete devices and ammunition systems, certain assemblies and components such as the turret and chassis of a battle tank or the projectile, warhead or fuse for certain types of ammunition are additionally defined as war weapons.

The KrWaffKontrG includes an extensive licensing system for war weapons. Almost every activity relating to these goods requires a license. A license is required for the production of war weapons, both during development and in series production. Transfer of the actual control over war weapons also requires a license, as does the purchasing of these weapons. The transportation of war weapons within a country is also subject to licensing. Moreover, the transportation of war weapons using German ships or aircraft outside German territory requires a license. Trading and brokerage transactions involving war weapons that are not intended to affect German territory are also subject to licensing. Above all, the importing, exporting and transit of war weapons requires a license. Exporting a war weapon requires not only the applicable licenses in accordance with the KrWaffKontrG, but also an additional license for export purposes, specifically an export license in accordance with the Foreign Trade and Payments Act (AWG) or the Foreign Trade and Payments Regulation (AWV).

Regulations on other military equipment – Other types of military equipment are listed in Part I Section A of the Export List, an annex to the German Foreign Trade and Payments Regulation. In particular, the export of these goods requires a license. The term “goods” and therefore the export controls apply not just to goods, but to technology and software as well. Licenses are also needed for some types of technical support (i.e. the transfer of intangible knowledge and capabilities) and for some trading and brokerage transactions. It is generally possible to import other types of military equipment without a license.

National regulations on trade and exports of military equipment – The Federal Republic of Germany is entitled to restrict the foreign trade and – in particular – the export of military equipment (including war weapons) by imposing licensing requirements or bans, for example to safeguard the material security interests of the Federal Republic of Germany, to prevent a disturbance to the peaceful co-existence of nations or a major disruption to the foreign relations of the Federal Republic of Germany, to safeguard the public order or security of the Federal Republic of Germany or another member state of the European Union or in the interests of the European Union; and in addition to implement the decisions of the European Council on economic sanctions within the sphere of Common Foreign and Security Policy, to carry out the obligations of the member states of the European Union that are stipulated in directly applicable binding acts of the European Union on the imposition of economic sanctions in the sphere of Common Foreign and Security Policy, and to implement resolutions of the United Nations Security Council or intergovernmental agreements.

Regulations on trade of military equipment at **EU level** – The adoption of the “Council Common Position 2008/944/CFSP defining common rules governing control of exports of military technology and equipment” of December 8, 2008, created a legally binding regime for all EU member states. The Council Common Position of December 8, 2008, sets out a total of eight criteria for assessing export license applications. It gives mention to an EU Common Military List, which largely matches the corresponding lists of controlled military equipment of the EU member states. Controlled goods that come under these lists are largely defined and amended by the international export control regime. The Wassenaar Arrangement (WA), in particular, governs the export controls of conventional military equipment and dual-use goods and related technology. The Australia Group (AG) is active in the area of chemical and biological agents and dual-use goods and technologies. Furthermore, the aim of preventing proliferation is pursued by the Missile Technology Control Regime (MTCR) in the area of ballistic missiles and by the Nuclear Suppliers Group (NSG) in the area of nuclear weapons. The goods in the respective item lists in the Annex to the EC Dual-Use Regulation and German export lists are reflected in German law.

International regulations on trade of military equipment – There has been a set of internationally applicable standards for the trade of conventional military equipment since the Arms Trade Treaty (ATT) came into force in December 2014. On April 2, 2013, the United Nations General Assembly approved a resolution, by a large majority, to adopt the text of the Arms Trade Treaty. The treaty came into force on December 24, 2014. A total of 135 countries have signed the treaty to date, including Germany.

Decision of the German government on exports of military equipment – The German government makes decisions on exports of military equipment based on its “Political Principles for the Export of War Weapons and Other Military Equipment.” These political principles take into account the German War Weapons Control Act and the Foreign Trade and Payments Act in conjunction with the “European Council Common Position of December 8, 2008, defining common rules governing control of exports of military technology and equipment,” the Arms Trade Treaty that came into force on December 24, 2014, and any respective subsequent regulations. The criteria laid down in the “Common Position” and any subsequent regulations form an integral part of these political principles. The new principles on the export of military equipment from June 26, 2019, expressly prohibit the export of small arms and light weapons to third countries. Licenses for these weapons and the associated ammunition are now issued by the federal government only in exceptional cases. If the political principles set out more restrictive measures than the “Common Position,” they take precedence.

Licenses for the export of war weapons and other military equipment are granted only on the basis of reliable prior knowledge of end use by the intended end-user. This generally requires appropriate written assurance by the end-user in the official end-user certificate. The granting of licenses can additionally be made contingent upon the recipient country giving its consent to on-site post-shipment controls in line with the federal government’s adopted key points for the introduction of post-shipment controls for German military equipment exports and any subsequent regulations.

Shipments of war weapons and other military goods of a quantity or type that could be relevant to war weapons are approved only upon presentation of official end-user certificates that include a reexport ban subject to authority approval. This applies mutatis mutandis to any other military equipment related to war weapons exported in connection with a manufacturing license. Effective end use regulations must be made a pre-condition for these manufactured war weapons.

War weapons and other military equipment related to war weapons may be reexported to third countries or brought into the EU single market only if the federal government has consented to this in writing. A recipient country that flouts an issued end-user certificate to approve the reexport of war weapons or other military equipment related to war weapons or that has knowingly failed to prevent or has not sanctioned an unapproved export of such weapons or equipment will be generally excluded from receiving any further deliveries of war weapons or other military equipment related to war weapons until the situation is resolved. The same applies if post-shipment controls identify violations of the end-user certificate or a country refuses to conduct on-site controls despite making a commitment to this effect in its end-user certificate.

Other goods – Other goods besides war weapons and other military equipment are controlled, namely dual-use goods (i.e. goods that can be used for civilian and military purposes). In other words, they are not purely civilian goods. Purely civilian goods are not generally subject to any export restrictions. With a few exceptions, they can be exported without requiring a license.

Export of dual-use goods – The export of dual-use goods has been harmonized at European Union level since 1995. The European Parliament and Council Regulation (EC) 2021/821 of May 20, 2021, "setting up a a regime for the control of exports, brokering, technical assistance, transit, and transfer of dual-use items" (EC Dual-Use Regulation) applies here. A common list of items lists all dual-use items that are subject to uniform control regulations in all EU countries. These are based on the aforementioned international export control regime. The transfer of these goods within the EU is free, apart from a few exceptions. In addition to the EC Dual-Use Regulation, there are further listed dual-use goods in Part I Section B of the Export List to the Foreign Trade and Payments Regulation (AWV) that also require a license to be exported. These are nationally listed dual-use goods.

Export of non-listed goods – To ensure seamless export controls, there are also licensing requirements for goods that are not technically described in any of the aforementioned export lists and are known as ".non-listed goods." These licensing requirements involve open-ended lists that prevent low-tech goods from being used for armaments projects. These are referred to as "catch-all clauses." Factors that play a role in licensing approval include the intended purpose of the goods and the respective purchasing country or country of destination. A licensing requirement may exist if the goods are intended to be used or may be used in connection with the development, manufacture, handling, operation, maintenance, storage, tracking, identification or dissemination of chemical, biological or nuclear weapons or other nuclear explosives, or for the development, manufacture, maintenance or storage of missiles for such weapons or are intended to be used for a military end purpose in an arms embargo country, or for use as components of military goods exported without requiring a license or, where the goods are for digital surveillance, the goods are or may be intended, in whole or in part, for use in connection with internal repression and/or the commission of serious violations of human rights and international humanitarian law.

Decarbonization – The European Green Deal sets the blueprint and roadmap for the EU to meet its climate change targets. It sets out a roadmap of legislative and non-legislative initiatives that will help the EU achieve these targets. The measures cover sectors such as industry, transport and mobility, energy and finance.

On June 28, 2021, the Council of the EU adopted the European Climate Change Act. This forms the centerpiece of the European Green Deal. The Climate Act translates the EU's political climate protection commitments into a legal obligation. This legal act will provide the framework for the measures to be taken by the EU and its member states to successively reduce emissions and ultimately achieve climate neutrality by 2050.

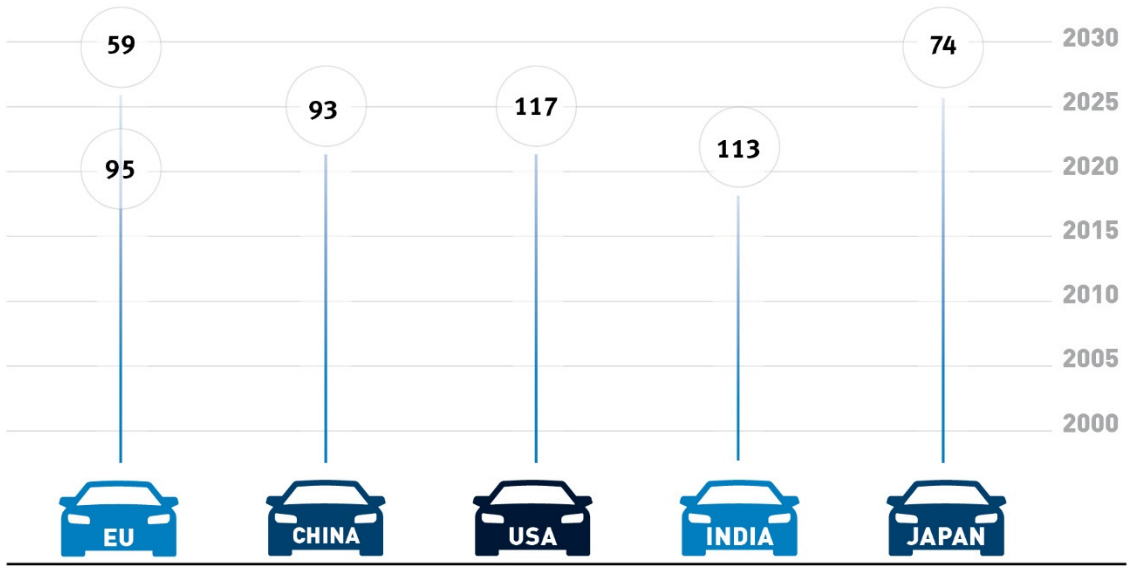
Vehicle emissions – Mobility in its current dominant form relies on burning fossil fuels, which is inextricably linked to the emission of substances that are harmful to health and the environment. In metropolitan areas in particular, traffic is repeatedly leading to severe impairment of air quality. To reduce the negative impact on citizens' health from traffic-related exhaust gases and cut greenhouse gas emissions, legislators in many countries are issuing limits for passenger cars and for light- and heavy-duty commercial vehicles. The focus here is on both CO_2 emissions that are harmful to the climate and on emissions of nitrous gases (NOX), hydrocarbons (HC), carbon monoxide (CO) and particulate matter (PM) that are caused by road traffic and are harmful to health.

The target value of 95 g CO_2/km that the European Commission adopted for new European passenger car fleets has been in effect since 2020, with manufacturers allowed to deduct 5% of new registrations from the average value of their new car fleet in 2020 due to a phase-in regulation. Since 2021, this concession has ceased. Starting from the reference year 2021, CO_2 emissions are to be reduced by 15% by 2025 and by 37.5% by 2030. Similarly, a limit of 147 g CO_2/km has applied to light-duty commercial vehicles in Europe since 2020. CO_2 emissions are to be reduced by 15% by 2025 and by 31% by 2030.

Non-compliance with the CO_2 fleet values may lead to substantial financial penalties for passenger car manufacturers. Every gram by which the limit is exceeded will cost manufacturers €95 – per vehicle. Whether and to what extent fines will apply depends, among other things, on how quickly manufacturers can push ahead with the production and sale of partially and fully electric vehicles with CO_2 emissions lower than 50 g per kilometer. This is because they can be included twice in the average value and so compensate for vehicles with above-average emissions.

From 2025, heavy-duty commercial vehicles in Europe will be subject to legally prescribed fleet values expressed in grams of CO_2 emissions per ton per kilometer (g CO_2/tkm). In relation to the reference value of average CO_2 emissions from all trucks registered in the EU during the period from July 1, 2019, to June 30, 2020, the CO_2 emissions performance of new, heavy-duty commercial vehicles is to decrease from 2025 by 15% and from 2030 by 30%. Excess emissions from heavy-duty commercial vehicles will also be sanctioned. If, from 2025, a manufacturer misses the CO_2 fleet limit within a reporting period, a penalty of €4,250 per g CO_2/tkm and vehicle shall be payable. From 2030, the penalty will increase to €6,800 per g CO_2/tkm and newly registered vehicle.

Limits for CO_2 emissions by region/country g/km



Source: International Council on Clean Transportation: Policy Update, CO_2 Emission Standards for Passenger Cars and Light Commercial Vehicles in the European Union, January 2019

On July 14, 2021, the European Commission adopted the Green Deal, a set of legislative proposals outlining how it intends to achieve climate neutrality in the EU by 2050. This includes the interim target of a net reduction in greenhouse gas emissions of at least 55% by 2030. The package proposes to revise several EU climate laws, including in the transport sector. A tightening of the CO_2 emission limits for passenger cars and light-duty vehicles outlined above is expected.

In international terms, a few major countries are pursuing similarly strict limits to the EU on CO_2 emissions from passenger cars. They include the US with 117 g CO_2/km from 2026 and South Korea with 97 g CO_2/km from as early as 2020. China's limit is 93 g CO_2/km from 2026, and Japan's is 74 g CO_2/km from 2030.

On August 5, 2021, the US President signed an executive order authorizing the Environmental Protection Agency (EPA) and the US Department of Transportation (USDOT) to modify the previous administration's fuel efficiency and emissions standards. It is therefore likely that emissions standards in the US will also be tightened.

In addition to the targets mentioned above for reducing CO_2 emissions, there are additional regulatory measures and subsidies in almost all relevant markets to stimulate demand for vehicles with electric drives. These measures were generally intensified in 2021 and extended to the following year.

Following the approval of the long-term EU budget 2021-2027 and the "NextGenerationEU" recovery instrument, at least 30% of total spending is to be earmarked for climate-related projects.

Hydrogen industry – Hydrogen has a central role to play in the further development and completion of the energy turnaround. Germany's National Hydrogen Strategy was published on June 10, 2021. With the National Hydrogen Strategy, the German government is creating a coherent framework for action for the future production, transport and use of hydrogen and thus for corresponding innovations and investments. It defines the steps needed to help achieve climate targets, create new value chains for the German economy and further develop international energy policy cooperation. To this end, funding of over €10 billion has been made available at national level to accelerate the market ramp-up of the hydrogen industry in Germany.

Vehicle safety – In recent decades, developments in vehicle safety have significantly contributed to an overall decrease in the number of people killed and seriously injured in road accidents. However, since 2017, approximately 25,300 people have consistently died annually on the roads of the European Union. In addition, around 135,000 people are seriously injured in road traffic collisions every year. Regulation 2019/2144 of the European Parliament defined a set of vehicle requirements to further improve the safety characteristics of vehicles as part of an integrated approach to road safety and to better protect vulnerable road users.

In particular, this regulation provides for advanced driver assistance systems for all classes of motor vehicles. For example, from July 2024, only vehicles that have installed a warning system in the event of driver fatigue or declining driver attention and a system for monitoring driver availability can be registered. From July 2026, only vehicles that have installed an advanced warning system for declining driver concentration can be registered.

Autonomous driving – According to the German Federal Ministry for Digital and Transport (BMVI), Germany is to take a leading role in the field of autonomous driving. To make the most of the great potential of autonomous and connected driving, the German government wants to drive forward research and development to make the mobility of the future more versatile, safer, environmentally friendly and user-oriented.

On July 28, 2021, the Autonomous Driving Act came into force in Germany. This new law creates the legal framework for autonomous vehicles (level 4) to be able to drive in regular operation in defined areas on public roads. According to the BMVI, this will make Germany the first country in the world to bring driverless vehicles out of research and into everyday use. The goal is to bring vehicles with autonomous driving functions into regular operation before the end of 2022.

Corporate management and control

The Executive Board of Rheinmetall Aktiengesellschaft, which consisted of three members at the end of 2021, is the governing body of the Rheinmetall Group. It is responsible for the Group's strategic orientation and development and for setting and monitoring corporate targets. The five corporate divisions, each with their own management and responsibility for their global business operations, are directly managed by the Executive Board. Moreover, the Executive Board is responsible for the introduction and further development of adequate management, control and monitoring processes, including the risk management system, internal control system, internal auditing and compliance management system and the allocation of resources.

The divisions are equipped with all the necessary functions and report to the members of the Executive Board on current business developments in regular target-setting, review and strategy meetings as part of the strategies, targets and guidelines determined by the Executive Board of the Group, and discuss with them not only strategies and targets but also operational and economic measures. The respective management bodies of the subsidiaries are responsible for operational management of their units. They are supported in their tasks by the service and support functions that have been set up within the management holding company.

The Supervisory Board, which consists of 16 members and is based on joint representation in accordance with the provisions of the 1976 German Codetermination Act, appoints, advises and monitors the Executive Board. The Executive and Supervisory Boards work together closely, constructively and in an atmosphere of trust, with the aim of ensuring the continued existence of the company and creating sustainable value added.

Rules of procedure are in place for both boards, containing regulations on the composition, tasks, responsibilities and areas subject to approval. For further information on corporate governance, please refer to the section of the same name in the corporate governance statement.

Most important financial management indicators

As derived from the strategic objectives, in the Rheinmetall Group, the divisions are managed and the economic success of the operational entities is assessed using five most important financial indicators – i.e. five core performance indicators as defined by the German Accounting Standard No. 20.

Most important financial management indicators for the Rheinmetall Group

		2021	2020
Sales	€ million	5,658	5,405
Operating result	€ million	594	446
EBT	€ million	582	367
Return on capital employed (ROCE)	in %	19.0	11.8
Operating free cash flow (OFCF)	€ million	419	217

The operating result represents earnings before interest and taxes (EBIT) adjusted for special items resulting from corporate transactions, restructuring and other significant items unrelated to operations or the accounting period. The reconciliation can be found in the 'Rheinmetall Group business performance – results of operations' section of the economic report. Return on capital employed (ROCE) for the year represents the ratio of EBIT to average capital employed (average of values as of January 1 and December 31 of the year under review). Capital employed as of the reporting date is derived from the sum of fixed assets, working capital and other assets and liabilities. Operating free cash flow is defined as cash flow from operating activities less capital expenditure on intangible assets, property, plant and equipment and investment property.

Further key figures

Further relevant financial indicators include earnings before interest and taxes (EBIT), the order backlog, order intake, booked business, the volume of capital expenditure, and research and development expenditure. The key figure booked business shows – similarly to order intake – the future sales potential from customer projects based on written agreements and framework contracts with customers, although – in contrast to the key figure order intake – these do not yet represent binding customer orders. The key figure booked business provides a guide value for sales on the reporting date.

Non-financial indicators for the Rheinmetall Group include the headcount by full-time equivalent (FTE), the accident frequency rate (LTIR) and – in addition to energy efficiency, energy intensity and CO_2 intensity – the volume of water used. Further details are provided in the non-financial statement in the section under "Environmental Protection and Conservation."

Financial management indicator for Rheinmetall Aktiengesellschaft

The most important financial management indicator for Rheinmetall Aktiengesellschaft is net income, from which the divided is paid to shareholders.

Strategy

Strategy is regularly assessed and adapted to framework conditions

Rheinmetall's strategy and the strategic orientation of the individual corporate divisions are reassessed at regular intervals by the Executive Board and the Supervisory Board and – where required – adapted to changing framework conditions. Market- and sector-specific conditions play just as much of a role here as technological and regulatory developments. Various regional aspects of the business units that operate internationally are also taken into account. Internal analyses supplement external surveys in order to measure and manage progress in strategy implementation. Overall, Rheinmetall's strategy development and the associated core objectives remains focused on enabling sustainable and profitable growth across economic cycles.

In this context, continuous analyses of the product portfolio are carried out, which initiated the transformation of the Group from a provider of security and mobility applications to a fully integrated technology group in 2020. In fiscal 2021, this transformation was also supported by the discontinuation of the organizational separation into the previous Automotive and Defence sectors. The tasks and functions performed in the intermediate holding company Rheinmetall Automotive AG, based in Neckarsulm, and the divisions affiliated there were restructured and integrated into the existing Group organization.

New Group structure with five divisions

The new Group structure now comprised five divisions that, as the drivers of the Group's operating business, are being managed in a direct reporting line by the Executive Board of Rheinmetall AG. The five divisions are Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade.

Since the beginning of 2021, the Pistons division, which combines small- and large-bore piston business, has been continued as a non-core business and has been recognized as a discontinued operation since the beginning of May. In light of the imminent transformation of the international automotive industry, Rheinmetall is pursuing the goal of handing over the small- and large-bore pistons business to new owners that will be able to continue the business appropriately. However, offers for individual investments or parts of companies are also being considered.

Strategic core objectives for the integrated technology group

- Increasing the sales share of security and defence technology as well as electrification within and outside the mobility sector
- Systematic technology management for medium- to long-term realization of additional growth potential in order to increase resilience and competitiveness
- Expanding the hydrogen business and developing new markets in the area of digitalization
- Securing the long-term future of the company by consistently implementing measures to increase sustainability with the aim of achieving carbon neutrality by 2035

Safety technology, electrification and decarbonization as growth drivers

Along with this changed organizational and management structure, the technology transfer between the individual divisions is to be continuously enhanced and the focus on technologies and business areas bolstered with sustainable value enhancement potential. Particular growth drivers over the coming years will include products, systems and services in the areas of security and defence technology and for electrification within and outside the mobility sector, whose shares of the overall increase in consolidated sales are expected to rise. On the other hand, the share of combustion engine business is being adjusted to reflect the market conditions anticipated in the medium term.

Alignment of the portfolio to increase resilience and competitiveness

In recent years, Rheinmetall has built up the organizational structures for systematic technology management, which is intended to support and guide the transfer of technology between the corporate divisions. The aim is to operate efficiently as an integrated technology group, to generate additional growth potential in the medium to long term and to increase the resilience and competitiveness of the company. This is also linked to a gradual diversification of the service portfolio, which is intended to complement the technological expertise as well as strengthen the existing core expertise in the areas of safety technology and mobility. To this end, a trend identification and technology management system has been developed and implemented in recent months. This makes it possible to systematically develop and validate new business ideas and, if they are economically viable, to translate them into specific programs.

The traditional technology fields of materials technology and lightweight construction, friction reduction and media control are being strengthened by additional and new technology fields. These essentially comprise digitalization, clean mobility, new mobility concepts (teleoperated driving) in the civilian and military environment, and technologies and products for the hydrogen economy, its storage, distribution and use.

The first orders in the hydrogen business area were posted in 2021. In fiscal 2021, booked business in the hydrogen growth market amounted to €123 million and related to fuel cell systems from various suppliers. Since September 2021, Rheinmetall has also been part of the national hydrogen and fuel cell initiative, which is financially supported by the German government and the state of North Rhine-Westphalia. Rheinmetall is an industrial partner in the research and development consortium of the Center for Fuel Cell Technology (ZBT) in Duisburg, which is renowned in terms of hydrogen and has been selected as one of four Innovation and Technology Centers for Hydrogen Technology (ITZ) funded in Germany.

As part of the digitization strategy, two projects were prepared in fiscal 2021 that are to be completed in 2022. Firstly, a purchase agreement was signed to acquire the activities of the renowned drone manufacturer EMT in the form of an asset deal. EMT Ingenieurgesellschaft Dipl.-Ing. Hartmut Euer mbH, based in Penzberg, Bavaria, is involved in developing, producing and maintaining unarmed, tactical flight systems for reconnaissance. EMT's most important customer is the German armed forces, which is introducing the LUNA NG reconnaissance system newly developed by EMT. LUNA NG is a key element in interconnected communications and reconnaissance (C4ISTAR) and the core of tactical data transmission. Furthermore, a declaration of intent was signed with the majority shareholder for the acquisition of a 25.1% stake in the Hungarian digitalization service and IT provider 4iG. This cooperation is intended to make a decisive contribution to further strengthening Rheinmetall's position as a leading systems supplier for security technologies in Central and Eastern Europe. The planned cooperation also offers great opportunities for opening up civilian markets and new fields of technology such as satellite technology. For example, 4iG will act as Rheinmetall's strategic IT partner in order to tap new digital market potential.

Sustainability to form an integral part of the Group's strategy

Founded in 1889, our technology company is active internationally. We are committed to fair competition and to acting lawfully, ethically and with integrity. The Group's focus on sustainability – particularly with regard to important social and political issues ranging from social responsibility to climate and environmental protection – is a key element of the Group's strategy. Sustainable management in harmony with the environment is a core element of business and production processes and helps to secure the long-term future of the company. In addition to continuity, economic growth and compliance with the principles of good corporate governance, the careful use of natural resources is part of our self-image. We are committed to avoiding negative impacts of our business activities on the environment as far as possible and to implementing transformative changes that help protect our planet for the current society and future generations as well as enable a more sustainable business for all our stakeholders.

As a long-standing company, we support the 2015 Paris Climate Agreement's goal of limiting global warming to below 2°C, or even better to 1.5°C, by 2100 compared with the pre-industrial era (1850). CO_2 neutrality by 2035 refers to emissions within our company in a first step (Scope 1) as well as emissions from the generation of our purchased energy (Scope 2). We also plan to further reduce Scope 3 emissions, e.g. from the use phase and procurement of goods and services, in the medium to long term. Through our commitment to the Science Based Target Initiative (SBTi), which is set to take effect in the first quarter of 2022, we are working with one of the leading international organizations to address these challenges. The SBTi is an independent panel of experts that assesses the impact of companies' climate protection targets. As things stand, we will submit our roadmap for achieving our ambitious Scope 1, Scope 2 and Scope 3 targets to the SBTi for validation in early 2024 to provide objective evidence for us and our stakeholders.

In addition to our International Framework Agreement Fair2All (principles of social responsibility), we have underlined our commitment to business ethics issues by signing the United Nations Global Compact, which sets out globally applicable guidelines in the areas of human rights, labor standards, environmental protection and anti-corruption and commits companies to comply with them.

A long-term remuneration component that integrates sustainability targets serves to further strengthen sustainable positive corporate development. For senior and middle management, the implementation of measures relating to the environment and social issues will be taken into account in the long-term incentive at 20% from fiscal 2022.

Research and development

Expenditure on research and development at the Rheinmetall Group was €337 million in fiscal 2021 (previous year: €343 million). Of this amount, €55 million was passed on to customers (previous year: €68 million). Of the total expenditure on research and development, €77 million was capitalized as development costs in the year under review (previous year: €45 million). The research and development ratio in relation to the Group's total sales was 6.0% (previous year: 6.4%).

The number of employees entrusted with research and development tasks has increased by 276 people or 6.7% year-on-year to 4,380 at the end of 2021 (previous year: 4,104 people). In relation to the total workforce, this corresponds to a share of 21.7% (previous year: 21.0%).

Research and development

	2021	2020
Employees in research and development (FTE)	4,380	4,104
Employees in research and development as % of total workforce	21.7	21.0
R&D: Expenses (€ million)	337	343
of which capitalized	*77*	*45*
R&D ratio (research and development expenses in relation to sales)	6.0	6.4

With regard to the individual divisions of the Rheinmetall Group, research and development expenses will again show a mixed distribution in fiscal 2021. As in previous years, the Sensors and Actuators division recorded by far the highest expenses at €151 million (previous year: €151 million). The Weapon and Ammunition division reduced its research and development expenses by -14.8% year-on-year to €69 million. Vehicle Systems reduced the corresponding funds slightly by -1.6% to €61 million. For Electronic Solutions, research and development activities accounted for a total of €38 million in fiscal 2021, an increase of 2.7% compared with the previous year's figure. In the Materials and Trade division, research and development expenses in the reporting year was €13 million, on par with the previous year.

Research and development expenses by division

MioEUR	2021	2020
Rheinmetall Group	**337**	**343**
Vehicle Systems	61	62
Weapon and Ammunition	69	81
Electronic Solutions	38	37
Sensors and Actuators	151	151
Materials and Trade	13	13
Consolidation/Others	5	-

The distribution of the total of 4.380 employees working in research and development in the Rheinmetall Group at the end of 2021 across the individual divisions is shown in the table below. The Vehicle Systems and Electronic Solutions divisions recorded the highest growth in R&D employees, with an increase of 176 and 92 respectively, while the number of employees in the corresponding areas in the remaining divisions remained roughly at the previous year's level.

Employees in research and development by division

FTE	2021	2020
Rheinmetall Group	**4,380**	**4,104**
Vehicle Systems	1,276	1,100
Weapon and Ammunition	667	656
Electronic Solutions	1,328	1,236
Sensors and Actuators	970	988
Materials and Trade	110	100
Others	29	24

Research and development in security technology

Rheinmetall's divisions, which focus primarily on security technology, specialize in the development and production of components and systems for the protection of people, vehicles, aircraft, ships and objects. They stand for the security of armed forces participating in military operations, but also for the protection of civilian security forces.

The Vehicle Systems, Weapon and Ammunition and Electronic Solutions divisions are continuously setting new technological standards with their products: from vehicle, protection and weapon systems through infantry equipment and air defence to the networking of function sequences as well as in the area of simulation and training. They systematically gear their research and development activities to the main areas of national capability stipulated by the German armed forces and to mission requirements profiles of international armed and security forces facing the growing challenges and complex threats of the 21st century. In addition to multinational deployments for stabilization and crisis management, the focus is once again increasingly on the tasks of the German armed forces and other NATO forces in the area of national and alliance defence. Modern equipment that uses cutting-edge technology and is adequate to the task can lead to vital improvements in ability to lead, stamina, mobility, effectiveness and ability to survive in the deployment scenarios faced by soldiers.

Vehicle Systems division

As the digitalization of military vehicles continues, the variety of support and automation functions in the systems is also increasing. These functions have been a focus of the Vehicle Systems division's R&D activities for years. Research and development activities are also focused on how tasks can be simplified and combined for the operator in order to ultimately optimize the manning of modern combat vehicles. The focus here is not only on reducing crew size, but also on relieving them of monotonous tasks and reducing the risk to the crew in dangerous situations. In this context, a high degree of automation in the execution of functions can be achieved via appropriate sensor systems and algorithms.

In the past fiscal year, the division managed the InterRoC (Interoperable Robotic Convoy) project for the German armed forces. This involved equipping two HX2 logistics trucks with a Rheinmetall B kit containing components of a commercial drive-by-wire system. This means that the accelerator, brake and steering functions of the trucks can be operated and guided via a vehicle-independent interface, for example, with regard to speed, engine speed or steering power feedback. With the integration of an autonomy kit (A kit) provided by the customer, the two trucks were upgraded for autonomous driving via this interface so that they can be used as a convoy – consisting of a manned lead vehicle and one or more unmanned following vehicles. The vehicle environment is detected and the route determined using the A kit, while the B kit operates and feeds back to the vehicle platform. The necessary parameterization of both the A kit and the B kit was carried out at the Rheinmetall test site in Unterlüss, so that the two trucks were demonstrated to the customer at its test site in Trier in fall 2021.

Another project in the field of autonomous driving was the self-financed construction of an autonomous tracked vehicle based on the Wiesel 2. As with the truck in the InterRoC project, a Wiesel tracked vehicle was equipped with a Rheinmetall B kit. The A kit from Rheinmetall's Canadian subsidiary was used as the autonomy kit. The vehicle was parameterized and upgraded for autonomous driving at the division's Rheinmetall site in Australia. Due to the strict pandemic-related protective measures in Australia, the presentation of the ACW (Autonomous Combat Warrior) did not take place as planned together with the customer as an in-person event, but was demonstrated via a video presentation at the end of 2021.

Activities in the field of autonomous driving will continue in fiscal 2022, with the focus on customer projects on specific individual topics as well as the fundamentals of sensor integration and sensor fusion in software-based vehicle guidance.

Weapon and Ammunition division

In view of the renewed challenges in national and alliance defence, there is a growing trend toward engaging enemy forces at greater distances with superior firepower. In this context, Rheinmetall successfully used new technologies to increase the range of the existing 155mm artillery system in fiscal 2021. Another focus of research and development activities was on the new 130mm weapon system with the main weapon, ammunition and autoloader components, the high performance of which has been demonstrated with regard to accuracy and target effects.

The renewed threat from conventional anti-tank weapons, whether air-to-air missiles or munition launched by cannon, also calls for new approaches to protecting armored platforms. The aim here is to develop system-compatible protection against these new threats. In fiscal 2021, Rheinmetall pressed ahead with its preparations for the Franco-German Main Ground Combat System (MGCS). The development of active as well as passive protection technologies for future battle tanks was continued and transferred into an integrated protection concept.

The conflict between Armenia and Azerbaijan over the region in Nagorno-Karabakh in 2020 revealed a new threat situation for conventional combat vehicles in the form of drones and “loitering munitions.” These new technologies, some of which are disruptive, focus attacks on what is the most weakly protected part of a vehicle, namely the roof structure. Modern top-attack drones and loitering munitions are equipped with a wide range of sensors and weapons, which must be countered by innovative technologies. Rheinmetall has therefore initiated the design and development of a corresponding protection system against this type of threat in fiscal 2021. This system will function as a vehicle protection system in the near future and combine various technologies from the areas of active and passive protection as well as electronic warfare.

Another development focus resulted from the fact that the latest generation of missile homing heads use high-resolution sensor technology and imaging algorithms in both the infrared and radar ranges. Rheinmetall is therefore developing innovative camouflage and decoy measures that can reliably ward off these threats. In this process, the spatial, temporal and spectral signature of the target to be protected is first emulated through coordinated use of structured active and passive decoy. After the homing head accepts the decoy target, it is actively separated from the actual target. In the marine segment, Rheinmetall uses its tried-and-tested rotating and pivoting MASS launcher system for this purpose. It can even produce customer-specific decoy signatures using numbering, positioning and sequencing of various countermeasures that can be selected individually.

One focus within the Weapon and Ammunition Division is also on the challenges of spare parts supply and logistics. Additive manufacturing using 3D printing already enables the division to reproduce components within a few hours or days. One example of this is an initial pilot project for a medium-caliber weapon, for which several metallic components were reproduced additively and successfully tested in various test series. In addition to technical implementation, the project addresses challenges from quality management and approval processes. The Weapon and Ammunition Division has developed its own approval process for this purpose in order to test, guarantee and document the very high quality requirements in the manufacturing process and for the component. Based on this approval process, research and development can then be extended to other components and systems. The division is also working on further logistics concepts that forge closer ties between additive manufacturing and customers and can significantly improve spare parts supply and logistics in terms of supply availability, delivery times and costs.

Electronic Solutions division

Manned-unmanned teaming (MUM-T), the interaction of manned and unmanned systems, will play a central role in the battlefield of the future. Under the title “The Focus is on People,” the Electronic Solutions division is developing and promoting technologies that help armed forces increase their assertiveness, survivability, command and control, agility and endurance. To further expand its leading position in digitalization and connectivity solutions (e.g. soldier systems), one focus of the division’s research and development activities is on the development of Future Human Capabilities and crew support for digitalized vehicle systems.

As part of the modernization and expansion of existing soldier systems, an active and intelligent (AI-based) exoskeleton for physical support of the upper extremities in military use cases was developed as the first physical functional model. In the future, the exoskeleton is intended to support soldiers during heavy physical work, primarily in the areas of military logistics, medical service and repair. The aim is to reduce physical strain on the musculoskeletal system and increase soldiers’ performance. Development of AI-based assistance systems also continued. A platform-based application for the automated detection, identification, classification and tracking of various objects, such as wheeled and tracked vehicles, is intended to relieve the crews and accelerate work processes. For this purpose, a first simulation-based laboratory prototype was developed, integrated and demonstrated. The development of physical prototypes is intended in the coming years.

The Air Defence and Radar Systems division is also pursuing the goal of providing Rheinmetall's international customers with improved capabilities for optimally assessing the military situation during deployments and using this information to ensure a high level of protection for forces on the ground. In response to all current and emerging airborne threats, including small drones and supersonic missiles, the Rheinmetall Multi Sensor Unit (MSU) has been developed. Based on a highly modular and scalable architecture, this sensor unit features a latest-generation 3D AESA search radar as the primary search sensor and uses AI-based sensor data fusion (SDF) to generate the combined local air picture. In addition, new sensor technology has been developed for the active and passive search and follow-up sensors for ground-based air defence ballistic directors, as well as advanced role-based touchscreen displays for the operator interface.

Research and development for civilian applications

Climate change, global resource scarcity and the transformation of markets were the most important factors influencing technological developments in the mobility sector in 2021. At EU level, the EU Commission's "Fit for 55" package of proposals specifically targeted to individual and transport traffic provides for a 55% reduction in CO_2 emissions from passenger car fleets by 2030. In addition, only emission-free new cars are to be registered from 2035. The announcement of the Euro 7 EU emissions standard represents a further tightening of regulations, which is to govern additional pollutants compared with the currently applicable Euro 6d standard, as well as uniform limits for diesel and gasoline engines. These regulatory steps will have a major impact on the R&D activities of the Sensors and Actuators and Materials and Trade divisions in the coming years.

The transformation of the automotive industry regarding alternative drive systems is also leading to new challenges. For example, in recent months many automotive manufacturers have announced their departure from the established internal combustion engine in anticipation of the expected legislative regulations. According to experts, around 36% – so around 37.4 million units – of all light vehicles produced globally by 2030 will be equipped with a battery-electric drive.

In addition to battery-electric drive systems, regeneratively produced hydrogen is also becoming increasingly popular as an energy carrier in many countries and is often supported by funding programs. As far as the mobility sector is concerned, the focus here is on the use of hydrogen in fuel cell systems for commercial vehicles to achieve the ranges possible with fossil fuels.

In fiscal 2021, Rheinmetall also successfully pressed ahead with development activities for interior monitoring systems, which will have to be installed in newly registered vehicles to monitor driver alertness in accordance with future European legislation. For the Radar Driver & Interior Monitoring Systems project, a demonstrator system was integrated into a production car, which is being presented to customers, with a view to a possible transfer to a series project. In parallel, further studies were conducted in urban mobility concepts, hydrogen technology, alternative fuels and urban charging infrastructure.

In connection with the coronavirus pandemic, the technology offered by Rheinmetall for air purification in buildings is of particular interest. Air purification devices make an important contribution to ensuring indoor hygiene and thus, for example, to maintaining classroom attendance in schools. Rheinmetall received a major order for air purification technology in schools from the city of Hamburg in 2021 and has already delivered a total of more than 1,000 units.

Sensors and Actuators division

In the Sensors and Actuators division, cooperation with more than 20 customers in fiscal 2021 significantly accelerated the marketing of fuel cell cathode valves. In particular, the high level of seal tightness achieved by the stack isolation valves (SIV) and the ability to offer valves with integrated position control electronics met with particular customer interest. New markets and customers were acquired and the first steps were taken on the Chinese market. Many new customer orders for product samples are evidence of the continuing trend towards a globally growing hydrogen and fuel cell market.

In addition to the familiar areas of application for fuel cells in stationary systems and commercial vehicles, new customer contacts were also established in the rail vehicle and marine vehicle segments. To enter this demanding area of application with suitable products, product applications have been developed in accordance with the part-sharing principle. These are to be delivered to the first customers in 2022.

In on-road and off-road applications, electrification – alongside established diesel technology – continues to gain in importance. In cases where the use of heavy battery packs is unattractive, the technology of choice is often a fuel cell, which uses hydrogen to generate the required on-board electricity. For efficient use and a long service life of the fuel cell stacks, a continuous excess of hydrogen is desirable. To make the excess hydrogen usable again, a hydrogen recirculation blower is part of the system. This technology and the corresponding products were developed by Rheinmetall. Prototypes have already been in use in smaller fleets for years. In 2021, Rheinmetall received two major orders from global leaders in fuel cell technology for the first time and has begun to create capacity for series production.

High-voltage coolant pumps are another product for future electrified truck fleets. This technology offers high cooling capacity and will be integrated into the high-voltage circuit of the vehicles. In terms of efficiency, this product ranks at the top end of the broad range of pumps developed by Rheinmetall for various mobile and stationary applications.

To comply with the EU's future CO_2 legislation for the truck sector, all manufacturers will have to significantly reduce their CO_2 emissions in two steps (2025 and 2030). Rheinmetall is participating in this development with a fully variable mechanical coolant pump that optimizes energy consumption based on actual cooling power requirements. The new technical concept developed in this context supports a regulatory strategy that also includes a "no flow" position. In 2021, Rheinmetall was awarded a contract by two major European truck manufacturers and will equip their fleets with this product from 2024.

Electric motors are often not cooled as effectively as possible, resulting in lower efficiency and low continuous output. Rheinmetall therefore sees a clear trend toward oil cooling for electric motors. Here, the non-conductive oil can be sprayed directly onto the electric motor coils, resulting in very efficient cooling. Based on many years of experience with mechanical oil pumps as well as electric coolant pumps, a new product family of electric oil pumps for cooling and lubrication applications has been developed. Rheinmetall received a nomination for this technology from a US customer in 2021. The start of series production is scheduled for 2023.

The division has also recently developed an innovative product portfolio for high-voltage switches as part of its e-mobility strategy. High-voltage switches are used to switch the high-voltage electrical system on and off safely and must also switch off quickly and safely without voltage in the event of a short circuit or crash. These include high-voltage contactors, pyrofuses and pyroswitches for 400- to 900-volt direct current (VDC) applications. The novel high-voltage contactors feature a very compact design with a low weight. Furthermore, even at 900 VDC, the Rheinmetall contactors manage without the usual extinguishing gas charbe, which eliminates the danger of bursting and guarantees a longer service life at higher line temperatures. In addition, a high-voltage pyrofuse has been developed which, in an emergency, is capable of safely disconnecting the high-voltage on-board network at 900 V and 30 kA within just one millisecond. In the future, this will make it possible to replace conventional fuses in high-performance 800-V vehicle drives. The advantage of the new technology with pyro-actuators is the much faster and also safer disconnection of the vehicle electrical system in the event of a short circuit or crash.

The division has developed an electrical refrigerant compressor for mobile applications in vehicles to production maturity. This product has a unique selling point because it was conceived as a modular system, so that different vehicle voltage levels (HV2-400V and HV3-800V) can be covered with an almost unchanged design. In addition, various communication protocols and transmission speeds are provided in the control electronics in such a way that the refrigerant compressor can be switched very flexibly by software parameterization from CAN to LIN communication, even with different data bus speeds. These features made it possible to book a first production business with a well-known German customer in fiscal 2021. This customer requires a product for a 400V and optionally an 800V voltage level, which can be very flexibly aligned to different target applications.

Materials and Trade division

In engine applications for plain bearings, the focus in fiscal 2021 was on localizing heavy-duty two-material bearings at the production site in India and consolidating the starting material and thus the product portfolio for the European market. In contrast, R&D activities for non-engine applications in the automotive environment focused on expanding the metal-polymer product portfolios for interiors, exteriors and chassis. We also supported the start of production of a new product group for commercial vehicle braking systems.

In 2021, the main focus was on the development, industrialization and series production start-ups of various industrial applications outside the automotive environment. In addition to the further development of existing materials for applications in the renewable energies sector, work was carried out on new products for hydraulic, transmission and compressor applications as well as for mechatronic components.

In the Castings business unit of the Materials and Trade division, the focus was on the implementation of a complex engine block using the low-pressure sand casting process and the expansion of process development for the volume production of electric motor housings for electric car drive systems. For the European and Asian markets, the focus was on developing and expanding the product portfolio. In the area of tread coating using the metal spray process, especially the rotating single-wire process, corrosion-free coating materials were further developed.

In non-engine automotive applications, the main focus was on expanding the scope of production for lightweight applications of structural and chassis components. Of particular note in this context is the start of series production of a support frame in 2021 as a new product in the Rheinmetall portfolio for a European automotive manufacturer.

Another focus in 2021 was on R&D analysis for the industrialization of various applications outside the automotive market. In addition to the further development of existing processes and equipment for use in renewable energies, work was carried out on new products and additional production capacities for components in communications technology (such as 5G antennas). In casting, machining and coating, the process development and industrialization of engine blocks for motorcycle applications was promoted as a new business area.

The development and marketing of energy recovery systems also formed a focus of R&D activities in fiscal 2021. Systems of this kind support the energy transition on the way to climate neutrality. The system developed by Rheinmetall has been met with great interest in the market – especially among customers who want to electrify their vehicles. In the year under review, there were numerous customer inquiries combined with customer-specific adaptations to the respective application. In addition, a first series order for such an energy recovery system, which increases the range and efficiency of electric vehicles and extends the service life of the installed battery, was received from an American specialty vehicle manufacturer in 2021.

The system developed is suitable for use in both commercial vehicles and passenger cars; it can be operated in cooling as well as heating mode. Other potential applications include high-power charging stations. Possible applications in heat pumps for the building sector are also currently being investigated.

Economic report
General economic conditions

Global economy back on growth track – upswing slowed by sluggish vaccination progress and supply bottlenecks

Following the setback in 2020 due to the coronavirus, the global economy returned to a moderate growth trajectory in the year under review. However, there were significant regional differences. The pandemic particularly weighed on economic activity in countries where vaccination progress is still inadequate. While the population in many developed economies is largely vaccinated, vaccination rates in low-income countries still lagged significantly. Supply bottlenecks and the rise in inflation also slowed economic recovery in 2021. The German Council of Economic Experts also counts the sharp rise in raw material prices, especially for energy, among the factors hampering production. According to calculations by the International Monetary Fund (IMF), global economic output in 2021 increased by 5.9% compared with the weak previous year, when the global economy contracted by -3.1% as a result of the coronavirus pandemic. In this respect, the significant minus in 2020 puts the growth calculated by the IMF for the reporting year into perspective.

In its World Economic Outlook Update published in January 2022, the IMF calculated an increase in gross domestic product of 5.0% for established industrial nations for 2021. The US represents a key growth driver with an increase of 5.6%. Growth in the eurozone was slightly lower at 5.2%.

For Germany, the IMF experts calculated an increase in gross domestic product of 2.7%. The German Council of Economic Experts also forecast GDP growth of 2.7% for Germany in its 2021 annual report. According to the "Joint Economic Forecast #2-2021" of leading German economic research institutes, the economic situation in Germany continued to be characterized by the coronavirus pandemic. After the infection subsided in the spring, gross domestic product initially clearly rose again. However, in the second half of the year, production in the manufacturing sector was hampered by supply bottlenecks for intermediate products, meaning that in essence only the consumer-related service sectors were able to grow. In the winter, economic output was again impacted by the significant rise in infection figures and persistent supply bottlenecks, which had a particular effect on the manufacturing sector, which is heavily integrated into global value chains.

In 2021, Chinese gross domestic product was 8.1% higher than a year earlier. In India, economic output increased by 9.0% year-on-year. For Brazil, the IMF calculated an increase of 4.7%. Overall, economic output in the developing and emerging countries increased by 6.5%.

In its assessment of the global economic situation, the IMF's chief economist Gita Gopinath concluded in January 2022: "To address many of the difficulties facing the world economy, it is vital to break the hold of the pandemic."

Global rise in investment in defence technology and cyber security

Transnational terrorism, interstate conflicts, and increasingly fragile states in some regions of the world: the range of threats to peace and security has become more diverse and unpredictable. The military conflict between Russia and Ukraine is a current example of this. In addition to conventional threats, new challenges such as hybrid warfare and attacks in cyberspace have emerged. Against this backdrop, the German federal defence minister in office during the year under review emphasized the importance of modern technologies for defence capability in a keynote speech in June 2021. She said that Germany would need to actively shape the rapid pace of technological change, stressing the importance of the technologies coming from Germany. Security, prosperity and political power are crucially dependent on Germany and Europe playing a leading technological role, she said. These new threats require massive investments in state-of-the-art defence. In its coalition agreement, the new federal government in office since December 2021 also expressly committed itself to a modern, well-equipped armed forces.

Defence spending in Germany rose again in 2021 to around €46.9 billion. This means that the German armed forces has €1.3 billion more at its disposal than in the previous year. Originally, further spending increases to around €50.3 billion were also planned for the current year. Due to the German government's announcement in response to the Ukraine conflict at the end of February 2022 that it would create a "special armed forces fund" of

€100 billion and henceforth spend at least 2% of gross domestic product on defence, German defence spending will actually be considerably higher in 2022.

According to an analysis by IHS Markit, global defence spending in 2021 was around $1,626.0 billion, compared with $1,617.0 billion the year before. This corresponds to an increase of 0.6%. In the US, the country with the biggest defence budget, the budget was 1.1% lower than the previous year's figure at $751.0 billion. The United Kingdom increased its defence budget by 3.8%. France, on the other hand, reduced spending by 1.8%. Hungary, an increasingly important NATO partner for Rheinmetall, again recorded a significant increase of 24.9% IHS Markit calculated a increase for the People's Republic of China as well. In what is now the second largest defence budget, spending rose by 6.2% to $261.1 billion. Russia's defence budget was around 6.0% lower than in the previous year at $47.8 billion.

At its summit in June 2021, NATO responded to the changes in security policy, in particular the challenges in cyberspace, with an updated strategic concept covering the decade up to 2030. Thus, in addition to its existing core tasks, NATO will in the future deal much more intensively with issues of resilience and dealing with new, disruptive technologies. Likewise, cyber dangers and dealing with hybrid threats are on the NATO alliance's agenda, as well as the question of how NATO should position itself with a view to preserving the rules-based order as well as regarding Russia and China.

Defence budgets of selected countries $ billion

	2021	2020
World	1,626.0	1,617.0
USA	751.0	759.0
China	261.1	245.8
UK	65.7	63.3
India	63.4	68.2
France	58.9	60.0
Germany	54.6	53.2
Russian Federation	47.8	49.8
Saudi Arabia	46.6	54.8
Australia	35.2	33.6
United Arab Emirates (UAE)	24.1	23.1
Canada	18.5	19.1
Poland	15.2	13.5
Netherlands	14.0	13.0
Algeria	8.9	8.9
Norway	7.0	6.4
South Africa	3.0	3.5
Hungary	2.6	2.0

Source: IHS Markit, January 2022 / Figures for 2021 taken from IHS Markit from January 2022

Rheinmetall remains on growth course in military business with sales successes

With numerous sales successes, Rheinmetall again underscored its position of leading equipment partner to the German armed forces in 2021. Rheinmetall also positioned itself successfully with NATO partners as a producer of cutting-edge defence technology and reached a new record level at the end of 2021 with a combined order backlog with external third parties of €13.9 billion for the three divisions operating in the field of security and defence technology.

Major order successes in Germany in 2021 included the upgrade programs for the German armed forces' Puma infantry fighting vehicle, which accounted for a volume of over €0.5 billion. Rheinmetall also achieved another significant success with the Kodiak armored engineering vehicle. The company was commissioned by the German armed forces to supply a total of 44 of these armored engineering vehicles with a gross value of around €295 million. Rheinmetall also signed a framework agreement for logistical operational support as part of the project to provide supplies and storage during deployment, thus opening up a new area of business in the service sector. With the German armed forces contract for the creation, integration and support of a laser weapon demonstrator for maritime use, Rheinmetall has taken an important step towards an operational high-energy laser system. In addition, the German armed forces commissioned Rheinmetall to supply laser light modules. This equipment is the newest generation of the LLM-VarioRay module. The product family is part of the innovative German soldier system "*Infanterist der Zukunft – Erweitertes System (IdZ-ES)*."

Rheinmetall was also successful as a partner to non-military security forces in the strategic internal security market in fiscal 2021. In a Europe-wide tender, the Vehicle Systems division prevailed with its Survivor R protected multi-purpose vehicle and will initially supply 55 vehicles to the federal police force and the riot police of the German states, with a high two-figure order volume and the option to supply further vehicles.

Further more, Rheinmetall won a groundbreaking contract to equip NATO land forces in Europe. The British Ministry of Defence has commissioned Rheinmetall to modernize the British Army's main battle tank fleet in 2021. The total volume of the order is around €770 million. The modernization will see 148 Challenger 2 battle tanks upgraded to the new Challenger 3, making them usable for decades to come. In the Netherlands, Rheinmetall equipped the armored reconnaissance vehicles in service there with new aiming devices and supplied the armed forces with modern artillery ammunition under the existing agreement. Both orders were completed in fiscal 2021. In the US, the company succeeded in acquiring an important development contract in connection with the new Optionally Manned Fighting Vehicle (OMPV) in 2021. This vehicle type, which is currently in the development phase, is intended to replace the nearly 3,800 Bradley Fighting Vehicles in the future.

The sales successes of fiscal 2021 are proof that Rheinmetall's security technology products will continue to benefit from the high modernization requirements in many armed forces in the coming years and that Rheinmetall will be able to tap into new future-oriented markets with high growth potential through innovative solutions.

Transformation of the automotive industry

The automotive industry is undergoing the greatest transformation in its history. The European Union and many European countries have stated their desire for the end of the combustion engine. In many cases, its disuse has already been decided. The proportion of new registrations accounted for by electrically powered vehicles or vehicles with hybrid drives is continually rising.

In addition to the far-reaching structural change, production in the automotive industry was strained in 2021 by sharply rising raw material prices in some cases and shortages of semiconductors and other primary products, with the result that existing customer demand could not be fully met. Whereas in the first half of the year it was still possible to realize significant growth in some cases due to the low production figures of the previous year and the catch-up effect, the picture was more negative in the second half of the year.

Nevertheless, according to analysts at IHS Markit as of January 2022, the number of passenger cars and light commercial vehicles up to 6.0 t produced in 2021 increased globally by a total of 2.5% year-on-year. This means that a total of 76.4 million units were produced worldwide in 2021, compared with 74.6 million vehicles in the previous year. However, despite this slight recovery, production volumes still fell significantly short of the level before the coronavirus crisis, when around 89.0 million vehicles rolled off the production lines worldwide in 2019.

The main contributors to the upward trend in 2021 were the markets in the US, South America and Asia. For China, IHS Markit calculated an increase in production of 4.0% for 2021, after the country contended with a decline in production in the previous year. Japan recorded a decline of 4.0% in 2021, while vehicle production in India increased by 25%. For the Asian countries as a whole (excluding Japan and China), IHS Markit calculated an increase of 9.2%.

In the USMCA region (US, Mexico, Canada), vehicle production in 2021 was 0.1% lower than a year earlier due to the sharp 19.6% decline in production in Canada. By contrast, production in the US increased by 3.4%. In Brazil, production figures were 8.8% higher than a year earlier.

European vehicle production continued to be heavily impacted by the coronavirus pandemic and its subsequent effects on supply chains. IHS Markit calculated an overall decline of 6.7% for the Western European market. In Germany, the slump in vehicle production in 2021 was particularly pronounced, with a drop of 12.3%, while the decline in production in the UK (-6.1%), Spain (-6.4%) and Italy (-6.9%) was much smaller. France saw a slight increase (2.4%).

Production of passenger cars and light-duty commercial vehicles up to 6.0 t million

	Change %	2021	2020
World	+ 2.5	76.4	74.6
Western Europe	– 6.7	9.4	10.1
Eastern Europe	– 4.5	3.4	3.6
USMCA	+ 0.1	13.0	13.0
Brazil	+ 8.8	2.0	1.9
Asia	+ 4.8	47.0	44.9

Source: IHS Markit, February 2022 / Figures for 2021 taken from IHS Markit from February 2022

Commercial vehicle market on course for recovery

Much like the passenger car market, the global market for medium- and heavy-duty commercial vehicles over 6.0 t in 2021 was impacted by the shortage of semiconductors, high freight prices and environmental regulations in addition to the coronavirus crisis. However, there were evident regional differences. For 2021 as a whole, IHS Markit forecast a year-on-year increase of 0.5% based on February 2022 figures.

In Western Europe, truck production increased by 11.0% year-on-year for the full year 2021 according to the IHS Markit forecast. Catch-up effects from the weak year 2020 were noticeable here. In contrast, IHS Markit forecasts a sharp decline of 20.4% in Chinese commercial vehicle production. For India, IHS Markit expects a significant increase in production of 79.5% in 2021. The North American market also developed positively. According to IHS Markit, truck production here increased by 21.4% year-on-year in 2021. The development in Brazil was even better, where production increased by 61.1% year-on-year according to IHS Markit.

Production of engines for heavy-duty commercial vehicles over 6.0 t ’000

	Change %	2021	2020
World	+ 0.5	3,665	3,646
Western Europe	+ 11.0	365	329
Eastern Europe	+ 19.8	47	39
USMCA	+ 21.4	558	460
Brazil	+ 61.1	173	107
Asia	– 7.5	2,460	2,659

Source: IHS Markit, February 2022 / Figures for 2021 taken from IHS Markit from February 2022

Rheinmetall’s civilian business benefits from slight recovery in the automotive industry

The economic recovery of the global automotive industry made a significant contribution to the increase in Rheinmetall’s sales in 2021, whereas in the previous year the weaker economic development of the automotive markets and the pandemic-related decline in production negatively impacted sales. In the business with civilian products, Rheinmetall recorded sales growth of 9.4% in the Sensors and Actuators division and 21.5% in the Materials and Trade division in fiscal 2021. The sales growth in both divisions, which primarily supply the automotive industry, is therefore considerably higher than the production growth of the international automotive sector.

In connection with research into new drive systems, Rheinmetall is also pressing ahead with its hydrogen strategy. Rheinmetall has been developing and manufacturing products for fuel cell systems for over two decades, using its experience and expertise in this field to position itself even more strongly as a leading company in the field of hydrogen and fuel cell technology for both mobile and stationary applications. For example, Rheinmetall is now part of the national hydrogen and fuel cell initiative, which is financially supported by the German government and the state of North Rhine-Westphalia, and is an industrial partner of the research and development consortium of the Center for Fuel Cell Technology (ZBT) in Duisburg.

This commitment continued to pay off in the year under review. In the middle of the year, Rheinmetall received new orders from two leading manufacturers of fuel cell systems to supply prototype hydrogen recirculation blowers. Rheinmetall thus considers itself to be in a good position to subsequently be able to generate the high volumes targeted for the period from 2024 onwards by means of a series nomination. At the beginning of 2021, Rheinmetall received an order to supply hydrogen recirculation blowers with a sales volume in the eight-figure range to Daimler Truck Fuel Cell GmbH & Co. KG.

Innovative products developed for vehicles with new drive systems

The German government's ambitious goal is to have seven to ten million electric vehicles registered in Germany by 2030. In January of 2022, the Association of the German Automotive Industry (VDA) again reported an increase in registrations of electric passenger cars in Germany for 2021. Accordingly, 681,900 electric passenger cars were newly registered over the course of the year (+73.0%). This corresponds to an electric share of new registrations of 26.0% for 2021 as a whole.

As part of its strategic realignment, Rheinmetall has defined the electrification of drive systems as a growth driver for future business and is developing innovative products for this market. The Sensors and Actuators division is particularly driving this electrification strategy forward. The division, which is active in components and control systems for emissions reduction and thermal management, saw a significant increase in sales again in 2021, but has not yet returned to its pre-coronavirus pandemic level. The reduced availability of semiconductors, which resulted in numerous automotive manufacturers producing significantly fewer vehicles than originally planned, played a main role in subduing any stronger growth momentum for the division in fiscal 2021.

Two significant orders from 2021 underscore the success of Rheinmetall's electrification strategy: an international automotive manufacturer commissioned the company to supply electric coolant pumps to be installed in luxury-class hybrid vehicles as part of a lifetime extension. In addition, a global systems partner from the automotive industry commissioned Rheinmetall to supply an electric climate compressor that has been newly developed specifically for electric vehicles. Alongside the climate compressor and an electric expansion valve for refrigerant, with its coolant pumps and coolant valves Rheinmetall offers all fluid-conveying and fluid-controlling system components for the thermal management of modern electrified vehicle drives from a single source.

Via its subsidiary KS HUAYU AluTech, a joint venture with the Chinese automotive supplier HASCO, Rheinmetall received a new order for around €60 million from a German premium automotive manufacturer in 2021 to supply a structural component that will be installed in models with internal combustion engines as well as in plug-in hybrids and fully electric variants. The order is particularly important for the joint venture as it underlines its strategic focus as an expert in large, highly complex structural castings for both conventional and new forms of drive systems. Another leading international automotive manufacturer had previously also ordered aluminum electric motor housings from the HASCO KSPG Nonferrous Components joint venture, which is part of the Rheinmetall Group, for use in the customer's entire fleet of electrically powered models.

The Materials and Trade division, which supplies structural components and plain bearings and operates the global aftermarket business, significantly increased its business volume in 2021. The increase in sales was supported by year-on-year production growth in the international automotive industry, but was significantly higher than the growth in global automotive production.

With its hydrogen and electrification strategy, Rheinmetall again made a clear contribution to environmentally friendly and thus forward-looking mobility in 2021. Rheinmetall also successfully expanded its position in the future markets for alternative drive systems through further product improvements and innovations. Products for alternative drives already accounted for 22% of the booked business of the Sensors and Actuators and Materials and Trade divisions in 2021; in the prior year this share was 13%.

Metal and energy markets in 2021

Due to the high volumes of metal alloys from aluminum, copper, nickel and tin purchased and the large energy requirements (electricity and gas) for the manufacture of Rheinmetall products, developments on the metal and energy markets are of great importance to us.

In 2021, the LME industrial metals index not only quickly recovered the losses due to the coronavirus pandemic from the previous year, but continued to rise for months afterwards. The rally culminated in a new record high in mid-October 2021, followed by a correction. In the course of the year, copper and tin marked all-time highs, while the other industrial metals reached multi-year highs. By far the strongest price trend until the end of December 2021 was tin at +100%, while the price increases for the other metals ranged from +30% (nickel) to +49% (copper). For a long time, prices were boosted by strong demand resulting from the fact that the global economy recovered faster and more strongly than expected from the coronavirus-related slump in 2020. Added to this were supply bottlenecks, which additionally drove the price rally, not least triggered by high energy prices in many countries. Problems with logistics also contributed to the supply shortage.

Global copper production was repeatedly restricted as part of measures to combat the pandemic. In producer countries such as Chile and Peru, strict coronavirus protocols were in effect, with the result that mines were often unable to operate at full capacity. So far, production in these two countries has not yet returned to its pre-coronavirus levels on a sustainable basis. It is also subject to political risks, as a slip to the left began in both countries after last year's elections. Mining companies may also face higher taxes and levies in the medium term.

Copper demand was mainly driven by the recovery of the global economy starting in 2021, as copper is essential in many industries and applications. Infrastructure measures resulting from the many economic stimulus packages worldwide also supported demand. Demand for copper was influenced by the megatrend toward greater sustainability and climate protection, which includes, for example, increased demand for electromobility (electric vehicles and charging infrastructure), but also the expansion of renewable energies from wind and solar power.

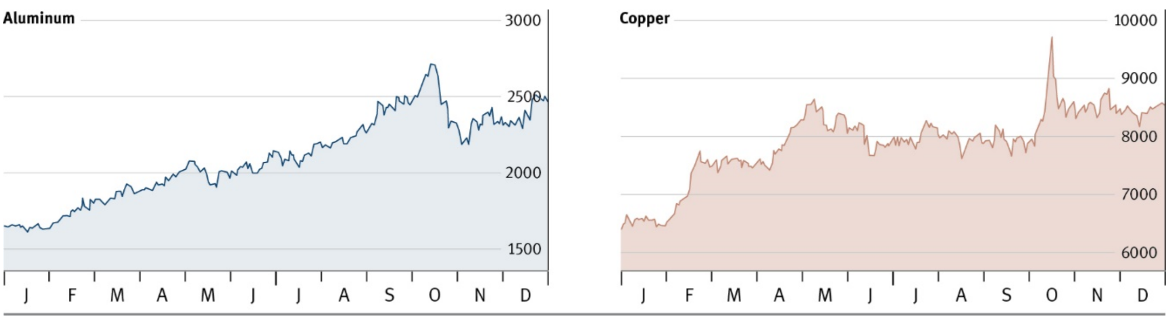
On the global aluminum market, the high supply surplus from 2020 has not only been completely eliminated, it is actually developing into a high supply deficit. This development was primarily driven by the production cuts ordered by the authorities in China as a result of the energy crisis in the country. According to various market observers, around three million tons of annual production capacity in China were affected by the measures. This corresponds to about 8% of last year's production. Given that China accounts for almost 60% of global aluminum production, this has had a significant impact on developments on the world market. However, the country has exported considerable amounts of aluminum until recently, which in turn triggered concerns about domestic demand in China. Physical premiums, which rose sharply in many places in 2021 and marked record highs, are clear signs of a supply shortage. LME aluminum stocks have also fallen significantly in recent months. According to industry circles, there are currently no signals that the production facilities shut down in China will be restarted. In October 2021, the National Development and Reform Commission approved higher electricity prices and eliminated preferential rates for energy-intensive industries. As a result, production costs of Chinese aluminum smelters, about 40% of which are determined by energy costs, have risen noticeably. In the wake of this, production is becoming less attractive and many smelters have fallen into the red. Outside China, too, smelters are being considered for closure due to the high energy costs. The reactivation of some closed smelters as a result of the current sharp rise in prices, such as in Australia, was unable to have a lasting impact on the overall situation on the market for aluminum.

In 2021, aluminum demand recovered well from its coronavirus-related slump. One trigger for this was the automotive industry, whose global production figures have started to move upwards again, albeit somewhat slowed by the shortage of semiconductors. The transportation sector accounts for around 23% of total aluminum demand. With its share of demand of 25% – particularly in house and apartment construction – the construction sector remains another driver of demand and is continuing to benefit from the low interest rate environment. In the long term, aluminum is expected to be in strong demand as part of the decarbonization of the economy, as this raw material is especially used in electromobility and the lightweight components required.

The price increases on the nickel market were caused by a sharp rise in demand from stainless steel production. This has now recovered significantly from its coronavirus-related decline and is on course for a record level. In addition, the impact of electromobility is becoming increasingly noticeable. The electrification of vehicle fleets is likely to result in significantly higher nickel demand, as nickel in the form of sulfate is used in the batteries. Although various automotive manufacturers have recently considered using lithium iron phosphate (LFP) technology in batteries, nickel-manganese-cobalt (NMC) technology in its various forms is expected to remain the dominant technology. Strong demand for nickel in 2021 was reflected in a significant reduction in nickel inventories registered on the stock exchanges. In LME warehouses, stocks have more than halved since mid-April 2021 and at year-end were at a two-year low.

In the period under review, global tin demand also recovered strongly from its decline the year before. The lion's share of tin demand, just under half, is accounted for by the soldering industry. Tin is in strong demand for use in electronic components, demand for which was in turn driven by the trend toward increased use for working from home. Supply was unable to adequately meet the high demand. In addition, the tin market also had to contend with production downtimes. In Malaysia, a tin smelter was at a standstill for an extended period due to measures related to the coronavirus. Myanmar, a major supplier to China, has long been struggling with the depletion of its reserves. China also temporarily closed border crossings with Myanmar due to outbreaks of the coronavirus, with the result that the movement of goods was severely restricted. Increased demand has led to a sharp decline in tin stocks registered on the stock exchanges.

Aluminum and copper prices in 2021 €/t



Source: REFINITIV

The massive rise in energy prices was probably one of the biggest surprises of 2021. Among energy sources, gas prices saw the biggest rise, especially on the European and Asian gas markets. The EEX price for natural gas supplies was quoted at an all-time high of €92 per MWh at the end of the year, 453% higher than at the beginning of the year.

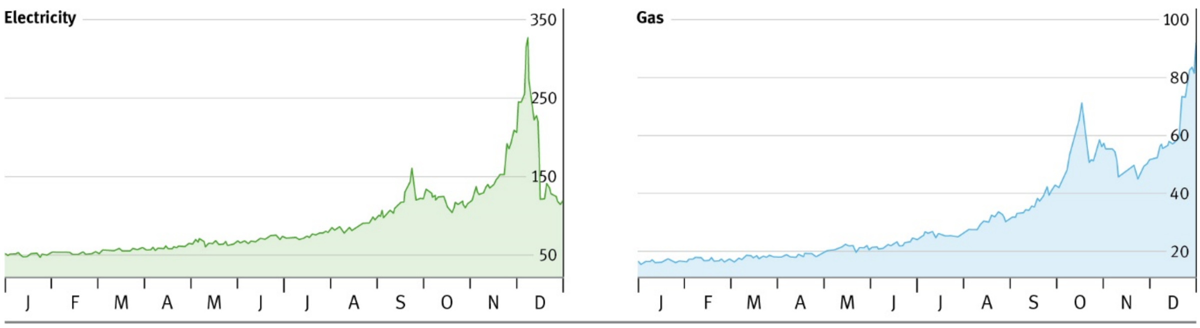
This massive price increase was caused by the generally strong recovery in demand and exacerbated by a hard or long winter in individual regions. Added to this were concerns about pipeline supplies and low gas storage levels in fall 2021. European gas prices rose particularly hugely in September 2021 when, in addition to Asia, South America was also competing for liquefied gas exports due to a water shortage and concerns about Russia's supply readiness increased. Then, at the beginning of October 2021, supply and demand trends reversed. The key factor in the turnaround was Russia's promise to supply more gas to Europe. Norway had already promised increased supplies in the new gas year 2022. At the same time, the high prices left an even bigger impact on European demand. In the electricity sector in particular, there was a clear shift from gas to coal, despite high CO_2 prices. Coal also became much more expensive in 2021 and climbed to a record price on the stock exchange at $190 per ton.

Prices in EU emissions trading largely developed in parallel with gas prices. They only decoupled during the extreme phase in the second half of September to early October 2021, when gas prices doubled within less than three weeks. Nevertheless, CO_2 was also trading at €80 per metric ton at the end of 2021, more than double the level at the beginning of the year and at a new record high. Fossil fuel prices eased somewhat at the end of 2021. Due to the close connection between the coal and gas markets on the demand side – gas and coal are often substitutes for each other, especially in the power sector– the correction on both markets started almost simultaneously. This was accompanied by simultaneous relief on the supply side in both markets, although on the European gas market skepticism remains high regarding the supply readiness of Russia, the largest supplier.

The prices of German electricity traded on the stock exchange tracked the ups and downs on the coal and gas markets; CO_2 prices, which also rose sharply, played a subordinate role in view of the dominant gas price effect. At its peak, the stock exchange contract for electricity in the next calendar year was quoted at a new record high of €315 per MWh. This was more than six times higher than at the beginning of 2021.

Within the context of our electricity and gas price hedging strategies in the Rheinmetall Group, we take action several years in advance based on our medium-term planning, meaning that our energy purchases did not suffer the full impact of the increase in prices in 2021.

Electricity and gas prices in 2021 €/MWh



Source: www.eex.com

Executive Board statement on the general economic situation

Rheinmetall Group – forecast vs. actual business performance in 2021

		2021 Actual	**Forecast 2021** Q3 | November	**Forecast 2021** Q2 | August	**Forecast 2021** Q1 | May	**Forecast 2021** Annual report February	**2020** pro forma** Actual
			figures compared with previous year	figures compared with previous year	figures compared with previous year	figures compared with previous year	
Sales							
Group	€ million	**5,658**	sales growth of around 6%	sales growth of around 7% and 9%	sales growth between 7% and 9%	sales growth between 7% and 9%	**5,406**
Division Vehicle Systems	€ million	**1,883**		-	-	continuing growth trend	**1,846**
Division Weapon and Amunition	€ million	**1,233**		-	-	significant growth compared with previous year	**1,196**
Division Electronic Solutions	€ million	**932**		-	-	slight growth	**935**
Division Sensors and Actuators	€ million	**1,315**		-	-	significant growth compared with previous year	**1,202**
Division Materials and Trade	€ million	**651**		-	-	strong growth	**546**
Operating margin*							
Group	Percent	**10.5**	around 10 %	9% - 10 %	9% - 10 %	8% - 9%	**8,4**
Division Vehicle Systems	Percent	**9.2**		-	-	operating margin on level of previous year	**8.1**
Division Weapon and Amunition	Percent	**17.6**		-	-	improved operating margin	**15.5**
Division Electronic Solutions	Percent	**10.6**		-	-	operating margin on level of previous year	**9.8**
Division Sensors and Actuators	Percent	**7.8**		-	-	substantial increase in operating margin	**3.0**
Division Materials and Trade	Percent	**7.8**		-	-	tangible improvement in operating margin	**5.2**
EBT							
Group	€ million	**582**		-	-	clearly above level of previous year	**367**
ROCE							
Group	Percent	**19.0**		-	-	around 14%	**11.8**
OFCF							
Group	Percent	**7.4**		-	-	2% - 4%	**3.7**

* Further information in the Rheinmetall Group business performance section

** Due to the classification of the Pistons non-core business as a discontinued operation from the second quarter of 2021, corresponding pro forma figures are stated at Group level. In the annual report 2020, the forecast figures for the Group as a whole are presented before taking account of IFRS 5. For sales they were € 5,875 million, for the operating margin 7.3%, for EBT € 57 million and for the ROCE 2.7%. Due to the organizational restructuring, the pro forma figures from the forecast in the annual report 2020 are shown for the divisions.

Following consolidated sales of around €5.9 billion in fiscal 2020, on publication of the 2020 annual report we forecast organic sales growth of between 7% and 9% for the Rheinmetall Group in the year under review. Sales performance in the civilian divisions is strongly influenced by production trends in the automotive markets in Europe, North America and Asia, in particular in the world's biggest automotive market of China. Based on the market expectations at the time, we assumed a significant year-on-year increase in sales in the Sensors and Actuators division and strong sales growth in the Materials and Trade division. This forecast assumed that international automotive production would pick up again, but would not quite reach the pre-coronavirus level of 2019. In the divisions focused primarily on safety technology, we expected the growth trend to continue in fiscal 2021 in the Vehicle Systems division, significant sales growth in the Weapon and Ammunition division, and slight sales growth in the Electronic Solutions division.

For the Group as a whole, we planned to generate an operating margin between 8% and 9%. For the divisions, we expect Sensors and Actuators to achieve an operating margin at the level of the previous year and a noticeable improved operating margin for Materials and Trade. For Vehicle Systems, we anticipate an operating margin on par with previous year. We expect an improved operating margin for Weapon and Ammunition, and an operating margin at the previous year's level for Electronic Solutions.

Q1 | 2021 — In view of the still relatively high level of uncertainty in the macroeconomic environment and given the situation on the procurement markets, and following a very good overall sales and earnings performance in the first quarter of 2021, we maintained the forecast for sales growth and the operating margin for the year as a whole that was published in mid-March 2021, but adjusted it to reflect the changed reporting structure.

For fiscal 2021 we expected operating sales growth of between 7% and 9% (pro forma sales 2020: €5,406 million) and an operating margin of between 9% and 10% (pro forma margin 2020: 8.4%).

Q2 | 2021 — In view of the continuing uncertainties regarding the macroeconomic environment and the situation on the procurement markets, we confirmed the forecast for the current fiscal year, adjusted to the new reporting structure, with operating sales growth of between 7% and 9% (pro forma 2020 sales: €5,406 million) and an operating margin of between 9% and 10% (pro forma 2020 margin: 8.4%).

Q3 | 2021 — Chiefly due to the still limited availability of raw materials and semiconductor components, which led to lower delivery call-offs by major customers, we forecast slightly lower sales growth of around 6% for the current fiscal year, measured against the pro forma sales of €5,406 million in 2020.

With regard to the earnings performance in fiscal 2021, we expect to reach the upper end of the original forecast for the operating margin of 9% to 10% as a result of strict cost management and further savings in the context of the Group restructuring. We anticipate an operating margin of around 10%.

Further information on developments in the year under review can be found in the following chapters: "Rheinmetall Group business performance" and "Notes on Rheinmetall AG".

Significant events in fiscal 2021

Strategic realignment of the Group

As already explained in the "Structure" section under "Basic information on the Rheinmetall Group," the previous organizational separation into the Automotive and Defence sectors was discontinued in February 2021 as a result of the strategic realignment. The new structure comprises the five divisions of Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade. It aims in particular to promote the transfer of technology between the individual parts of the Group and encourage the focus on future-driven technologies and business areas with large potential for a sustained increase in value.

Reporting for fiscal 2021 is based on the new Group structure. The figures for the comparative period of the previous year have been restated accordingly. Further information on the new reportable segments is provided in the "Notes on segment reporting" section of the notes to the consolidated financial statements.

Changes in the management structure and extension of Executive Board mandates

A new management structure was established in connection with the strategic realignment into an integrated technology group. Following the discontinuation of the organizational structure into the Automotive and Defence sectors, the Group's divisions will be managed directly by the Executive Board. For this reason, Jörg Grotendorst asked the Supervisory Board to relieve him of his duties as the Executive Board member responsible for the automotive holding company at Rheinmetall AG. Following Jörg Grotendorst's departure as of April 22, 2021, the Group's management structure was adjusted accordingly. In the future, the Board will comprise only three members instead of four.

In addition, in May 2021 the Supervisory Board extended CEO Armin Papperger's employment contract by five years to December 31, 2026. Armin Papperger has been in this role since January 2013. CFO Helmut P. Merch, who has also been a member of the Executive Board since January 2013, was also confirmed in office for a further year until the end of 2022. The Executive Board also includes Peter Sebastian Krause, who has been Chief Human Resources Office since January 1, 2017. In 2020, Peter Sebastian Krause was confirmed in office by the Supervisory Board until December 31, 2024.

Classification of the Pistons non-core business as a discontinued operation

As part of the realignment of the Rheinmetall Group, the Executive Board decided to sell the Pistons business unit, classified as a non-core business. The Pistons business unit primarily comprises the small- and large-bore pistons business of the former Hardparts division.

As of May 1, 2021, the Pistons non-core business was classified as a discontinued operation for the first time, taking account of the provisions of IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations). In accordance with IFRS 5, the key figures relevant to management for the Rheinmetall Group have been stated only for continuing operations from the second quarter of 2021 onward. The figures for the comparative period of the previous year have been restated according to the rules of IFRS 5.

The process of selling the small- and large-bore pistons business has not yet led to any result and is still continuing. It was not possible to find a financially sound buyer in fiscal 2021, not least because the global automotive market has been impacted by supply bottlenecks. However, Rheinmetall is still pursuing the goal of handing over the small- and large-bore pistons business to new owners that will be able to continue the business appropriately. As of the beginning of fiscal 2022, however, offers for individual investments or parts of companies are also being considered.

Virtual Annual General Meeting and dividend distribution

On May 11, 2021, Rheinmetall AG's Annual General Meeting was again held as a purely virtual event. 59.2% of the share capital was represented. All resolutions proposed by the Executive Board and the Supervisory Board were approved, including the dividend proposal of €2.00 per share for fiscal 2020. Based on the closing price on the day of the Annual General Meeting, the dividend yield was 2.3%. The dividend of €86.6 million was distributed on May 17, 2021.

Limited availability of raw materials and semiconductor components

The continued limited availability of raw materials and semiconductor components, which has led to lower delivery call-offs by major customers, resulted in lower sales growth of 4.7% in fiscal 2021 compared with the original forecast, measured against pro forma sales of €5,406 million in 2020. Sales growth of between 7% and 9% was originally forecast. However, we slightly exceeded the upper end of the original forecast for the operating margin of 9% to 10% as a result of strict cost management further savings in the context of the Group restructuring. The operating margin in fiscal 2021 was 10.5%.

Syndicated loan of €500 million replaced

In the third quarter of 2021, Rheinmetall AG replaced the existing syndicated loan of €500 million with a new syndicated loan, thereby significantly extending the maturity profile of the Group's financing. The new syndicated loan of €500 million has a term of five years plus two extension options of one year each ("5+1+1"). The syndicated loan can be used for the Group's general corporate financing and also serves as a back-up facility for Rheinmetall AG's €500 million commercial paper program.

Establishment of a strategic liquidity reserve

As a result of the good current and anticipated future liquidity situation Rheinmetall is increasingly facing the challenge of avoiding negative interest on its investments. For this reason, in the third quarter of 2021 the Executive Board of Rheinmetall AG decided to invest part of its cash and cash equivalents on the capital market as a strategic liquidity reserve. This money is invested in a special fund that was set up in 2016 and is already being used to finance obligations from the company pension plan and to map insolvency protection for partial retirement and working time models under a contractual trust arrangement (CTA). The invested funds are available for Rheinmetall to pay out at short notice at any time. As the fund assets are not included in the Group's cash and cash equivalents, these funds do not form part of net financial debt/net liquidity. As of December 31, 2021, €162 million was invested in the fund with a strategic asset allocation of 70% bonds and 30% shares.

Strategic agreements, important new orders, cooperations and acquisitions

In the first half of the year, Rheinmetall joined the United Nations Global Compact (UNGC), thus expressing its commitment to corporate responsibility and sustainability. As a signatory, Rheinmetall pledges to promote the UNGC's ten principles for sustainable and responsible business and development. The UN Global Compact is the world's largest sustainability initiative. It was launched by the United Nations in 2000 and currently comprises around 13,000 participating companies from more than 150 countries. All supporters commit to corporate action in line with ten universally recognized principles on human rights, labor standards, environmental protection and anti-corruption. In addition, signatories are required to report annually on their progress in implementing them. Based on the ten principles and the 17 United Nations Development Goals, the UN organization, in collaboration with UNGC participants, pursues an inclusive and sustainable global economy for the benefit of all people, communities and markets. Before joining, Rheinmetall had already aligned its sustainability strategy with the United Nations' Sustainable Development Goals (SDGs) and is aiming to become carbon-neutral by 2035. The increased use of renewable energy and reduction consumption of energy and water are the core measures here.

In May 2021, Rheinmetall won a groundbreaking contract to equip NATO land forces. The British Ministry of Defence has commissioned the technology group to modernize the British Army's main battle tank fleet. A total of 148 Challenger 2 main battle tanks are to be fitted with new 120 mm smooth-bore guns from Rheinmetall over the next few years. They are also to receive a completely new turret superstructure with a pioneering digital system architecture. This comprehensive modernization as part of the British armed forces' Challenger 2 Life Extension Project (LEP) will convert the tried-and-tested main battle tanks into the new Challenger 3 and make them usable for decades to come. Delivery of the modernized vehicles is scheduled to take place between 2021 and 2027.

In August 2021, an agreement was concluded with the German Federal Office of Infrastructure, Environmental Protection and Services of the Armed Forces (BAIUDBw). Rheinmetall is available to the German armed forces as a partner to build, operate and, if necessary, dismantle operational infrastructure in the future. Rheinmetall is one of three companies selected by the German armed forces as strategic partners for support during deployment. The contract begins upon signing and has a basic term of four years with a three-time option of a one-year extension. During this period, Rheinmetall undertakes to provide the services on an individual call-off basis.

In January, Rheinmetall announced that it would supply Daimler Truck Fuel Cell as a strategic supplier for fuel cell components. Rheinmetall will supply hydrogen recirculation blowers with a sales volume in the eight-figure range to Daimler Truck Fuel Cell GmbH & Co. KG, in which all of Daimler AG's activities in the field of fuel cell technology will be pooled. Rheinmetall's cooperation with Daimler Truck Fuel Cell could lead to a surge in development in the commercial long-haul transport and stationary power generation sectors in the future and to a sustainable reduction in greenhouse gas emissions.

Rheinmetall is continuing to drive the company's hydrogen strategy and is now also part of the national hydrogen and fuel cell initiative, which is financially supported by the German government and the state of North Rhine-Westphalia. Rheinmetall is an industrial partner in the research and development consortium of the Center for Fuel Cell Technology (ZBT) in Duisburg and has been selected as one of four Innovation and Technology Centers for Hydrogen Technology (ITZ) funded in Germany. The German Federal Ministry of Transport and Digital Infrastructure and the government of the state of North Rhine-Westphalia will pay €100 million to Duisburg and the participating consortium partners over the next few years to establish and expand the ITZ, which will focus mainly on mobility applications in connection with hydrogen technology. Hydrogen is considered a key element in the transition to a climate-neutral energy supply of the future and in the context of the climate-neutral transformation of industry.

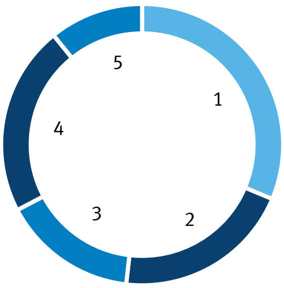
As part of its digitalization strategy, in November 2021 Rheinmetall reported its intention to acquire 25.1% of the shares in the digitalization service provider and IT supplier 4iG in Hungary. The cooperation aims to strengthen Rheinmetall's position as a leading systems supplier for security technologies in Central and Eastern Europe. In addition, 4iG will act as a strategic IT partner in order to tap new digital market potential.

In November 2021, Rheinmetall also announced the acquisition of the activities of drone manufacturer EMT in the form of an asset deal. This is to take place at the turn of 2021/2022 and will also support Rheinmetall's digitalization strategy. EMT's most important customer is the German armed forces, which is currently introducing the newly developed LUNA NG drone-based reconnaissance system. LUNA NG is a key element in interconnected communications and reconnaissance (C4ISTAR) and the core of tactical data transmission.

Rheinmetall Group business performance – results of operations

Consolidated sales of around €5.7 billion

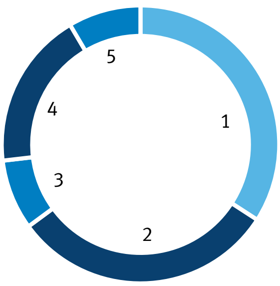
In fiscal 2021, the Rheinmetall Group generated consolidated sales of €5,658 million. This meant that sales were up by €253 million or 4.7% on the previous year's figure. Adjusted for currency effects of €14 million, sales growth was 4.4%.



Sales by divisions

€ million	2021	2020
Rheinmetall Group	**5,658**	**5,405**
1 Division Vehicle Systems	1,883	1,846
2 Division Weapon and Ammunition	1,233	1,199
3 Division Electronic Solutions	932	931
4 Division Sensors and Actuators	1,315	1,202
5 Division Materials and Trade	651	536
Others/ consolidation	(356)	(309)

Fiscal 2021 was characterized by significant sales increases in the Sensors and Actuators and Materials and Trade divisions. These divisions benefited from the – compared with the crisis year 2020 – increasing demand in the global automotive industry. In the other divisions, the sales level increased only slightly. At 65.9%, the international share of consolidated sales in the year under review was higher than the previous year's figure of 64.4%.



Sales by region

€ million	2021	2020
Rheinmetall Group	**5,658**	**5,405**
1 Germany	1,931	1,926
2 Other Europe	1,745	1,526
3 North-, Middle- and South America	462	437
4 Asia and the Near East	1,040	926
5 Other regions	480	590

Consolidated operating result sets new record despite the ongoing coronavirus crisis

In fiscal 2021, the Rheinmetall Group achieved a consolidated operating result (EBIT before special items) of €594 million, which exceeded the previous year's figure of €446 million by €148 million or 33%. This is the highest operating result in the company's recent history. The Group's operating margin was 10.5%, which was significantly higher than the previous year's figure of 8.3%.

The Weapon and Ammunition division again made the largest earnings contribution of €218 million (previous year: €184 million). In Others/Consolidation, the operating result changed only slightly from €-44 million in the previous year to €-49 million in the year under review.

Operating result

€ million	2021	2020
Rheinmetall Group	**594**	**446**
Division Vehicle Systems	174	149
Division Weapon and Ammunition	218	184
Division Electronic Solutions	99	92
Division Sensors and Actuators	103	36
Division Materials and Trade	51	29
Others/ consolidation	(49)	(44)

The operating result in fiscal 2021 was adjusted for positive special items totaling €14 million. These special items primarily related to subsequent income from the sale of land to a joint venture in 2018. Taking into account the special items, EBIT in the Rheinmetall Group was €608 million and thus €211 million above the previous year's figure of €398 million.

Special items of €-48 million were recognized in the previous year. €-26 million of these special items related to the recognition of provisions for restructuring measures. In addition, write-downs of €-33 million were recognized as special items. In contrast, a subsequent purchase price adjustment in connection with the sale of the unmanned aircraft systems product area in fiscal 2012 (€10 million) was accounted for as a positive special item in the Electronic Solutions division.

Special items in 2021

€ million	Operating result	Corporate transactions	Restruc-turing	Others	Special items	EBIT
Rheinmetall Group	**594**	**(2)**	**1**	**15**	**14**	**608**
Division Vehicle Systems	174	-	-	-	-	174
Division Weapon and Ammunition	218	-	-	-	-	218
Division Electronic Solutions	99	-	-	-	-	99
Division Sensors and Actuators	103	-	-	-	-	103
Division Materials and Trade	51	-	1	-	1	52
Others/ consolidation	(49)	(2)	-	15	13	(37)

Special items in 2020

€ million	Operating result	Corporate transactions	Restruc-turing	Others	Special items	EBIT
Rheinmetall Group	**446**	**-**	**(26)**	**(23)**	**(48)**	**398**
Division Vehicle Systems	149	-	-	-	-	149
Division Weapon and Ammunition	184	-	(7)	-	(7)	178
Division Electronic Solutions	92	-	-	10	10	102
Division Sensors and Actuators	36	-	(16)	(6)	(22)	14
Division Materials and Trade	29	-	(3)	(27)	(29)	-
Others/ consolidation	(44)	-	-	-	-	(44)

Significant income and expenses

Due to increased reversals of warranty provisions, other operating income amounted to €134 million after €114 million in the same period of the previous year.

In fiscal 2021, the cost of materials amounted to €2,745 million, which was slightly lower than the previous year's figure of €2,792 million (-1.7%) despite the increase in sales. The cost of materials ratio therefore declined from 51.7% to 48.5%.

Additional indicators regarding personnel expenses

		2021	2020
Personnel expenses	€ million	1,643	1,537
Personnel expenses / employees	€ thousand	83	79
Sales / employees	€ thousand	285	278
Personnel expenses ratio (relating to revenues)	%	29.0	28.4

The rise in personnel expenses resulted – in addition to the discontinuation of the short-time working allowance received in 2020 – primarily from the increase in personnel in continuing operations. The Vehicle Systems division in particular had more employees in 2021 than in the previous year. The average number of employees in the Rheinmetall Group breaks down by division as follows:

Annual average headcount

Capacity - Full Time Equivalents (FTE) (annual average)	2021	2020
Division Vehicle Systems	4,774	4,298
Division Weapon and Ammunition	4,801	4,878
Division Electronic Solutions	3,095	2,952
Division Sensors and Actuators	4,445	4,645
Division Materials and Trade	2,197	2,197
Rheinmetall AG / Other	530	488
Rheinmetall Group (continuing operations)	**19,843**	**19,458**
Discontinued operations (Pistons)	3,872	3,971
Rheinmetall Group (continuing and discontinued operations)	**23,715**	**23,428**

Amortization, depreciation and impairment decreased from €282 million to €251 million in fiscal 2021 as a result of modest investment and lower impairment. The decline in amortization and depreciation affected all divisions.

Other operating expenses increased only slightly from €642 million to €656 million in 2021. While some types of expense increased, other types of expense were also reduced year-on-year due to effective cost management. The rise in IT costs from €102 million to €119 million is in the context of the initiated IT transformation. After the restrictions of 2020, distribution and advertising costs increased by €19 million to around €93 million in the year under review. These increased expenses are offset by reduced audit, legal and consultancy fees of €30 million (previous year: €47 million) and lower warranty costs of €18 million (previous year: €39 million).

Net income

€ million	2021	2020
EBIT	**608**	**398**
Net interest	(27)	(31)
Earnings before Taxes (EBT)	**582**	**367**
Income taxes	(150)	(83)
Income from continuing operations	432	284
Income from discontinued operations	(100)	(283)
Earnings after taxes	**332**	**1**
of which:		
Minority interests	*41*	*27*
Rheinmetall AG shareholders	*291*	*(27)*
Earnings per share	**€ 6.72**	**€ (0.62)**
Earnings per share from continuing operations	€ 9.04	€ 5.93
Earnings per share from discontinued operations	€ (2.32)	€ (6.55)

Net interest income was €-27 million in fiscal 2021, compared with €-31 million in the previous year. The Rheinmetall Group's earnings before taxes (EBT) therefore amounted to €582 million, after €367 million in the previous year. The €215 million increase was mainly due to the improved operating result and to the positive special items of €14 million in 2021 after negative special items of €-48 million in the previous year. Earnings after taxes reached €332 million, significantly higher than the previous year's figure of €1 million. After deduction of earnings attributable to non-controlling interests of €41 million (previous year: €27 million), earnings attributable to shareholders of Rheinmetall AG were €291 million, compared with €-27 million in the previous year. Taking into account the weighted number of shares (2021: 43.28 million; 2020: 43.17 million), earnings per share came to €6.72, compared with €-0.62 in the previous year. Earnings per share from continuing operations increased from €5.93 to €9.04.

Rheinmetall Group business performance – net assets and financial position

Capital expenditure

In fiscal 2021, the investment decisions of the Rheinmetall Group retained the focus of securing the competitiveness of the operating units on international markets and further expanding technological competence through the expansion of plants and facilities and the optimization of processes. Targeted investments are made in areas offering specific growth opportunities, allowing the Group to maintain and strengthen its profitability on a sustained basis.

Given the hard-to-forecast economic consequences of the coronavirus crisis, restrictive benchmarks were again set for investment decisions across the whole Group in 2021. This meant that capital expenditure of continuing operations on property, plant and equipment and intangible assets amounted to €242 million in fiscal 2021, after €277 million the year before. This is equivalent to 4.3% of consolidated sales (previous year: 5.1%). A total of €16 million of the capital expenditure volume of continuing operations related to leases as per IFRS 16 (previous year: €77 million). Capital expenditure was offset by depreciation and amortization of €251 million (previous year: €282 million).

Capital expenditure[1)]

€ million	2021	2020
Division Vehicle Systems	112	124
Division Weapon and Ammunition	44	53
Division Electronic Solutions	28	23
Division Sensors and Actuators	45	54
Division Materials and Trade	15	16
Consolidation/Other	(2)	5
Rheinmetall Group (continuing operations)	**242**	**277**
Discontinued operations (Pistons)	24	24
Rheinmetall Group (continuing and discontinued operations)	**265**	**301**

1) Net capital expenditure less payments received from customers of €23 million (previous year: €17 million).

Statement of cash flows

The considerable improvement in earnings after taxes together with improved working capital contributed to the €237 million increase in cash flow from operating activities, from €453 million in the previous year to €690 million in fiscal 2021. Following a figure of €42 million in the previous year, €35 million was paid into an external fund (CTA) in the year under review to cover provisions for pensions and partial retirement obligations.

Operating free cash flow – defined as cash flow from operating activities less capital expenditure on intangible assets, property, plant and equipment and investment property – amounted to €419 million (previous year: €217 million). At a ratio of 7.4% of sales, it lay above the strategic target range of 3% to 5%. The capital expenditure included in operating free cash flow increased from €237 million to €271 million, although the net capital expenditure of continuing and discontinued operations decreased from €301 million to €265 million. This is due to the significant decline in non-cash investments in right-of-use assets from €79 million to €18 million. The payments received from customers, which are included in cash flow from operating activities, likewise increased from €17 million to €23 million.

Taking into account the proceeds from the sale of assets, payments from divestments and acquisitions, and payments for the acquisition of fund units, free cash flow amounted to €228 million, which was €37 million lower than the previous year's figure (previous year: €265 million).

Statement of cash flows

€ million	2021	2020
Earnings after taxes	332	1
Amortization, depreciation and impairments	344	557
Payment into external Fund (CTA)	(35)	(42)
Changes in Working Capital and others	50	(63)
Cash flows from operating activities	**690**	**453**
Investments in property, plant and equipment, intangible assets and investment property	(271)	(237)
Operating free cash flow	**419**	**217**
Cash inflows from the disposal of property, plant and equipment, intangible assets and investment property	3	20
Net cash outflow from financial investments in/divestments of consolidated subsidiaries and other financial assets	(34)	8
Cash outflows for investments in securities held for trade	(160)	-
Cash inflows from the disposal of current (liquid) financial assets	-	20
Free Cash Flow	**228**	**265**

Asset and capital structure

The Rheinmetall Group's total assets rose by €466 million or 6.4% to €7,734 million in fiscal 2021. As of December 31, 2021, non-current assets accounted for 36% of total assets, after 40% in the previous year. They went down by €177 million to €2,752 million mainly as a result of the reclassification of pistons activities in accordance with IFRS 5. In contrast, current assets increased by €643 million overall year-on-year to €4,982 million. A total of €78 million of this increase was attributable to inventories and €162 million to fund units held as a strategic liquidity reserve. In addition, assets of €334 million were recognized as assets held for sale in accordance with IFRS 5 (previous year: €0 million).

Asset and capital structure

€ million	Dec. 31, 2021	%	Dec. 31, 2020	%
Non-current assets	2,752	36	2,928	40
Current assets	4,982	64	4,339	60
Total assets	**7,734**	**100**	**7,267**	**100**
Equity	2,620	34	2,053	28
Non-current liabilities	1,772	23	2,326	32
Current liabilities	3,341	43	2,888	40
Total equity and liabilities	**7,734**	**100**	**7,267**	**100**

The equity of the Rheinmetall Group increased significantly by €567 million or 28% to €2,620 million in fiscal 2021. The equity ratio consequently reached 34%, following 28% at the start of the year. This significant increase resulted primarily from the positive earnings after taxes (€332 million) and the positive other comprehensive income (€325 million). At €231 million, the remeasurement of pensions (after taxes) made the largest contribution to the positive other comprehensive income. This was offset by the distribution of the dividend to the shareholders of Rheinmetall AG amounting to €87 million.

The €554 million decrease in non-current liabilities to €1,772 million is essentially due to the reduction in provisions for pensions and similar obligations (€-404 million). This was mainly driven by positive effects from the remeasurement of pension obligations (€291 million).

Current liabilities increased by a considerable €453 million to €3,341 million. This increase is the result of higher trade payables (€+109 million) and contract liabilities (€+143 million). Other provisions developed in the opposite direction (€-119 million). In addition, liabilities directly related to assets held for sale of €246 million (previous year: €0 million) were recognized in accordance with IFRS 5.

Capital structure

€ million	Dec. 31, 2021	%	Dec. 31, 2020	%
Equity	**2,620**	**39**	**2,053**	**33**
Current financial debts	215	3	150	2
Non-current financial debts	706	11	873	14
Total financial debts	**921**	**14**	**1,023**	**16**
Cash and cash equivalents/financial resources	1,039	16	1,027	16
Net financial debts (-)/Net liquidity (+)	**118**	**2**	**4**	**-**
Total assets adjusted for cash and cash equivalents	**6,695**	**100**	**6,240**	**100**

In relation to total assets adjusted for cash and cash equivalents, the equity ratio was 39%, after 33% in the previous year. Financial liabilities decreased by €102 million or 10% compared with the beginning of the year to €921 million. As of the end of the reporting period, cash and cash equivalents totaled €1,039 million, after €1,027 million at the end of the previous year. Due to the strong operating free cash flow, net liquidity for the 2021 reporting year amounted to €118 million, after €4 million at the beginning of the year. These figures do not include the strategic liquidity reserve of €162 million (previous year: €0 million).

ROCE

€ million	2021	2020
Net financial debts (-)/Net liquidity (+)	118	4
Asset from pension valuation	102	-
Pension provisions	773	1,177
Equity	2,620	2,053
Capital Employed	**3,173**	**3,226**
Average capital employed	3,199	3,359
EBIT	608	398
ROCE (in %)	**19.0**	**11.8**

ROCE increased significantly from 11.8% to 19.0%. The main reason for the increase is the significantly improved earnings situation combined with the increased net liquidity. In addition, the reclassification of assets and liabilities assigned to discontinued operations reduced the capital employed. If this reclassification is applied retroactively to the beginning of the year, the ROCE for 2021 amounts to 19.3% (pro forma) with average capital employed of €3,149 million (pro forma).

Financing

Principles and aims of financial management

The most important principle for Rheinmetall is to ensure that it remains solvent at all times. Another core task of the Group's centrally organized financial management is to generate a positive contribution to the Group's enterprise value and profitability. This primarily entails the efficient implementation of financial transactions and optimization of liquidity, capital structure and contractual conditions.

Within the scope of global cash management, excess liquidity at subsidiaries is pooled at the Group headquarters and made available to Group companies based on their liquidity requirements. To ensure that it meets its overriding aim – solvency at all times – in addition to the liquidity position Rheinmetall also has contractually agreed credit facilities with banks and access to the money and capital markets. Liquidity requirements are determined on the basis of rolling twelve-month liquidity outlooks and the three-year Group plan and are subjected to a stress test using actuarial model simulations. This is Rheinmetall's conservative approach to ensuring its solvency, even under worst-case scenarios such as the COVID-19 pandemic or bottlenecks in delivery.

Currency, interest rate, price, counterparty and country risks are determined, analyzed and managed centrally. This can help to mitigate risks with the aim of safeguarding the profitability of ongoing business operations and Rheinmetall's assets. Furthermore, implemented contractual structures and, where required, use of primary and derivative financial instruments serve to mitigate potentially negative effects on earnings or assets.

Another key principle for financial management is the company's financial independence from individual banks and financial service providers. To prevent possible cluster risks, Rheinmetall therefore has a broadly diversified portfolio of national, European and international financial partners for every service involved in processing operational business. Creditworthiness-linked counterparty limits are also used to limit financial default risks.

In addition to the conceptual approaches, financial management also follows strict organizational guidelines, such as strict adherence to the principle of dual control and the separation of implementation, processing and checking in the front, middle and back offices. On the one hand, this ensures compliance with legal requirements and, on the other, that financial transactions are used exclusively in connection with operating business and not for speculative purposes. Other important principles include ensuring that data is secure and that transactions are documented so that they can be traced.

Financing in the Rheinmetall Group

Rheinmetall covers its operating financial requirements using a mix of existing liquidity sources across the Group and external, short- and long-term negotiated financial instruments. Here, the financing elements used are broadly diversified in terms of sources, maturities and instruments, and the associated costs are also optimized. This achieves the goal of ensuring sufficient financing scope at all times, even in difficult times. In addition to the approach described for the operating business, long-term real estate loans are also used for investments or development loans, for example to finance research and development activities.

Rheinmetall's long-term financing is secured by three main instruments: various promissory note loans, development loans from the European Investment Bank (EIB) and a syndicated credit facility.

The volume of promissory note loans amounted to €375 million at the end of the year and covers maturities from 2022 to 2029. The EIB development loan paid in 2017 has a nominal volume of €250 million and matures in August 2023. Twelve national and international banks are participating in the syndicated credit facility of €500 million concluded in September 2021. In addition to being used for general corporate financing, it also serves as a back-up facility for the commercial paper program in the same volume.

Bilaterally committed cash and guarantee credit facilities from various banks and insurance companies with a total volume of €3.0 billion round off Rheinmetall's financing profile and allow further flexibility in financing. By the end of the year, €1.1 billion or 41% of the guarantee credit facilities and €44 million or 12% of the cash credit facilities had been drawn. Real estate and additional development loans financed through the EIB totaling €30 million are also available.

Since 2016, Rheinmetall has supplemented the financing of obligations of German Group companies arising from the company pension plan or from the provision of insolvency protection for partial retirement credits or working time models by successively building up trust assets. €35 million was added to the contractual trust arrangement in fiscal 2021. Trust assets amounted to €231 million at the end of the year.

Financing activities in 2021

In fiscal 2021, Rheinmetall AG replaced the existing syndicated loan of €500 million with a new loan in the third quarter, thereby significantly extending the maturity profile of the Group's financing. The new syndicated loan of €500 million has a term of five years plus two extension options of one year each ("5+1+1"). As before, it can be used for the Group's general corporate financing and continues to serve as a back-up facility for Rheinmetall AG's €500 million commercial paper program.

In the civilian divisions, the conclusion of a second EIB loan in December 2021 ensures long-term financing for R&D activities focused on sustainable and intelligent mobility solutions. At the same time, this optimizes the maturity profile of the Group's financing. This loan has a credit facility of €100 million, of which €80 million will be disbursed in December 2022. Depending on the purpose of the funding, up to a further €20 million can be drawn down until June 2023.

In the third quarter, Rheinmetall AG also began to invest part of its cash and cash equivalents on the capital market as a strategic liquidity reserve due to the current and expected good liquidity situation. This was mainly carried out against the backdrop of the ongoing negative interest rate situation for bank balances in the euro currency area. This money is invested in a Rheinmetall special fund that was set up in 2016 and is already being used to finance obligations from the company pension plan and to map insolvency protection for partial retirement and working time models under a contractual trust arrangement (CTA). As part of a defined strategic asset allocation, 70% of fund assets are invested in bonds and 30% in equities. The invested funds are available for Rheinmetall to pay out at short notice at any time. As the fund assets are not included in the Group's cash and cash equivalents, these funds do not form part of net financial debt/net liquidity. As of December 31, 2021, the fair value reached €162 million.

The asset-backed securities (ABS) program in place since 2004 was terminated in June 2021. As part of financial risk management, sales of receivables have since been carried out on a situational basis as part of supplier finance solutions, forfeiting or comparable instruments. At the same time, sale without recourse passes any potential customer default risk to the acquirer. The volume of receivables sold amounted to €72 million (previous year: €73 million) as of December 31, 2021.

The syndicated credit facility and the commercial paper program of €500 million each had not been utilized by the end of 2021.

Financing instruments € million

	Term	Nominal	Financing source
Promissory note loans	2022 - 2029	375	International financial institutions
Development loans Research and development I	2023	250	European Investment Bank (EIB)
Development loans Research and development II	2028	80 - 100	European Investment Bank (EIB) (payout €80m in December 2022)
Commercial paper (CP)	unlimited	500	Money market investors
Syndicated loan	2026	500	12 banks
Real-estate financing and development loans	2022 - 2025	30	banks
Bilateral line of credit (cash advances and bank guarantees)	2022	2,994	Banks and insurances

Rheinmetall's rating

The external assessment of Rheinmetall's creditworthiness has been carried out by the rating agency Moody's since 2000. In June 2021, Moody's confirmed the rating at "Baa3 stable outlook." This means that Rheinmetall's rating has not changed since April 2018 and continues remains in the investment grade range. Key factors influencing the rating include Rheinmetall's business activities in two end markets that are subject to different economic cycles, the strategy of focusing more strongly on the more stable business in the area of security technology, and Rheinmetall's conservative financial policy including a very good liquidity situation.

BUSINESS PERFORMANCE IN THE DIVISIONS

VEHICLE SYSTEMS

WEAPON AND AMMUNITION

ELECTRONIC SOLUTIONS

SENSORS AND ACTUATORS

MATERIALS AND TRADE

Business performance in the divisions

Vehicle Systems division

Key figures Vehicle Systems

		2021	2020
Sales	€ million	1,883	1,846
Order intake	€ million	2,851	4,389
Of which with external third parties	*€ million*	*2,840*	*4,378*
Of which within Group	*€ million*	*11*	*10*
Order backlog (December 31)	€ million	10,445	9,363
Of which with external third parties	*€ million*	*10,438*	*9,361*
Of which within Group	*€ million*	*7*	*1*
Operating results	€ million	174	149
Operating result margin	in %	9.2	8.1
Capital expenditure	€ million	112	124
Operating free cash flow	€ million	321	77
Employees (December 31)	FTE	4,975	4,515

Sales – In fiscal 2021, the Vehicle Systems division generated sales of €1,883 million, exceeding the previous year's figure of €1,846 million by 2.0%. Adjusted for currency effects, growth amounted to 0.9%. In Australia, the Asia Pacific business unit achieved significant sales contributions with the major order for 211 Boxer all-wheel-drive vehicles (Land 400 Phase 2 program). In the Tactical Vehicles business unit, the start of production of the high-volume British Boxer project, which includes the delivery of 500 Mechanized Infantry Vehicles (MIV), and the major orders for the Hungarian armed forces, which are at the beginning of their project term, counteracted the expiry of two major projects in Germany and Algeria. In fiscal 2021, the Logistic Vehicles business unit generated significant sales from the supply of military trucks to the German armed forces and logistic vehicles delivered to the Australian customer based on a contract in place since 2013.

Order intake – The order intake for the Vehicle Systems division in the year under review was €2,851 million, after €4,389 million in the previous year. With the order to modernize the British Challenger 2 main battle tank fleet, the division won another major contract of around €770 million to equip the European NATO land forces. In addition to the follow-up order for the supply of kits for the Fuchs 2 wheeled tank from an international customer, major new contracts were signed with the German armed forces. With a net contract value of around €295 million, these orders relate to the supply of armored engineering machines and to the further modernization of the Puma infantry fighting vehicle with a net value of around €421 million.

Order backlog – The Vehicle Systems division recorded an order backlog of €10,445 million in fiscal 2021, compared with €9,363 million in the previous year. Of this order backlog, €1,941 million is attributable to Germany, €2,296 million to the United Kingdom, €3,619 million to Central Europe, and €2,121 million to Australia. The increase also includes a positive currency translation effect of €105 million.

Operating result – In 2021, the operating result of the Vehicle Systems division improved by around €24 million to a total of €174 million. At 9.2%, the operating margin exceeded the previous year's figure of 8.1% thanks to a better product mix and strict cost management.

Capital expenditure – The Vehicle Systems division invested a total of €112 million in 2021, compared with €124 million in the previous year. The decrease was mainly due to the capitalization under IFRS 16 of the rental agreement for the Military Vehicle Center of Excellence opened in Queensland, Australia, in 2020, which significantly increased the capital expenditure volume in the previous year. In the year under review, capital expenditure focused on capacity expansion at plants and facilities at German and international sites to process the existing high order backlog. In addition, there was extensive capital expenditure in development work to expand the existing and future product portfolio.

Operating free cash flow – Operating free cash flow in the Vehicle Systems division increased by €244 million year-on-year to €321 million. The improvement as against the previous year is essentially attributable to advance payments from the major projects in Hungary and Great Britain.

Employees – The Vehicle Systems division employed 4.975 people as of the end of the fiscal year (previous year: 4.515). This increase in employees reflects the financial success of the division and is characterized in particular by the recruitment of staff to process major orders in Germany, Great Britain, Australia and Hungary.

Weapon and Ammunition division

Key figures Weapon and Ammunition

		2021	2020
Sales	€ million	1,233	1,199
Order intake	€ million	1,403	1,760
Of which with external third parties	*€ million*	*1,114*	*1,367*
Of which within Group	*€ million*	*289*	*393*
Order backlog (December 31)	€ million	2,862	2,736
Of which with external third parties	*€ million*	*2,132*	*2,189*
Of which within Group	*€ million*	*731*	*548*
Operating results	€ million	218	184
Operating result margin	in %	17.6	15.4
Capital expenditure	€ million	44	53
Operating free cash flow	€ million	132	(8)
Employees (December 31)	FTE	4,852	4,792

Sales – The Weapon and Ammunition division generated sales of €1,233 million in the year under review. Measured against the previous year, this represents an increase in sales of €34 million or 2.8%. Adjusted for currency effects, sales growth was 2.3%. The Propulsion Systems business unit made a contribution to this sales growth, increasing its sales by €15 million year-on-year, mainly due to growth in the civilian chemicals business. Another positive effect resulted from the development of new business areas within the Integrated Systems and Services business unit. These include initial sales worth €16 million by Rheinmetall Project Solutions, which – based on a framework agreement – provides the German armed forces with logistical deployment services.

Order intake – At €1,403 million, order intake in the Weapon and Ammunition division was €357 million lower than the previous year's figure of €1,760 million, which was particularly high due to a large-volume individual order to supply radar systems for the Hungarian armed forces. Significant individual orders in fiscal 2021 included the order for the upgrade of the British Army's Challenger 2 weapon systems in the amount of €134 million and the renewed high order intake from the German armed forces with a total volume of €283 million.

Order backlog – As a result of consistently high order intake from the United Kingdom and the Netherlands and another positive book-to-bill ratio of 1.1, the order backlog rose by €126 million to €2,862 million by the end of 2021. The increase also includes a positive currency translation effect of €39 million.

Operating result – The operating result in the Weapon and Ammunition division rose by €33 million to around €218 million in fiscal 2021 (previous year: €184 million), mainly due to the higher sales volume. The operating margin improved from 15.4% in the previous year to 17.6% in the year under review due to intensified cost optimization measures and a more profitable product mix in the traditional ammunition business.

Capital expenditure – A total of €44 million was invested in the Weapon and Ammunition division in fiscal 2021 (previous year: €53 million). In addition to general modernization, the investments also related to expansion investments in Maryborough, Australia, where construction of the production building was completed in 2021 following the acquisition of the land in 2019. To further expand the product range and local value creation in the US, investments were made in a production line for detonators. The division also invested in the in-house development of the electronic air start unit for aircraft in Canada and – in conjunction with a site merger in the Protection Systems business unit – increased capital expenditure at the Bonn site.

Operating free cash flow – Operating free cash flow in the Weapon and Ammunition division increased by €140 million year-on-year to €132 million. The change is the result of improved earnings and a positive development in working capital.

Employees – The Weapon and Ammunition division employed a total of 4.852 people as of the end of the fiscal year. This equates to an increase in the workforce of 60 employees compared with the previous year.

Electronic Solutions division

Key figures Electronic Solutions

		2021	2020
Sales	€ million	932	931
Order intake	€ million	1,021	1,065
Of which with external third parties	*€ million*	*705*	*635*
Of which within Group	*€ million*	*316*	*430*
Order backlog (December 31)	€ million	2,420	2,298
Of which with external third parties	*€ million*	*1,380*	*1,391*
Of which within Group	*€ million*	*1,040*	*906*
Operating results	€ million	99	92
Operating result margin	in %	10.6	9.8
Capital expenditure	€ million	28	23
Operating free cash flow	€ million	(52)	105
Employees (December 31)	FTE	3,181	2,984

Sales – The Electronic Solutions division generated sales of €932 million in fiscal 2021, on a par with the previous year (€931 million). Sales in the period under review were largely influenced by the delivery of the Skynex air defence system to an international customer and by sales as part of the German VJTF (Very High Readiness Joint Task Force) program. Other relevant sales came from the Electronic Solutions division's share in the major Land 400 Phase 2 project for Australia and the expansion and modernization of Skyguard air defence systems for international customers.

Order intake – The Electronic Solutions division recorded order intake of €1,021 million in fiscal 2021, compared with €1,065 million in the previous year. A significant order intake related to the follow-up delivery of components for existing Skyguard air defence systems. In addition, the Electronic Solutions division's share of the upgrade program for the German armed forces' Puma infantry fighting vehicle was recognized in fiscal 2021.

Order backlog – The order backlog of the Electronic Solutions division amounted to €2,420 million at the end of fiscal 2021, compared with €2,298 million in the previous year. The order backlog thus increased by €122 million or around 5.3% year-on-year. Significant order backlogs are attributable to the Electronic Solutions division's share of the major Hungarian order for the new Lynx infantry fighting vehicle and the shares in the upgrade program for the German armed forces' Puma infantry fighting vehicle posted in fiscal 2021. Other relevant order backlogs result from the major Australian Land 400 Phase 2 project and the order for the Skynex air defence system from an international customer.

Operating result – At €99 million, the operating result achieved by the Electronic Solutions division in fiscal 2021 was up 7.6.% on the previous year's figure of €92 million. The operating margin increased from 9.8% in the previous year to 10.6% in the year under review thanks to the successful completion of major orders and as a result of additional measures to further reduce costs.

Capital expenditure – The total capital expenditure of the Electronic Solutions division amounted to €28 million in the period under review, after €23 million in the previous year. At the Bremen location, additional office space required for handling the major projects was created or external office space was rented. The modernization of IT equipment was continued. Significant investments were also made in the modernization and expansion of machinery in parts and electronics production and in the modernization of laboratory equipment at the Zurich site. Furthermore, investments were made in a sensor unit for an air defence gun for development and testing **purposes.** As in previous years, the focus of investment at the Rome site was on the further development of airspace radar technology to expand the product range.

Operating free cash flow – Operating free cash flow in the Electronic Solutions division decreased by around €158 million year-on-year to €-52 million (previous year: €105 million). This change was chiefly due to the necessary increase of working capital and payments for the contractual trust agreement amounting to €25 million. The previous year also included high milestone payments generated as a result of final project billing for the German armed forces' Infantryman of the Future (IDZ) soldier system.

Employees – The Electronic Solutions division employed 3.181 people as of the end of the fiscal year (previous year: 2.984). This corresponds to an increase of around 196 persons compared with the previous year, which is mainly due to the necessary increase in personnel for the future handling of the major projects acquired.

Sensors and Actuators division

Key figures Sensors and Actuators

		2021	2020
Sales	€ million	1,315	1,202
Booked Business	€ million	2,472	1,665
Operating results	€ million	103	36
Operating result margin	in %	7.8	3.0
Capital expenditure	€ million	45	54
Operating free cash flow	€ million	29	5
Employees (December 31)	FTE	4,364	4,563

Sales – Following the pandemic-related slump in 2020, sales in the Sensors and Actuators division increased by 9.4% or €113 million to €1,315 million in the year under review. Significant increases in sales were generated in the first half of 2021 in particular. The second half of 2021 was dominated by the market shortage for electronic components and correspondingly reduced customer call-offs. Adjusted for currency effects, the increase in sales was 10% and thus above the global growth in light vehicle production, which is estimated at 2.5% (IHS Markit). Nearly all product areas of the Sensors and Actuators division increased their sales compared to the previous year. Particularly strong growth rates were achieved in the Commercial Diesel Systems business unit, where sales of exhaust gas recirculation valves, cooling modules and exhaust flaps in truck applications increased significantly at all relevant production sites. In the Actuators business, business with Chinese and Indian customers in particular was expanded. The increase in sales of electric pumps and variable mechanical water and oil pumps underscores the trend toward the use of particularly efficient technologies. In addition, production of the Electrical Vapor Pump (EVAP) was commenced for another global customer.

In regional terms, the Asian markets showed particularly strong growth in fiscal 2021. The division's growth there exceeded 25%, driven by innovative products for reducing pollutants and increasing engine efficiency. However, the division also realized rising sales in Europe, where the market for light vehicles declined overall last year, and in the USMCA region.

Booked business – Booked business in the Sensors and Actuators division in fiscal 2021 was 48% higher than a year earlier at €2,472 million (previous year: €1,665 million). Around 60% of this was new business and around 40% extensions or volume increases for existing customer orders. The volume of orders for alternative drive systems (BEV, PHEV, fuel cells) almost doubled as against the previous year and attained a share in total booked business of roughly 30%. As part of this, the first series order for the supply of a hydrogen recirculation blower for use in fuel cells was also acquired in 2021.

Operating result – The Sensors and Actuators division achieved an operating result of €103 million in fiscal 2021. This corresponds to a significant increase of €67 million compared with the previous year. The division's operating margin increased by 4.9 percentage points to 7.8% in 2021.

The increase in sales was the main contributor to the higher result. In addition, further positive effects were generated from the cost-cutting measures introduced in the previous year and lower operating depreciation as a result of the sharp decline in capital expenditure in 2020 and 2021. Increased personnel costs due to the significantly reduced proportion and the expiry of short-time working had an offsetting effect.

Capital expenditure – The companies of the Sensors and Actuators division spent a total of €45 million in 2021 (previous year: €54 million). The reasons for the reduction include project postponements initiated by various customers due to the coronavirus pandemic and the continuing low volumes in engine production worldwide compared with previous years. Capital expenditure in capacity expansions were therefore generally only necessary to a lesser extent. In addition, capital expenditure not directly related to projects was again made only in a very limited sense in the past fiscal year.

Following the successful launch of the electrical vapor pump (EVAP) in 2019 at the American site in Fountain Inn and at the Chinese joint venture Pierburg Huayu Pump Technology in Shanghai, investments were also made in a production line for this electrical vapor pump at Pierburg in China in 2021 in order to supply further customers. EVAP production capacities were also expanded at Pierburg US. Another focus of investment at Pierburg s.r.o., Czech Republic, was on increasing production capacity for the new fuel tank isolation valve. In preparation for projects and products for alternative drive technologies, the Sensors and Actuator division also increased development investments in fiscal 2021.

Operating free cash flow – Operating free cash flow in the Sensors and Actuators division was up year-on-year at €29 million (previous year: €5 million). The change was chiefly attributable to an improved earnings and lower capital expenditure. This was offset by higher working capital resulting from increased business activity. Operating free cash flow also includes a contractual trust agreement effect of around €10 million.

Employees – At the end of 2021, the division employed a total of 4,364 people, around 199 less than at the end of the previous year. In almost all companies, the workforce was further reduced in 2021. The European locations were particularly affected by this. The measures taken in 2020 in connection with the sharp drop in sales triggered by the coronavirus pandemic continue to have an impact here. The response to the strong sales months in the first half of 2021 was to use temporary staff. In Brazil, the weak market development led to a further reduction in personnel.

Materials and Trade division

Key figures Materials and Trade

		2021	2020
Sales	€ million	651	536
Booked Business	€ million	720	573
Operating results	€ million	51	29
Operating result margin	in %	7.8	5.4
Capital expenditure	€ million	15	16
Operating free cash flow	€ million	24	39
Employees (December 31)	FTE	2,223	2,147

Sales – The Materials and Trade division increased sales in 2021 by 22% or €115 million to €651 million compared with the previous year, which was severely impacted by the coronavirus pandemic. Adjusted for currency effects, the increase in sales amounted to 23%. The Bearings business unit and the Trade business unit both showed a very good year-on-year sales performance. The Bearings business unit increased sales by 22% year-on-year. In the plain bearings business this was due to higher overall volume sales, which were achieved despite supply volume reductions at some automotive manufacturers due to the shortage of semiconductors. In Europe in particular, the business unit achieved higher sales than a year earlier. In the Continuous Castings unit, the increase in sales resulted from a significant rise in tonnage and material price increases which could be passed on to customers. The Trade business unit achieved 20% higher sales than a year earlier. The key factor here was the Independent Aftermarket unit, which significantly increased sales, especially in the Western and Eastern Europe and Latin America sales regions. However, sales in the Original Equipment Supplier/Original Equipment business also exceeded the previous year's level.

Booked business – Booked business in the Materials and Trade division came to €720 million in fiscal 2021, a significant year-on-year increase of 26%. However, the previous year's figure was impacted by the extremely cautious approach of automotive customers to orders in the pandemic situation. Of the booked business in fiscal 2021, 93% was attributable to the new business category and 7% to term extensions and volume changes.

Operating result – The Materials and Trade division achieved an operating result of €51 million in fiscal 2021, up €22 million on the previous year. As a result, the division's operating margin increased by 2.4 percentage points year-on-year to 7.8%.

While the Bearings and Trade business units each achieved a significant improvement in earnings, the Castings business unit fell short of the figure from a year earlier. In Bearings and Trade, the improvements in earnings were mainly thanks to the additional contribution margins from the additional sales generated. However, in the second half of 2021 both material price increases and rising transportation and logistics costs slowed the overall positive earnings trend. Earnings from the Castings business unit, which are largely determined by the at-equity contributions of the joint ventures HASCO KSPG Nonferrous Components (Shanghai) Co. Ltd and KS HUAYU AluTech GmbH, were positive in fiscal 2021 but significantly lower than a year earlier. In addition to material price increases in the second half of the year, this was also attributable to supply volume reductions at individual automotive customers due to the lack of availability of semiconductors.

Capital expenditure – In 2021, capital expenditure in the Materials and Trade division decreased again slightly year on year to €15 million (previous year: €16 million). 2020 was also characterized by a high priority to secure liquidity as a result of the pandemic and an equivalent strong reluctance to invest. In the Bearings business unit, the regional focus of capital expenditure was on the German sites and on machining equipment for bushes used in wind turbines, as well as in the procurement of automatic stamping and bending machines. Capital expenditure in the Trade business unit focused in particular on the expansion of micromobility activities and related to capitalized development costs as well as equipment and tooling investments.

Operating free cash flow – Operating free cash flow in the Materials and Trade division fell year-on-year to €24 million (previous year: €39 million). The decrease is mainly due to the sales-related increase in working capital and an increase in capital expenditures.

Employees – At the end of 2021, the division employed a total of 2.223 people, 76 more than at the end of the previous year. The percentage increase in employees of 3.5% was significantly lower than the sales growth of 22%. Employee numbers particularly rose at the sites in Germany, Mexico and Brazil.

Explanatory notes on Rheinmetall AG

Rheinmetall AG as the Group holding company

The single-entity financial statements of Rheinmetall AG for fiscal 2021 have been prepared in accordance with the accounting regulations of the German Commercial Code and the additional provisions of the German Stock Corporation Act.

Rheinmetall AG's role as a holding company for the Rheinmetall Group shapes its financial statements. In this role, Rheinmetall AG performs control and governance functions and provides services to the Group companies. Key tasks relating to the financial statements include central financing as well as support and service functions in information technology, finances, HR, corporate communications, law and taxation.

Results of operations

Rheinmetall AG's results of operations reflect its function as a holding company. The results of the subsidiaries and the expenses and income from central Group financing determine the financial result. In addition, earnings before taxes are influenced by income from the provision of support and service functions and profit and loss from central currency management. Tax costs are defined by Rheinmetall AG's role as the fiscal entity for income tax purposes in Germany.

Income statement of Rheinmetall AG in accordance with German Commercial Code (HGB)

€ million	2021	2020
Investment income	248	142
Net interest	20	21
Net financial income	**269**	**162**
Sales	86	80
Other operating income	164	191
Personnel expenses	56	47
Amortization and depreciation	5	34
Other operating expenses	226	227
EBT	**232**	**126**
Taxes on income and revenue	(52)	(36)
Net profit for the year	**180**	**90**
Appropiations to retained earnings	35	-
Net earnings	**145**	**90**

Net investment income of €248 million was generated in fiscal 2021 (previous year: €142 million). The rise in net investment income results primarily from the business performance in the automotive shareholdings held indirectly by Rheinmetall AG.

Net interest income deteriorated slightly from €21 million to €20 million. Rheinmetall AG's financial result improved significantly from €162 million to €269 million as a result of the influences outlined.

Higher allocations saw sales increase from €80 million in fiscal 2020 to €86 million in the year under review. Due to business as a holding company, personnel costs amounted to €56 million (previous year: €47 million). A major factor was the increase in personnel in connection with the initiated IT transformation. Other operating income decreased by €-27 million to €164 million. In 2020, other operating income included a write-up of financial assets of €14 million. Other operating expenses hardly changed at €226 million (previous year: €227 million). The amortization, depreciation and write-downs of 2020 include write-downs on receivables from affiliated companies of €29 million. Amortization of intangible assets and depreciation of property, plant and equipment are unchanged at €5 million.

Earnings before taxes amounted to €232 million (previous year: €126 million). Following deduction of €52 million in taxes (previous year: €36 million), net income of €180 million remained for fiscal 2021 (previous year: €90 million). Net income therefore exceeded the expected range of €100 million to €130 million. €35 million (previous year: €0 million) of the net income was transferred to retained earnings, resulting in net earnings of €145 million (previous year: €90 million).

Proposed dividend

At the Annual General Meeting on May 10, 2022, the Executive Board and the Supervisory Board of Rheinmetall AG will propose that the net earnings be used to pay a dividend of €3.30 per share (previous year: €2.00 per share), whereby the treasury shares held by Rheinmetall AG (December 31, 2021: 255,201; previous year: 361,392) are not entitled to a dividend.

Net assets and financial position

The asset situation of Rheinmetall AG is largely defined by its holding function, i.e. by the management of investments and the financing of Group activities. This is reflected above all in the amount of the investments held and in the receivables due from and liabilities owed to Group companies.

Balance sheet of Rheinmetall AG in accordance with the German Commercial Code (HGB) – Assets

€ million	2021	2020
Fixed assets		
Intangible assets	9	8
Property, plant and equipment	34	35
Financial assets	1,499	1,496
	1,542	**1,538**
Current assets		
Inventories	-	-
Receivables and other current assets	1,245	1,139
Bonds	160	157
Cash	853	618
	2,258	**1,914**
Deferred income	**7**	**11**
Active difference from asset offsetting	**-**	**-**
Total assets	**3,807**	**3,463**

Financial assets include shares in affiliated companies in the amount of €1,492 million (previous year: €1,488 million). The share of total assets decreased from 43% to 39% due to the increased total assets.

Receivables and other assets mainly comprise receivables from affiliated companies of €1,242 million (previous year: €1,121 million). These originate almost exclusively from intra-Group financing and central liquidity management. The share of these receivables in total assets amounts to 33% (previous year: 32%).

Securities increased slightly from €157 million to €160 million. While the investment for operating liquidity management was made in short-term commercial papers at the end of 2020, at the end of 2021 investment was made in shares of a special fund as a strategic liquidity reserve. Cash and cash equivalents increased from €618 million in the previous year to €853 million.

Balance sheet of Rheinmetall AG in accordance with the German Commercial Code (HGB) – Equity and liabilities

€ million	2021	2020
Share capital	112	112
Treasury stock (notional value relating to the share capital)	(1)	(1)
	111	**111**
Capital reserves	563	558
Retained earnings	290	248
Net earnings	145	90
Equity	**1,109**	**1,007**
Provisions	**113**	**97**
Liabilities due to banks	625	654
Other liabilities	1,959	1,703
Liabilities	**2,583**	**2,356**
Deferred income	**2**	**3**
Total equity and liabilities	**3,807**	**3,463**

Equity amounted to €1,109 million as of December 31, 2021, after €1,007 million at the end of the previous year. Part of this change involved the fact that the dividend payment for 2020 of €87 million was offset by the net income generated for the year of €180 million. In addition, equity increased by €5 million as a result of the reduction in treasury shares (106,191). The equity ratio is still the same at 29%.

Provisions include pension provisions of €24 million (previous year: €27 million). Measured pension obligations of €118 million (previous year: €114 million) are covered by plan assets of €94 million (previous year: €87 million).

Other liabilities include liabilities to affiliated companies of €1,932 million (previous year: €1,658 million). These originate almost exclusively from intra-Group financing and central liquidity management. The increase is the result of the improved liquidity situation of the Group companies. The share of these liabilities in total assets rose from 48% to 51%.

Risks and opportunities
Risk management system

Entrepreneurial behavior – leverage opportunities, reduce risks

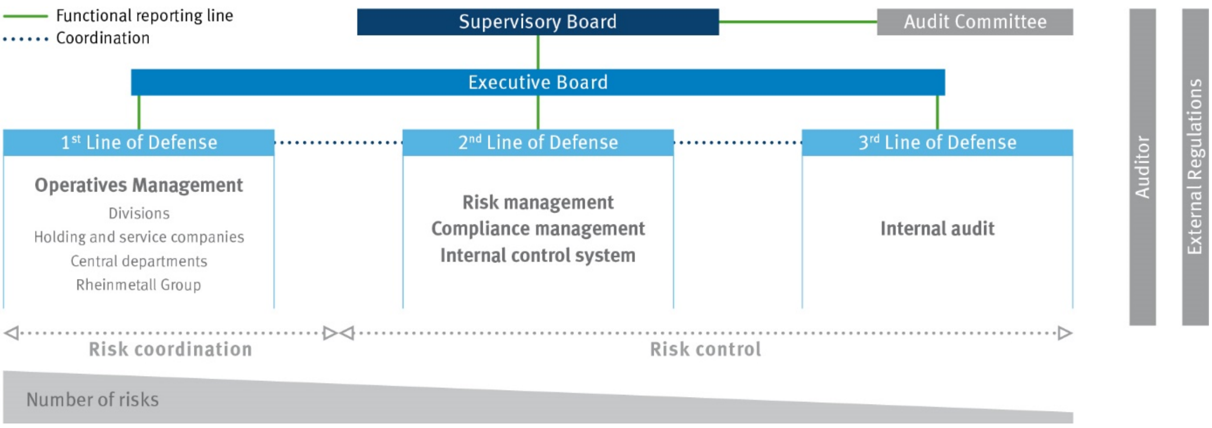
In light of rapid market changes, increasing uncertainty, the greater complexity of framework conditions that vary significantly from one country to the next and major technological progress, business decisions are increasingly dependent on the ability to reliably evaluate potential risks. As an internationally active technology group with a heterogeneous product portfolio, Rheinmetall is exposed to risks that vary depending on the business unit, industry and region. The corporate policy is aimed at generating fair returns over the long term, looking at any opportunities that come our way, leveraging and expanding success potential, and, at the same time, avoiding, minimizing or compensating for the associated risks. The aim is to maintain our corporate flexibility and financial security, systematically enhance the company's value and, in turn, safeguard the continued, long-term existence of the Rheinmetall Group.

The Rheinmetall Group's risk management system

As part of its principles of corporate governance, Rheinmetall AG is committed to a responsible, fair, reliable and transparent corporate policy that is geared toward expanding and leveraging entrepreneurial potential, achieving medium-term financial targets and increasing the company value systematically and over the long term.

The standardized risk management system that was introduced throughout the Group is based on risk policy principles stipulated by the Executive Board of Rheinmetall AG, which are geared toward financial resources and strategic and operational planning. At the Rheinmetall Group, identified opportunities are considered in terms of their impact on the planned earnings indicators within the framework of existing planning, controlling and strategy processes and assessed and documented in processes that run separately from the risk management system in the narrower sense. The Rheinmetall Group's risk management system is designed to systematically identify developments early on that could jeopardize the continued existence of the Group and control risks that could endanger the company's success. It comprises the ad hoc, operational and strategic risk management pillars and pursues the "three lines of defence" approach.

Three lines of defence model



The first line of defence lies with the management of the operating activities, which is responsible for recording, assessing and managing the risks that arise there. The second line of defence comprises the risk management, the compliance management and the internal control system. Internal Audit is the third line of defence and acts as the independent control organ of the Executive Board of Rheinmetall AG.

The guideline for the Rheinmetall Group's risk management system covers the regulatory framework conditions including the 16 risk fields since the introduction of the new risk field Environmental Social Governance in 2021 (previous year: 15 risk fields), roles and responsibilities, the handling and documentation of identified risks and specific thresholds.

The risk management system helps to ensure that the corporate targets can be met. It provides high-quality information for Group management, clearly defines responsibilities for identifying and controlling risks, ensures effective risk analysis, control and monitoring thanks to clearly defined risk fields and types and closer dovetailing with other corporate governance systems.

The Rheinmetall Group's risk management process is based on auditing standard 981 of the Institute of Public Auditors, Germany, which sets out the generally accepted standards for the auditing of risk management systems and takes into account the legal requirements regarding the monitoring duty of the Supervisory Board in accordance with section 107(3) of the German Stock Corporation Act as well as the diligence and organizational duties of the Executive Board. The risk management process comprises the following elements:

Risk identification – The regular and systematic analysis of internal and external risk-containing developments with respect to defined targets

Risk assessment – Systematic risk assessment by means of standardized assessment procedures, taking into account probability of occurrence and the extent of loss in the dimensions of Performance (EBIT/cash flow impact in € million), Market | Customer | Reputation and Legal

Risk control – Risk control measures designed to prevent, reduce, transfer and/or accept risks

Risk reporting – Timely risk reports prepared so that they are suitable for the respective target group

Identified risks are evaluated in terms of their net value with regard to their extent of loss and probability of occurrence by means of empirical values, expert knowhow and function-specific risk analysis, on the basis of a scenario that is as realistic as possible. This means that established countermeasures and checks are taken into account in the evaluation of the potential extent of loss. This results in an aggregated assessment of the risk types and risk fields as well as an evaluated risk portfolio of the Rheinmetall Group. All information used in the assessment and aggregation of risk types and fields is documented as part of strategic risk management in special risk management software.

Ad hoc risks that are assessed as having a "medium" loss extent and a "probable" probability of occurrence can generally be identified by any employee during the year between the operational and strategic risk management reporting cycles and communicated as part of a defined process. If it is not possible to immediately control the ad hoc risk, it can be taken into account as part of operational and, if necessary, strategic risk management.

In the analysis and assessment of individual risks in terms of the extent of loss, which must be performed quarterly, operational risk management focuses exclusively on the "performance" risk dimension. The thresholds for reporting these individual risks are a potential extent of loss of more than a €5 million impact on EBIT and a probability of occurrence of more than 30%. The period under review relates to the ongoing fiscal year and the two following years.

The divisions prepare operational risk reports for Group Controlling every quarter, while the operational risk situation is reported every month within the divisions. Any relevant individual issues and important, higher-level incidents/issues must be discussed in the committee meetings at the level of the divisions and Rheinmetall Group as a whole.

If necessary, individual risks from operational risk management can be outlined in the strategic risk management reports as examples and/or for illustrative purposes. To identify, analyze and assess potential risks – including the addition of new risks – the previous year's risk inventory is updated once a year as part of strategic risk management. This contains all the most important risk types potentially impacting the corporate targets and sub-targets, probabilities of occurrence, the potential level of loss, responsibilities and suitable countermeasures. The extent of loss, which is considered over a period of three years, is evaluated according to a range of quantitative and qualitative parameters. The risk dimensions Performance, Market | Customer | Reputation and Legal are used as a basis here, although not every risk can necessarily be assigned to all three dimensions. If multiple risk dimensions are considered in the evaluation of the extent of loss and different risk impacts are determined, the dimension that was evaluated more highly shall apply. Measures aimed at controlling the risks that were identified and evaluated over a three-year period must be formulated and their implementation systematically monitored.

On this basis, formal reporting takes place to the Executive Board and the heads of the divisions (including in their capacities as heads of the relevant legal entities). This form of risk reporting is based on bundled information on risk types, risk fields and the corresponding countermeasures and, in contrast to ad hoc and operational risk management, not explicitly on individual risks. Reporting from the various entities is concluded with the review of the risk portfolio by management and the subsequent release by the relevant CFO. Suitable preventive, validation and corrective actions lower the probability of risks occurring or limit the extent of loss. The risk management measures introduced are monitored on an ongoing basis and, where necessary, adjusted in line with a new risk assessment.

This ensures that the Executive Board and managers are regularly kept up to date by Group Controlling with the development of the overall risk situation in the Rheinmetall Group, the status of and significant changes to important ventures that must be reported as well as the status of countermeasures that have already been introduced. If necessary, additional measures are taken in order to further limit and reduce identified potential risks. Sudden or unexpected risks with significant consequences are reported to the Executive Board on an ad hoc basis. The Supervisory Board is advised of individual operational risks in the quarterly reports that entail a net loss exceeding €5 million of EBIT and also have a probability of occurrence of 30% or more. The thresholds for reporting risks to the Supervisory Board on an ad hoc basis are a net loss of more than €20 million of EBIT combined with a cash flow impact and a probability of occurrence of more than 50%. By contrast, risks below €2 million and/or that have a probability of occurrence of less than 2% are not reported.

After a fundamentally overhauled guideline for risk management was introduced on November 1, 2019, the Rheinmetall Group's risk management system was developed further in the year under review. This primarily applies both in respect of the amendments arising from the version of IDW PS 340 (as amended) applicable for the first time for fiscal 2021, mainly with regard to the determination of risk-bearing capacity, and for the introduction of the new risk field “Environmental Social Governance (ESG).” In consultation with the Rheinmetall AG Supervisory Board's Audit Committee, we have also further differentiated the risk classes.

The most significant change in IDW PS 340 (as amended) for the Rheinmetall Group is the mandatory determination of risk-bearing capacity. IDW PS 340 (as amended) defines risk-bearing capacity as the maximum risk that the Rheinmetall Group can bear over time without seriously jeopardizing its existence. This requires both the determination and measurement of an overall risk position and the comparison of overall risk with the business resources available to cover the risk at Rheinmetall with regard to net assets, financial position and results of operations, which can be used to mitigate the effects of the risk. In fiscal 2021, on the basis of the corporate planning and deploying an integrated finance model, taking into consideration defined critical KPIs, Rheinmetall implemented a differentiated scenario analysis of realistic risks, assessing them on both an individual and cumulative basis. Neither the individual or cumulative assessment of the scenarios resulted in a risk position that could jeopardize the continued existence of Rheinmetall.

The new and independent risk field “Environmental Social Governance (ESG)” was introduced because this range of topics will become even more important in the future, not least due to the trend toward increasing regulatory requirements and the expectations and requirements of governments, customers, investors, lenders and other financial institutions in the areas of ESG.

In addition, the presentation of the risk matrix was specified in 2021 to the effect that it now comprises four risk classes instead of the previous three: low, medium, high, and very high risk. The discontinuation of the previously very broad “medium risk” field thus enables a more differentiated picture for our external stakeholders. This new approach has an impact on the classification of the risk fields in some cases. The change to the risk classes means that the comparability of risk presentation in the year under review with the previous year is limited. After analyzing the risk situation in the Rheinmetall Group between the year under review and the previous year, it is clear that the change in presentation does not result in any changes in the overall assessment of the risk situation and that the composition and scope of the risks have remained fundamentally the same.

Significant corporate risks

On the basis of the risk reporting to the Rheinmetall AG Executive Board, as of the end of the reporting period there was the following risk situation which summarizes the significant corporate risks from a Group perspective in the defined risk fields with their risk classification:

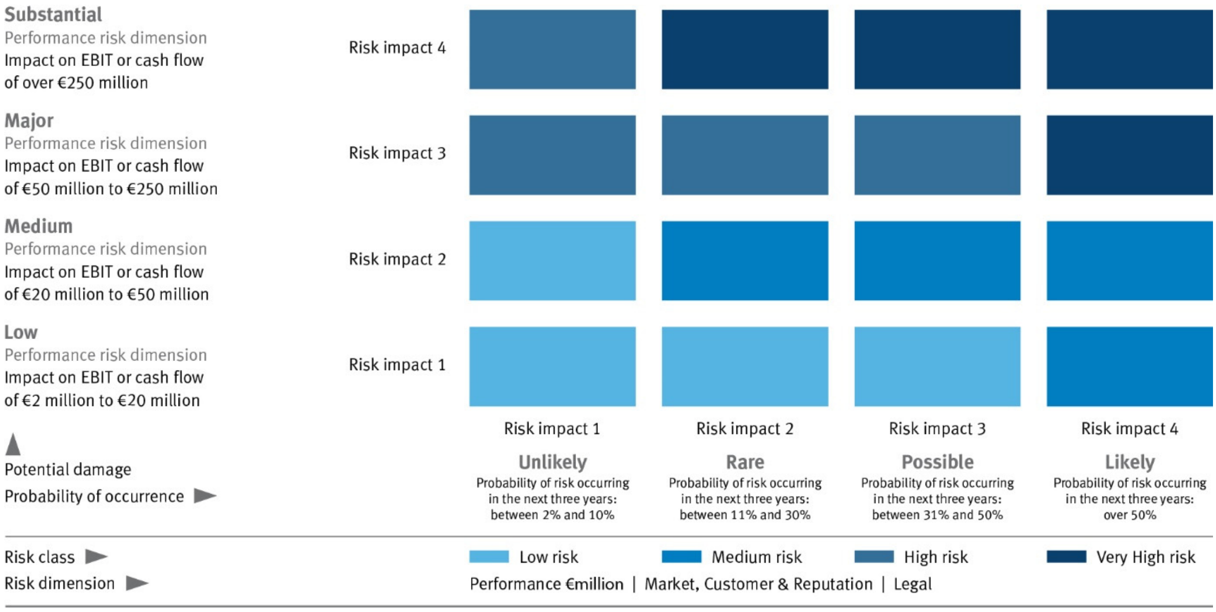
Risk fields

Risk field	Risk class
Customer and market	High risk
Competition	Low risk
Technology and development	Low risk
Production and project implementation	Medium risk
Suppliers and procurement	Medium risk
Human resources	Medium risk
Finances	Low risk
Taxes	Low risk
Legal	High risk
Compliance	Medium risk
Public perception	Low risk
Environmental Social Governance	Medium risk
Corporate security	Medium risk
Information technology and information security	Medium risk
Mergers and acquisitions	Low risk
Joint ventures and shareholdings	Low risk

Categorization of risk classes in line with the description on the previous page

As of December 31, 2021, no material individual risks were identified within the risk fields. Risks are classified as material individual risks when they have at least a medium extent of loss and at least a possible probability of occurrence.

Risk classification matrix



Customer and market

The risk assessment of the customer and market risk field is unchanged compared with the previous year. The changed risk classification compared with 2020 vis a result of the described differentiation of risk classes.

Customer satisfaction is the decisive criterion for our performance. We maintain close customer relations and, even as early as the offer phase, endeavor to address the needs and requirements of our customers to the greatest possible extent. Thanks to technical innovation and the ever-expanding breadth of our product portfolio, we can use our various sales channels to position further products with customers. Opportunities also arise through our generally long-term business relations and our global presence. At irregular intervals, we conduct customer satisfaction analyses so that we can identify and implement improvement potential.

Customer risks can arise from the dependency on key buyers with whom a not-insignificant share of sales is generated, who use their negotiating power and increase pressure on margins. This applies particularly to OEMs in the Sensors and Actuators and Materials and Trade divisions. Declines in demand or the loss of these customers can negatively impact the Rheinmetall Group’s business and performance. When competition is particularly intense, it might also be the case that we can no longer assert our target margins in order negotiations.

The key customers in the Vehicle Systems, Weapon and Ammunition, and Electronic Solutions divisions are national and international authorities. Risks lie in the dependence on spending patterns for public budgets in Germany and foreign customer nations. This can lead to shifts and cuts in state budgets, which can also affect defence. Political, economic, commercial, regulatory and export control influences and changes in the armaments technology requirements of customer nations, along with budget restrictions resulting from strained budgetary situations, or general financing problems on the part of customers, can result in risks in the form of delays in the awarding of contracts, time extensions or even the cancellation of orders. Risks also arise from increasing transatlantic competition. Moreover, there is tough international competition on export markets to which the Group has access.

In addition, it might not be possible to make sufficiently speedy investments in anticipation of major changes in customer demand or in the originally expected market premises, or such changes could lead to poor investments. Delayed investment, for example, entails the risk of non-compliance with delivery agreements concluded with customers.

When new business areas are opened up, misjudgments regarding customer requirements, resource deployment, price/margin targets as well as demand, market and competition developments are also possible.

The development of the Rheinmetall Group is closely linked with macroeconomic trends and economic cycles on a global level but also in the individual regions and countries in which we operate. It is not possible to completely avoid risks that arise due to economic cycles. A deterioration in statutory, regulatory and/or general economic conditions in the sales regions can adversely impact the sales and earnings situation of the Rheinmetall Group. Geopolitical or economic crises can affect overall global demand, regional markets or individual industries. The consistent alignment of business towards the major economic areas in Europe, the US and Asia reduces dependence on individual customer countries, thereby distributing the risk. The diversified product portfolio of the divisions and consistent internationalization of the Rheinmetall Group help to ensure that temporary economic fluctuations can be offset in part by more favorable developments in other regions and markets. Rheinmetall counteracts global economic fluctuations with its different divisions, which are subject to different demand and procurement cycles.

In times of advancing globalization and growing competition and market transparency, market risks are becoming more prevalent. Trends such as digitalization, artificial intelligence and the electrification of vehicles require disruptive technologies and business models and lead to new customer requirements that were not anticipated or to which the response was inadequate. Global challenges relating to climate change, pandemic events, interstate conflicts, migration and resource scarcity can trigger changes in customer behavior. This can lead to changes in the portfolio and to fluctuations in prices, quantities and margins.

Focusing on technologically demanding market segments, product innovations, process improvements, production and capacity adjustments and strict cost management all contribute to strengthening competitiveness in each of the company’s industries and securing and building on the profitability of the Rheinmetall Group. In view of the technological progress in our industries we continue to strive to develop new markets and customer groups in the mobility and security segments. Thanks to our broad international presence, we can respond to market and demand fluctuations and balance out developments in individual regions and industries.

Competition

Rheinmetall’s risk profile can also be negatively impacted by changes in the competition structure. Consolidation trends force competitors to merge, and new competitors can emerge through technological innovations. In their industry and security policies, some countries strive to create highly skilled workforces and a high degree of autonomy from imports. For us, this means building up our own capacities by increasing the percentage of local value added. Furthermore, where competition is fierce, we cannot rule out the possibility of being unable to achieve our margin targets. By systematically monitoring the competitive environment, Rheinmetall is in a position to respond to these changes early on. International partnerships and systematic localization concepts are part of the Group’s strategy and, together with technological market entry barriers, serve to safeguard business.

Technology and development

Our innovative strength is a key success factor, which we consider to be a driver of profitable growth. The future market position, economic development and earnings situation of the Rheinmetall Group also depend on the ability to identify technological trends in good time, correctly assess their impact on operational business, to continually develop marketable new applications, products and systems and to bring them to market maturity within a short period of time. The sometimes long development lead times, continuously changing regulatory and technological framework conditions and intense competition are key factors contributing to the uncertainty regarding the economic success of current or future products.

The current strongly changing mobility and automotive sector is presenting particular challenges in respect to the necessary changes. It is particularly the global climate issue which is reinforcing a change in vehicle drives. The consequence of the corollary decline in vehicles with a combustion engine drive system is the declining market for classical products in the drive area for combustion engines, such as pistons, engine blocks, coolant pumps and also for components such as exhaust gas cleaning and aftertreatment. This transformation also generates potential as hybrid-electric, battery-electric or even fuel-cell driven vehicles require electrically driven components and aggregates which can be integrated as needed. As a result of the generally increased share of electronics in these aggregates, this trend brings with it the opportunity of increasing the share of value added. Parallel to this transformation for drives, it is particularly digitalization in vehicles which offers an opportunity to bring new products and product functionalities to the market. On the other hand, this trend also harbors the risk that moving into digital technology and product segments requires high expenditure in establishing expertise for development and production. Furthermore, it should also be taken into account that products with a high share of digitalization generally have shorter product life cycles, which ultimately can result in high expenditure for adjustments, and thus amortization risks.

Misjudgments regarding future market developments or the development of products, systems or services that are not taken up by the market as expected as well as missed development deadlines, fundamental changes in customer demand that were not foreseen or responded to adequately, increased startup costs for new products or delays in launching innovations on the market can lead to a deterioration in our competitive and economic situation. However, intensive market and competitor monitoring and analyses, the market presence and customer proximity associated with international distribution structures as well as regular discussions with customers and suppliers make it possible for us to identify trends on the sales markets in good time and to align product strategies consistently towards new requirements.

Feasibility studies, profitability analyses, modern project management aimed at reviewing the criteria for technical and economic success, bringing the sales and development units closer together, the involvement of customers in the definition, design, development and testing of new products and safeguarding our technological position through property rights, especially patents, reduces possible R&D-specific risks such as misdevelopments and budget overruns.

Thanks to a balanced mix of short-, medium- and long-term projects in a well-filled research and development pipeline, we are making advances in new markets and technological fields and, in doing so, further safeguarding our technology positions.

The focus of the Rheinmetall Technology Center, which was established in 2020 with the express aim of developing new technologies and innovations outside the existing core business and bringing them to market maturity quickly, is particularly on the technology segments of automation, new sensor technology, artificial intelligence (AI) and new mobility. The latter is also particularly supported by targeted activities in the area of electromobility and hydrogen technologies. In addition to these key topics, systematic technology management has been established throughout the Group and integrated into the process landscape. Initial results indicate further promising technology areas that are now being reviewed with regard to their value.

Despite compliance with the processes and the use of state-of-the-art project management, monitoring and controlling measures, developing new products and launching new technologies and products entail risks in addition to changes to existing product portfolios. These exist not only in the actual design and development phase, but also during market launch, where startup costs may be higher than expected or unscheduled delays may arise. Risks can also arise following market launch due to the potential need for technical improvements, which come to light only following use in real-life situations or through continuous operation.

Production and project implementation

We counter potential production risks by applying high technical and safety standards. We ensure compliance with regulatory requirements for the product areas, for example, through internal policies and procedural instructions as well as our quality management systems. Our quality management systems have been certified in accordance with the internationally recognized ISO 9001, IATF 16949 and AQAP or ISO 9100 standards for many years now. In addition, methods including Six Sigma, lean management and failure mode and effects analysis (FMEA) are used to prevent quality risks. Appropriate insurance cover is in place for warranty, product liability and recall risks, which is reviewed periodically and adjusted where necessary.

Risks also arise from capacity bottlenecks or overcapacity, production downtime, excessive scrap levels, lack of demand availability as a result of failures or partial failures in the supply chains, a high level of working capital commitment and excessive reliance on individual production sites. These risks can be mitigated, however, through careful planning and continuous monitoring of the production processes in conjunction with flexible working hour models. Continuous improvement in production – for example, by simplifying processes or increasing the level of automation – can help to further increase production efficiency.

The availability of production plants is ensured through preventive maintenance with accompanying checks and modernizations as well as through investments. Production can, however, be impacted by natural disasters, disruptions in the infrastructure, delivery stops or technical failure. As a countermeasure, we operate appropriate business continuity management (BCM). For potential damage and associated interruptions to operations or production downtime and for other conceivable loss occurrences and liability risks, insurance cover has been taken out as financially reasonable to ensure that the financial consequences of potential risks are contained or completely ruled out. Although the existing insurance cover is regularly reviewed in terms of covered risks and insured sums and adjusted if necessary, it may prove insufficient in individual cases.

We review investment decisions carefully over several stages. Investments that exceed a defined limit are presented to the Executive Board for approval after undergoing a review. Nevertheless, unforeseen changes in general conditions can lead to higher investment costs or cause delays to facilities being commissioned.

Especially in the Vehicle Systems, Weapon and Ammunition and Electronic Solutions divisions, large complex projects can last several years resulting in risks for planning,calculation, execution and processing. These include not only uncertainty in calculations, but also unexpected technical and/or logistical problems, difficulties surrounding the fulfillment of product specifications, underestimations of the level of complexity, project-specific additions and related cost increases, capacity and supply bottlenecks as well as quality problems with business partners or suppliers, unforeseeable developments during assembly and deferred dates of acceptance and settlement. These risks can be minimized, though not excluded altogether, through the technical expertise and longstanding project experience of the employees, professional project management, verification levels for each project stage, comprehensive quality management measures and the appropriate formulation of contracts.

Suppliers and procurement

The task of the purchasing organization, which is controlled by the central Purchasing Council, is to improve Rheinmetall's market position with respect to suppliers and achieve better purchasing conditions. This ranges from optimized prices to improved payment and delivery conditions. Another objective of the Purchasing Council is to transfer expertise and information and to ensure networking within the purchasing organization. Furthermore, regular exchanges in the Purchasing Council ensure that the purchasing organization is adapted to changing requirements and that both organization and processes are described in sufficient detail.

Risks can arise in connection with the purchasing of raw materials, parts and components in the form of unexpected supply shortages, delays or bottlenecks in delivery, quality problems or rising purchase prices for intermediate products, raw materials and energy. This is countered through ongoing monitoring of the procurement markets, structured procurement concepts and the avoidance of dependence on individual suppliers. The careful selection of efficient suppliers, annual supplier reviews, precise specifications and quality requirements, reliability checks, medium- and long-term supply contracts, bundling of volumes to be procured within the Group, and appropriate safety stock levels also reduce the risk potential. Cost escalation clauses are also agreed in contracts where possible, to minimize negative effects from increases in purchase prices to a large degree. Stronger internationalization of our supplier circle can leader to more favorable purchasing conditions. If new suppliers possessing, for example, specialized product knowledge are identified, our competitive situation may improve. Legal bans on substances and/or materials are taken into account through appropriate measures and cooperation with other specialist areas.

Bottlenecks in supply and sharp fluctuations in prices for raw materials involve significant risks. Price risks for raw materials, particularly aluminum, copper and nickel, are countered with cost escalation clauses in contracts on the sales side. When procuring raw materials that are traded on the stock market, the central Commodities Office manages the timing of purchases and the volume purchased in consultation with the operating units, making use of financial hedging instruments.

An inadequate energy supply for the Rheinmetall companies under cost-efficient conditions constitutes a risk for competitive production at the sites. Within the context of our electricity and gas price hedging strategies in the Rheinmetall Group, we take action several years in advance based on our medium-term planning, meaning that our energy purchases did not suffer the full impact of the increase in prices in 2021. For details on the energy markets, refer to the “Metal and energy markets in 2021” section It is not possible to ensure complete hedging of fluctuations in the price of energy sources or to guarantee that increases in energy prices will be passed on to customers. Rising energy costs are addressed by bundling procurement volumes and through coordinated invitations to tender, long contract durations and optimization of the electricity price via the European Energy Exchange in Leipzig. Germany’s energy turnaround is expected to lead to the expansion of electricity grids and a significant increase in the share of renewable energies. We believe that constantly rising electricity prices represent a risk – a development that could impact the international competitiveness of industrial companies.

The complexity of the supply chains and the resulting challenges also gained considerably in importance as a result of the COVID-19 pandemic. For example, in the event of the situation worsening or regional events in procurement markets that are important for Rheinmetall, there is a possibility that the production of individual or several suppliers could be temporarily or even permanently interrupted – e.g. due to lockdown measures ordered by the authorities or insolvencies. This could lead to difficulties in the Group’s value chain and thus to additional sales and liquidity risks. Due to strict regulations and requirements imposed by authorities, we may not be able to establish additional or alternative sources of supply at short notice. Screening of suppliers’ financial and performance data was stepped up in the year under review. A cross-disciplinary team was also set up to respond quickly to changes in the situation and to prevent potential losses and damages due to disruptions in the supply chain.

In addition to general risks in our international procurement activities, country- and supplier-specific risks may also arise. These include, for example, the use of child labor by local suppliers, the conscious acceptance of environmental damage, or inadequate safety and working conditions. These risk aspects are addressed as part of the established due diligence processes for business partners and the mandatory supplier qualification process.

The situation on the global procurement markets is not expected to ease in the short term, as the COVID-19 pandemic has not yet been contained and international capacity restrictions and bottlenecks in raw material procurement and energy supply continue to exist. The conflict in Eastern Europe means additional risks in relation to the security of existing supply chains, particularly in the civilian segment. Furthermore, global supply problems in the semiconductor market are ongoing. These can impact both procurement and sales. This is being counteracted with interdisciplinary teams, the use of alternative and sound requirement forecasts. Rheinmetall is also exposed to logistics risks arising from potential disruptions and interruptions in the transport of goods, for example due to shortages in freight capacities (air, sea, road, rail). This is directly associated with risks of a general increase in freight costs and possible interruptions in the availability of materials.

Human resources

In a technology-oriented company such as the Rheinmetall Group, the implementation of the ambitious growth-oriented corporate strategy, the achievement of financial targets and, in general, the sustainable economic success hinges on a variety of staff, including employees with an above-average level of qualifications and a number of experienced specialists from a wide variety of fields. Having a high turnover of managers and employees in key positions can lead to a loss of key specialist knowledge and expertise. Problems or delays caused by a shortage of skilled workers in finding suitable management, specialist and junior staff for vacant positions, who have the desired commercial, technical or industry-specific skills, can also negative repercussions for the company such as an aging workforce, inadequate qualifications, low employee motivation or a low individual employee willingness to perform.

We mitigate potential personnel risks, for example, by positioning Rheinmetall globally as a fair and attractive employer with a value-based corporate culture and by using target group-oriented personnel marketing to communicate our strengths to the outside world, in particular to younger people. Further elements to minimize risks include the continuous development of competitive, performance-based pay with performance-based incentive systems, modern HR practices, and structured training and continuing education in specific disciplines and methods based on our competency model. As an international company, we also pursue a diversity-oriented HR policy. The success of these measures is reflected in the high number of applications from qualified people, the low fluctuation over the past few years and a relatively long average tenure within the company. Furthermore, we offer a variety of flexible working time arrangements at our German sites and the option of working from home on a temporary basis, which are designed to promote a healthy work-life balance.

In view of an aging workforce and the potential resulting skills shortage, age structure analyses – in addition to key function analyses – are conducted at regular intervals as part of Generation Management; the results of the analyses are taken into account in forward-looking staff and department-specific succession planning and training activities. We counteract the demographic change in particular through funding suitable programs for young people, knowledge management and local health promotion programs.

The companies in the civil sector face intense competition in attracting qualified employees. New mobility concepts and, above all, new drive concepts for cars, mainly hybridization and all-electric drive systems, will change the requirements for the available expertise in research and development as well as production. This applies equally to automotive manufacturers and their suppliers. Our companies are already discovering that it is becoming more difficult to attract engineers with specialist knowledge in the fields of software and electrical engineering throughout the world. Generally, this situation will get worse as the pressure to innovate in the industry as a whole will increase.

Often capacity adjustments, potential efficiency enhancement measures and possible restructuring or reorganization that may be necessary to safeguard long-term competitiveness require a reconciliation of interests at operating level. We endeavor to limit the negative impact of such measures on the workforce wherever possible and to make any job cuts that may become necessary in a socially responsible manner. We traditionally work constructively with employee representatives at our sites.

Our business activities can be affected by epidemics. The current coronavirus pandemic may worsen as the number of new infections rises again in many countries. Depending on the respective vaccination rates in the countries, the figures for illnesses and severe courses of disease vary greatly. We are trying to adapt to the respective pandemic situation as best as possible and ensure that day-to-day operations are as far as possible free of disruptions by taking appropriate measures such as comprehensive protection concepts and strict hygiene rules, wearing face masks, providing protective equipment, working from home and holding virtual meetings where possible, as well as extensive testing and vaccination offers. However, the duration and extent of individual effects on our business are difficult to predict. Measures by governments to contain the virus could be initiated at short notice or take an unpredictably long time. As a result, our business could be impacted in a way that exceeds current expectations and goes beyond mitigation measures already in place. We could be subject to unexpected site, factory or office closures, which would affect our ability to produce or supply our products. In the reporting year, interdisciplinary coronavirus action teams were again active at all locations, coordinating or arranging the measures required locally to contain and manage the crisis. The Executive Board and Corporate Security were kept apprised with up-to-date information by way of status reports on the situation at the individual company sites. In this way working capacity was maintained at the sites during the pandemic, without there being an increase of the general infection risk among the workforce.

Finances

Rheinmetall's business situation, financial position and performance are exposed to financial risks from operating activities. The main financial risks are liquidity risks, counterparty risks and market price risks arising from changes in interest rates, exchange rates or raw material prices.

Liquidity risk is the risk that existing or future payment obligations cannot be met, cannot be met on time or can be met only with excessive costs. To manage this risk, all cash transactions are recorded, assessed and centrally aggregated within the scope of corporate planning and rolling monthly twelvemonth liquidity plans. The values calculated are compared with the available financial scope to identify any potential financing gaps early on.

Scenarios such as catastrophe-related sales slumps and payment defaults, unexpected working capital requirements or reductions in credit facilities are simulated, taking into account worst-case scenarios. When determining the necessary financial scope, Rheinmetall takes great care to ensure that adequate reserves are held at all times.

Counterparty risks arise in connection with deposits, financing commitments or financial receivables such as positive fair values from hedging transactions, as a result of the relevant counterparty's inability to pay or insolvency. Rheinmetall manages these risks through limit-based, creditworthiness-linked and widely diversified lending from commercial banks. Financial transactions are conducted exclusively with banking or insurance partners that have an investment grade rating from recognized rating agencies or comparable credit ratings. Moreover, in the allocation of business, emphasis is placed on ensuring that, in addition to sufficient diversification of the counterparties themselves, diversification is pursued at country level as well.

Default risks from the operating business can generally be assessed as low on account of the customer structure. In the case of large-volume or long-term business relations, potential counterparty risks are individually analyzed and managed by means of prepayments, milestone payments, guarantees, letters of credit or credit default swaps and special individual contractual frameworks. There are no customer or country dependencies that could jeopardize the continued existence of the Rheinmetall Group if they were to take a negative turn.

Interest rate risks arise from volatility on the money and capital markets. These can occur in two forms. Whereas fixed-interest financial instruments can result in fluctuations in fair values and thus to valuation effects that are of relevance to earnings, variable-interest financial instruments are subject to a cash flow risk, as future interest payments can fluctuate in terms of their amount. Both these forms tend to be of secondary importance for Rheinmetall, as the interest rates of the longer-term debt instruments used are already fixed in the original contracts themselves, while the cash flow risk from variable interest is offset to a large extent by corresponding opposite cash positions in the Group.

Currency risks that Rheinmetall is exposed to in its global business operations can also have an adverse effect on the operating result. Here, too, the Group's risk management unit should be involved early on in large-volume projects or long-term contract negotiations to prevent currency risks from occurring at all by formulating contract currencies or introducing cost escalation clauses. Moreover, in currency management, simulation calculations are performed to derive hedging strategies and use suitable derivatives that reflect the different business structures of the divisions. The currency risks are identified and assessed as part of regular reporting.

Similar to hedging against interest rate and currency risks, risks from changes in prices are largely avoided in advance in contract negotiations for the procurement of raw materials or significantly restricted through the agreement of cost escalation clauses. In cases where this is not possible, derivative financial instruments are used. This is the case, for example, for industrial metals and the energy sector. The strategic management of market price risks is carried out at regular financial committee meetings, in which the hedging decisions are made and documented.

Regulatory or political interventions can impact the processing of international payment transactions. This would mean that either Rheinmetall would not be able to fulfill its contractual payment obligations or would fulfill them only to a limited extent, or it itself would receive cash receipts from exports incomplete or late. On the whole, this risk should be classified as insignificant for Rheinmetall and would be managed on a case-by-case basis if it should ever occur.

Taxes

Tax risks can result from changes in the legal or tax structure of the Rheinmetall Group or from assessment periods that are still open. The differing assessment of circumstances during audits can lead to claims on the part of the tax authorities. There is also the risk that the tax burden for the Rheinmetall Group increases as a result of changes to tax legislation for individual countries or court decisions.

To identify and minimize tax risks at an early stage, the Rheinmetall Group has set up a global tax compliance management system and taken organizational measures aimed at ensuring compliance with tax legislation. This system is developed on a regular and systematic basis. The tax compliance management system is also being systematically rolled out to the international companies.

Legal

This risk assessment of the “Legal” risk field remains unchanged from the previous year. The changed risk classification compared with 2020 vis a result of the described differentiation of risk classes.

Legal risks can arise in relation to competitors, business partners or customers and as a result of changes to the legal framework in the relevant markets. Not only is the Group supported by detailed advice from its own specialist legal experts, but it also, depending on the case, consults external experts. Furthermore, potential losses, damage and liability resulting from ordinary operations are, wherever possible, appropriately covered by insurance policies or accounting provisions.

Our goal is to avoid litigation within the limits of what is economically reasonable. However, it is naturally difficult to predict the outcome of pending legal and administrative proceedings in the majority of cases. Costs can arise on the basis of adverse court or official decisions or the conclusion of settlements that are not covered or not fully covered by provisions or insurance policies and thus exceed the provisions that have been made. However, after a thorough review, we do not believe this will occur.

Regulatory and legislative changes at national or European level may involve risks that could negatively affect our earnings situation. This applies, for example, to new laws and other amended legal frameworks (e.g. relating to export controls) or through export restrictions in practice. Embargoes, economic sanctions or other forms of trade restriction could be imposed on countries in which we operate by the European Union, the US or other countries or organizations.

Legal risks arising from the violation of legal regulations are avoided or reduced as far as possible within the context of the compliance management system.

Compliance

Compliance violations can cause many different types of damage and can have serious consequences such as the discontinuation of business relationships, exclusion from contract awards, negative assessments on capital markets, the imposition of fines, the absorption of profits, claims for damages, and civil or criminal proceedings.

Under the previous government, German legislators were still planning to introduce corporate criminal conduct legislation ("Law to Strengthen Integrity in Business"), which would have provided for fines of up to 10% of total global sales in the event of gross breaches of compliance by the company. This proposed legislation may also be pursued by the new German government. In addition, the German Supply Chain Due Diligence Law was passed in June 2021, which from 2023 or 2024, depending on the number of employees, will require companies to carry out internal due diligence and risk analyses not only of their business partners but also in their own business areas with regard to compliance with human rights and environmental due diligence requirements. In the event of infringements, fines of up to 2% of Group sales may be imposed.

Furthermore, compliance violations that have a high public profile always pose the risk of significant and lasting damage to the company's reputation. Customers, shareholders, employees, non-governmental organizations, rating agencies and also the general public could lose trust in our company. In itself, the examination and clarification of alleged cases can result in considerable internal and external costs.

Compliance risks can occur in every area of the company. The compliance organization is therefore designed to ensure proper and compliant modes of conduct and behavior on the part of a company and its employees and to make sure that potential or actual infringements of external or internal regulations are responded to appropriately. Group-wide structures, stringent regulations and standardized processes are put in place to prevent any liability risks, risks of a penalty or a fine and reputation risks, in addition to other financial disadvantages, loss or damage that the company may incur as a result of misconduct or violations of the law.

The regular execution of a Group-wide compliance risk assessment (top-down and bottom-up) and additional regular and case-by-case risk analyses help to identify systemic and company-specific compliance risks. Measures to introduce or improve international or local structures, guidelines, processes, IT systems and training content are derived from the results.

However, despite extensive and multi-level inspection and control mechanisms, the possibility of risks arising from unlawful activities of individual parties cannot be ruled out. Alleged cases are investigated actively. In investigative proceedings we cooperate with the relevant authorities. Proven misconduct results in consequences for those involved and – if necessary – to adjustments in the organization. However, the financial impact of compliance cases on the Group's results is very difficult to estimate. Depending on the case and the circumstances, a considerable range is to be assumed.

The introduction in 2018 of the EU General Data Protection Regulation (GDPR) required EU-based companies also to meet a whole range of obligations concerning data protection. Violations of the GDPR are subject to significant sanctions, including the imposition of fines totaling up to 4% of the Group's total global sales. To counter these risks, we established a Group-wide data security management system (DSMS) designed to ensure a data protection level that is structured, secure and, as far as possible, standardized. It defines a range of functions and responsibilities and undergoes continuous improvement as part of a "plan–do–check–act" cycle. The effectiveness of the DSMS is monitored on an ongoing basis. Where legally prescribed, data protection officers are appointed in Rheinmetall. Our employees receive regular instruction and training in matters relating to data protection. The content of data protection training is adapted for individual departments in line with the specific requirements in their respective spheres of work. For new employees, this training is an important part of the induction process.

Public perception

In a time in which markets are interconnected and the flow of information is becoming increasingly globalized, communication is becoming ever more important to the company's success. Shareholders, customers, lenders, employees, the media and the public at large are informed regularly, transparently and quickly about our social and financial status, our key processes and changes as well as the latest news and developments.

In the course of a highly dynamic sustainability debate, the communicative presentation of a medium- and long-term corporate strategy based on responsible action is crucial for the perception and acceptance of the company by a broad public. Protecting and building a positive reputation as a central task of communications is considered essential in order to continue to be recognized and commissioned as a supplier and equipment provider to the public sector and to be able to survive on the money, credit and capital markets. In particular, the impact of our communications and other image-building measures on the general (media) public determines how we are perceived by politicians, administrators, and business and financial players.

Environmental Social Governance

Sustainability risks differ in part from traditional risk assessments in terms of the timescale considered, the assessment of their impact, but also in perspective. For this reason, the process for sustainability risk reporting builds on the existing risk management modules, but goes beyond them in parts. This avoids both duplication of work and double entries while also ensuring comprehensive analysis.

If we do not comply with the increasing regulatory requirements and fail to meet the expectations and requirements of governments, customers, investors, lenders and other financial institutions in the areas of environmental and social responsibility and governance (ESG) to the required extent or level of detail, this can have a negative impact on the Rheinmetall Group's business and earnings. Customers could potentially refuse to award contracts to us, private and institutional investors might refuse to include us in their portfolio, and financial institutes might refuse to issue loans at all or only at an increased cost. We counter these risks through comprehensive and transparent CSR/ESG reporting based on globally recognized standards such as the Global Reporting Initiative and – where possible – through continuous improvement of our customer and CSR/ESG ratings from internationally renowned agencies and institutions such as MSCI, ISS ESG, Sustainalytics, VigeoEiris, Arabesque, Gaia and CDP.

Furthermore, the passing of legislation or regulations for the finance sector could cause institutional investors to restructure their portfolios and reduce or eliminate their exposures in companies that operate in industries classed as critical. Possible sector exclusions (e.g. for the weapons and defence industry) could also limit our options to raise capital. Changes to the qualification criteria for being accepted to or remaining on stock indices could also harbor risks for our company.

Business activities that touch on sensitive ESG topics can result in a negative response among stakeholders or trigger negative media reports, which could damage our reputation and jeopardize the achievement of our business goals. This impact could be exacerbated by insufficient crisis communication.

The protection of human rights is an integral part of our social responsibility and anchored in our Group guidelines such as the Code of Conduct, the Supplier Code of Conduct and the principles of social responsibility. Rheinmetall seeks to prevent the negative consequences of its business activities and supply chain impacting its ability to uphold human rights. It is a matter of course for us to identify human-rights-related risks associated with our business activities and sphere of influence through, for example, adequate due diligence processes and risk analyses and to mitigate these risks as far as possible through suitable measures.

With 133 locations in 33 countries, we are subject during our everyday business to a wide range of legal and regulatory requirements, any of which can be updated, developed or made stricter at ever shorter notice. This applies in particular to provisions relating to not only the environment, chemicals, hazardous substances and critical raw materials, but also occupational and health protection. Adapting to new requirements could increase our operating costs or result in unscheduled investments. A whole range of different licenses and approvals are also required for our locations and factories and their provisions have to be met, which are subject to renewal, amendment, suspension and revocation by the issuing authority. Violations of relevant official regulations that apply to how we exercise our business activities or infringement of social, (occupational) safety and environmental standards could potentially harm Rheinmetall's reputation and subsequently result in internal or external investigations, requirements, remediation obligations, claims for damages and, under certain circumstances, substantial fines or penalties. We actively counter these risks in various ways, including through high technical standards, integrated management systems and certification in accordance with international standards such as ISO 14001, ISO 50001 and ISO 45001. We evaluate measures that go above and beyond compliance with legal requirements on a cost–benefit basis. Although we have organizational structures and procedures in place to ensure that we comply with applicable government regulations in the conduct of our business, it cannot be entirely ruled out that violations of applicable government regulations could occur on our part or on the part of third parties with whom we have a contractual relationship and whose actions could be attributed to us.

A large amount of land owned by the Rheinmetall Group has been subject to industrial usage for decades. For this reason, it cannot be ruled out that contamination has also been generated during this time as a result of production that Rheinmetall is not yet aware of. Provisions have been recognized for necessary measures to safeguard against or clean up identified pollution. The elimination of leaks or the clean-up of effects resulting from technical failure could give rise to direct costs for the company. It is possible that the relevant authorities may issue regulations that require costly clean-up measures. We counter potential environmental risks by implementing statutory environmental standards, certified environmental management systems, proper and safe storage of hazardous substances, and environmentally friendly disposal of waste and hazardous materials via certified service providers. At our different locations, special organizational units ensure that the relevant legislation and regulations are observed and that further technical options for mitigating environmental risks are identified. The tightening of environmental protection provisions and environmental standards could lead to additional unplanned costs and liability risks over which Rheinmetall would have no influence. For certain environmental risks, we have taken out liability insurance policies with coverage amounts that we consider customary and appropriate for the industry. We could incur losses from environmental damage that exceed the insured amounts or are not covered by insurance.

Risks attributable to climate change are currently already beginning to emerge. These can be chronic and acute physical risks such as the rise in average temperature, rising sea levels, extreme weather events, sharply fluctuating water levels, increasing heat waves and droughts affecting property. With regard to production sites, production interruptions, delivery delays or delivery failures represent significant risks. These may be exacerbated by more intense and frequent extreme weather events. Transitory risks from climate change arise from cross-sector structural change due to the transition to a lower-carbon economy. They relate in particular to changes in the legal framework and tighter limits at national or transnational level. These include, for example, increasing efforts by legislators to introduce CO_2 pricing via emissions trading systems, to levy additional taxes and to tighten energy legislation. Furthermore, Rheinmetall's emissions balance and intensity could lead to a negative perception and limited attractiveness among stakeholder groups such as customers and investors. Climate protection measures also entail financial risks, for example due to increased energy and investment costs, emerging levies for CO_2 emissions or extended specifications for products. To identify and better assess risks from climate change more reliably, Rheinmetall carried out an initial comprehensive site-specific assessment on its production sites in the year under review using database content from a renowned service provider in accordance with the parameters of the Task Force on Climate-related Financial Disclosure. We are making a contribution to prevention with some of our products in civil business sectors and by gradually reducing our own CO_2 emissions as part of energy and carbon management. We have set ourselves the ambitious goal of being carbon neutral by 2035.

Corporate security

The higher classification of the "Corporate security" risk field in comparison to the previous year is due to the higher assessment of personal protection and confidentiality risks.

As a company that receives orders from the public sector, we sometimes gain access to a range of confidential information and material that are rated as "classified." The specific requirements regarding the personnel and material security measures vary depending on the degree of confidentiality. Material confidentiality relates to the technical and organizational precautions taken in the company to protect classified information. This involves measures relating to, for example, the creation, labeling, processing, duplication, management, storage, transportation and forwarding of classified information as well as to the security of IT systems. Only persons who have undergone state security screening to prove their dependability and been issued with authorization to handle classified information are permitted access to classified information.

Like any other multinational company, Rheinmetall is at constant risk of cyber attacks and risks resulting from industrial espionage or sabotage. The risks, especially those resulting from cyber attacks, have intensified as a result of the conflict in Eastern Europe. We are unable to fully ensure that the personnel, organizational, electronic, structural and technical precautionary/security measures that we implement to protect confidential commercial information, data and material as well as our own intellectual property are sufficient and successful. Incidents can have a negative impact on our reputation, competitiveness or business situation, which is why it is important for us to raise awareness among our employees about the careful handling of all business-related information. Audits and the implementation of corresponding awareness measures are therefore essential.

Potential risks associated with business trips and business stays abroad (e.g. health risks and security risks through criminality or terrorism) are countered primarily through preventive measures. The latest information concerning the security situation in the destination countries is thoroughly evaluated and appraised, potentially resulting in travel warnings or even travel bans being announced by the Group's management. To provide our employees with not only detailed security, safety and medical advice but also all the support they need before, during and after business trips, we work together with the International SOS organization, which runs a global network supporting business travelers and expatriates in the event of illness, accidents, civil unrest or other incidents occurring abroad.

A location-specific combination of personnel and organizational measures involving various structural and mechanical property protection and electronic monitoring systems is designed to prevent unauthorized persons from accessing the company premises and/or buildings/building sections and potentially endangering employees, business partners and visitors or even causing them harm.

Information technology and information security

Information and data are exposed to a range of constantly growing threats with regard to availability, confidentiality and integrity.

Risks arise through not only the organizational and IT networking of locations and complex systems, but also the growing need for remote access for customers and employees. In addition, the use of new forms of technology (e.g. cloud technology, software-defined networks) entails additional risks. The use of licensed or self-created software can also harbor risks if the license agreements, which are subject to constant amendment, are not observed.

Disruptions to or the failure of application-critical IT systems, IT applications and infrastructure components can severely compromise the management of business and production processes and cause serious harm to the business. External influences or incorrect programming and operation or even manipulation can also expose data to the risk of being falsified, destroyed, spied on or stolen. Blackmail attempts through the installation of ransomware are currently being widely reported.

Potential risks relating to information technology are limited through modern IT infrastructure standards, IT security rules, IT process harmonization, IT security training and adequate precautions to protect against the loss of data, unauthorized access to data or misuse of data. Regular investment and security updates ensure that the software and hardware installed uses state-of-the-art technology. Appropriate back-up and recovery procedures are also implemented, along with virus scanners and firewalls to avert risks.

We are also strengthening our processes and technologies for monitoring our networks and systems so that we can identify anomalies or attacks early on. The technical configuration, functional security structures and efficient operation of the IT architecture are reviewed on a regular basis with competent service providers certified to ISO 27001 and continuously improved.

In addition, in fiscal 2021 Rheinmetall started an extensive IT insourcing program with the objective of fully offering all core IT competences within the company again. This was the reason for founding Rheinmetall IT Solutions GmbH Establishing new structures can temporarily result in additional risks. It is possible that Rheinmetall cannot recruit the necessary level and quantity of IT expertise on the market or that the current extremely extended hardware delivery times negatively impact the planned success of the program.

Mergers and acquisitions

Acquisitions remain an important element of the Group's ongoing internationalization and growth strategy in order to improve and expand its market positioning, supplement existing business and penetrate new segments. In 2021, in connection with the digitalization strategy being pursued by Rheinmetall, the activities of EMT, the drone manufacturer, were acquired. A further successfully concluded acquisition project in the area of mobile medical technology was the acquisition of Zeppelin Mobile Systeme GmbH. Furthermore, divestments of individual business units could also be a strategic option within the scope of active portfolio management.

In accordance with strategic requirements and guidelines, transactions are subjected to an analysis of opportunities and risks through standardized processes such as extensive due diligence procedures and are assessed on the basis of yield/risk considerations. When necessary, we involve external experts and consultants in the transaction processes. Furthermore, we ensure that contracts are designed in a way that is commensurate with the risk, in particular by obtaining warranties of specific properties or guarantees and by agreeing purchase price mechanisms and liability clauses or taking out appropriate insurance policies. Despite a careful approach, it is always possible that some acquisitions do not ultimately come to fruition – for example, due to regulatory obstacles.

Following approval proceedings carried out over several stages, the Executive Board and, where the transaction volume exceeds defined value thresholds, the Supervisory Board of Rheinmetall AG decides on the implementation of the acquisition or divestment project.

Acquisitions always harbor business risks because they inherently entail a range of imponderables arising from the integration of new employees, technologies, products and processes. The integration process could, for example, prove to be more difficult, time-consuming and cost-intensive than originally expected. We have put in place the structures and processes required for ensuring the smooth integration of companies and work, for example, according to a standardized post-merger concept. Our many years of experience with the successful integration of companies also serve us well.

It may also be the case that the acquired company does not fare quite as well following integration as was originally hoped or that the targets, synergy potential and cost-savings that the acquisition was expected to bring about are not, or only partially, achieved. In addition, risks can arise in connection with the activities of newly acquired companies that were either not previously known or not considered significant. Acquisitions can also negatively impact the debt ratio and financing structure and lead to an increase in assets and divestments, including goodwill. Difficulties may result primarily from impairments of goodwill due to unforeseen business developments. Furthermore, such transactions may well result in considerable acquisition, administration and integration expenses.

Joint ventures and shareholdings

In addition to improved access to growth markets and new technologies, joint ventures and shareholdings help to leverage synergy effects and improve cost structures so that we can confront the competitive situation more effectively. Financial obligations or additional financing requirements may arise from the acquisition of a shareholding or the establishment of a joint venture or from their business activities. Joint ventures and shareholdings always harbor risks because it is impossible for us to counter any potential negative impact on our business by exerting sufficient influence over corporate governance processes or business decisions. Joint ventures also harbor risks associated with the integration of employees, technologies, products and processes. Likewise, strategic alliances can entail risks because, in certain areas, we might find ourselves in competition with the same companies with which we are also collaborating. Any necessary portfolio or structural measures could result in additional financing requirements.

Risks affecting Group companies can result in reductions in earnings in the single-entity financial statements of Rheinmetall AG as the parent company. If there are profit transfer agreements or loss-sharing arrangements in place, these reductions in earnings can arise directly from the assumption of losses incurred by the Group companies. Furthermore, loss of assets or a deterioration in future prospects at the Group companies can result in impairment losses.

Opportunity management

Opportunity management in the Rheinmetall Group

The new structure of the Rheinmetall Group under Rheinmetall AG with its five divisions - Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators as well as Materials and Trade - aims to leverage the existing strengths and synergies within the company and to take advantage of the related opportunities.

Our business policy is geared towards maintaining and expanding our current business liberties and financial flexibility. The goal is to ensure the long-term and economically successful existence of Rheinmetall for the benefit of all stakeholders. Opportunities that present themselves must be identified early and systematically and the accompanying potential for success must be exploited in order to be able to continue growing sustainably in dynamic markets. To this end, market, industry and technology trends are continually monitored, including as part of integrated strategy and planning processes, and target markets are analyzed intensively and assessed in terms of their strategic and economic significance for the Rheinmetall Group’s areas of business.

The operating units are responsible for the identification and initial assessment of opportunities and the potential for success. They are supported in this by various functions at Group level, such as Corporate Strategy & Development.

Potential for current business operations is managed, among other things, in regular review sessions between the Executive Board and the heads of the divisions and central departments. Based on an examination of structured assessments of market, industry and competition data, discussions focus on economic, market, industry and sales developments as well as the competitive situation and technological trends. The next step involves defining strategic initiatives and operational measures that are aimed at realizing the potential opportunities that have been identified. This can entail a reallocation of budgets that are provided for exploiting opportunities. In addition, the opportunities that arise are logged and evaluated as part of the forecast prepared three times a year.

Opportunities and potential success deemed strategically important for the medium and long term are included in the three-year medium-term corporate planning on the one hand and, on the other, discussed at both global strategy and division strategy meetings for periods beyond this horizon, where they are assessed and prioritized in terms of their significance for the future development and assigned a budget if necessary.

As a technology group, we follow and promote continual product and technology innovations and their modifications. This is associated with a diversification of our product and service portfolio and the development of new and dynamic markets with the aim of acquiring new customers as well as supporting existing customers with growing challenges and encouraging their confidence in technology.

Opportunities due to increasing defence spending

Triggered by the military conflict between Russia and Ukraine, European nations in particular are expected to increase their defence spending. The conflict not only means that certain countries of Western and Eastern Europe are supporting Ukraine with deliveries of military equipment from their own stocks, but has also increased their willingness to improve the equipment of their own armed forces in terms of both quality and quality and especially with regard to military capabilities for national and alliance defence. In the short and medium term, this will result in a rising number of new, additional armament procurement projects that offer great business potential for Rheinmetall as one of the most important European armed forces suppliers.

Significant, concrete business opportunities for Rheinmetall will arise from the German government's announcement at the end of February that it would create a “special armed forces fund” in the 2022 federal budget in response to the current conflict in Ukraine. This special fund, which is to enshrined in Germany's Basic Law, is to be endowed with a one-off investment of €100 billion and will serve to expand and improve the equipment of the German armed forces. In addition, the German government announced that it would henceforth meet the NATO target every year and invest at least 2% of its gross domestic product in defence. This means that defence spending in Germany, which most recently amounted to around €47 billion (2021), will soon increase to between €70 billion and €80 billion per year. The German armed forces' planned and new armaments projects can now be financed and implemented faster. As one of the major suppliers of main weapons systems to the German armed forces, Rheinmetall will benefit from this development and generate considerable additional business with its primary customer.

Opportunities due to automation and digitalization of armed forces

Apart from the additional business potential resulting from increasing defence spending, there are significant opportunities for Rheinmetall, in particular from soon-to-be achieved technology leaps in the areas of automation, robotics, artificial intelligence, miniaturization, cyber security and digitalization at our customers in the security services area. In this respect Rheinmetall has aligned its strategy as a technology corporation and created structures which identify such technology, market and customer trends at an early stage and have them integrated into in-house research and development projects.

In the portfolio there are already a large number of innovative high-tech solutions for the armed forces of tomorrow. Examples include AI-supported assistance systems for soldiers on deployment, simulation solutions, autonomous system solutions for interference-free and fully automated communication or drone defence systems. To supplement its automation portfolio, Rheinmetall is developing autonomous and remote-controlled unmanned ground and air systems which are supplemented for the battlefield on the basis of digitalization solutions.

Opportunities due to fleet renewal

The Vehicle Systems division is well positioned to participate successfully in the tenders for major European military vehicle programs in the medium to long term. Before the outbreak of the war between Russia and Ukraine, we anticipated demand for around 400 medium-weight and heavy tracked vehicles in Germany and for approximately 850 in Europe. For medium- and light-weight protected wheeled vehicles, we estimated demand at over 4,000 in Germany and Europe. Oversees, particularly in Australia and the USA, we estimated more than 4,000 additional tracked vehicles and at least the same number of protected wheeled vehicles. In the markets relevant for Rheinmetall, we forecast market potential for military vehicles of well over € 100 million over the next few years. Against the backdrop of the war in Eastern Europe, this potential and the underlying vehicle unit figures are likely to increase further.

Opportunities due to consolidation

Other growth opportunities may arise for Rheinmetall as a result of the expected ongoing consolidation process in the European defence market. These may occur as a result of targeted acquisitions of products and/or technology or on the basis of company acquisitions allowing more rapid regional market access.

Opportunities due to conventional drives

The combustion engine is subject to increasingly stringent international regulations regarding the emission of pollutants, especially climate-damaging carbon dioxide. This will require ever more complex solutions and, in turn, additional and more sophisticated components. The Sensors and Actuators and Materials and Trade divisions offer a large range of innovative and competitive components and systems which take account of these rising demands. These include divert-air valves, wastegate actuators and pressure control valves for exhaust gas turbochargers as well as specially coated pistons, plain bearings and engine blocks, and variable oil, coolant and vacuum pumps.

Opportunities due to expertise in lightweight construction

In parallel with the transition toward electromobility, lightweight construction methods will play an increasingly important role. Through the strategic stake acquired in 2020 in Carbon Truck & Trailer, a startup specializing in the development and production of innovative supporting components made from carbon-fiber-reinforced plastic, Rheinmetall is aiming to support the partner in the industrialization of the manufacturing process. This opens up the strategic opportunity to also develop additional lightweight construction applications as well as integrated modules and systems through the use of further processes and products from Rheinmetall.

Opportunities due to new drive concepts

Demand for electric drives and hybrids as a bridge technology to electromobility will increase. With components such as systems for heating and cooling electric drive components, purely electrically operated auxiliary units or DC link capacitors, such as are developed in the Sensors and Actuators division, and additional solutions such as cast components for battery trays in electric vehicles from the Materials and Trade division combined with the ongoing growth of the electric drive portfolio, we see great opportunities of continuing to grow in this transformation to alternative drive forms. In addition to products for battery-electric vehicles, Rheinmetall divisions are also developing components for fuel cells.

Opportunities in the area of ecological and economic sustainability

New drive systems, driven by synthetic fuels, power or hydrogen will play a great role in the future, also with military vehicles. With its expertise in the civilian business, Rheinmetall can generate extensive synergies here for developing military vehicles. Furthermore, the assessment across the entire life cycle from development, including operations right up to recycling, secures additional opportunities for both ecological and economic sustainability.

Internationalization and geographical opportunities
Rheinmetall intends to continue optimizing its business activities from a geographical viewpoint in the future, according to the needs of the automotive markets. The emerging economies of India and China in particular are expected to harbor the biggest growth potential for automotive manufacturers and their suppliers due, on the one hand, to rising demand for passenger vehicles and light- and heavy-duty commercial vehicles and, on the other, to the introduction of increasingly strict requirements to reduce emissions of pollutants and carbon dioxide. For our products in the area of safety technology, there are particularly attractive growth opportunities in Asia and Australia, but also individual countries in Western and Eastern Europe.

Diversification and accessing new markets
Alongside our core markets, associated markets offer further opportunities of growing with modified products. Within the “Beyond Automotive” strategic initiative, the Sensors and Actuators division is already developing solutions for cooling server farms in data centers and for CO_2-neutral electricity generation in power electronics. In the area of sensor technology as well, products are currently being developed which can be transferred from applications in the automobile industry to other industries. Over the last few months, in the area of plain bearings there has been a successful entry into the strongly growing market for renewable energies, which also present a relevant growth opportunity for Rheinmetall.

Opportunities due to hydrogen technology
Hydrogen is an important element of our strategy. We are dealing with mobile and also stationary hydrogen technology applications. Alongside the secure production and distribution of hydrogen and data security for the hydrogen infrastructure, the focus of our commitment will be on the fuel cell system itself. A broad customer portfolio and current booked business exceeding € 123 million in the hydrogen area reflects the leading role Rheinmetall is targeting in this future growth market.

Control and risk management accounting-related

Internal accounting-related control and risk management system
The internal control and risk management system related to the accounting process at the Rheinmetall Group includes all principles, procedures and measures, which ensure, by both organizational and technical means, that all business processes and transactions are recorded in the accounting system promptly, accurately and consistently. In addition to defined control mechanisms, (e.g. manual coordination processes and technical coordination processes for systems), this includes the separation of administrative, executive, settlement and approval functions together with guidelines and operating instructions. Changes to the economic, legal and regulatory environment of the Rheinmetall Group are analyzed to determine whether adjustments to the accounting-related control and risk management system are necessary.

Accounting guidelines – Our IFRS accounting guidelines cover all the regulations of the International Financial Reporting Standards (IFRS) that are of relevance to Rheinmetall AG. They explain the IFRS regulations and specify accounting procedures. The guidelines must be observed by all companies included in the consolidated financial statements, thereby ensuring standardized accounting. The accounting guidelines are reviewed at least once a year and amended where necessary. Companies are informed about specific changes to guidelines. The content of the guidelines is the responsibility of the main Accounting department of Rheinmetall AG.

Accounting processes in companies included in the consolidated financial statements – It is the responsibility of the management of the respective companies to prepare the financial statements of companies included in the consolidated financial statements. The accounts and financial statements are prepared using SAP-based accounting systems (SAP-FI). Procedures are implemented in the accounting process to ensure the correctness of the accounts and financial statements. The management of each Group company monitors compliance with IFRS accounting guidelines and other guidelines and operating instructions in force across the Group. The management must confirm the correctness of the financial statements in a corresponding declaration.

Consolidation and Group accounting process – The main Accounting department of Rheinmetall AG is responsible for central management of the Group accounting process. It stipulates the schedule for the consolidated financial statements and monitors compliance with deadlines.

The consolidated financial statements of Rheinmetall AG are drawn up with the aid of the consolidation software SAP SEM-BCS. A standardized, binding chart of accounts is incorporated into this system, which covers virtually all the information required for the IFRS consolidated financial statements of Rheinmetall AG. The individual companies record the financial statements prepared in accordance with IFRS accounting guidelines in the consolidation software. After this IFRS single-entity financial statement data is recorded, it then undergoes an automatic plausibility check and system-based validation. If error or warning messages are displayed during this process, these are to be analyzed and dealt with by the person responsible for the single-entity financial statements. Employees in the main Accounting department then perform additional automatic and manual checks. The manual and automated consolidation measures undergo system-based checks and automatic plausibility checks.

The consolidated financial statements are also audited on the basis of standardized reports using comparisons of target and actual performance, trend and deviation analyses and detailed evaluations. A check is carried out every quarter to ensure the completeness of the scope of consolidation.

Auditing and monitoring – As a central department that is independent in terms of instructions in line with a guideline promulgated by the Executive Board, Internal Audit uses a systematic and targeted approach to examine workflows, structures and policies at Group companies and the Group headquarters for their correctness, effectiveness and economic efficiency on the basis of an audit plan adopted by the Executive Board. The audit plan establishes the focal areas for the risk-oriented audit activities and the scope of the audits to be performed. These are then implemented by Rheinmetall employees or auditing companies as mandated by Rheinmetall AG. If necessary, the Executive Board will also commission Internal Audit to conduct special audits on an ad hoc basis. Risks identified and weaknesses discovered during audits are promptly eliminated by those responsible in each case. The central department Internal Audit monitors implementation of the necessary improvement measures. The Executive Board and Audit Committee of the Supervisory Board are regularly informed of the results of the audit and of the implementation status of improvement measures.

The auditors examine the consolidated financial statements and the combined management report to determine whether they comply with applicable accounting regulations and other relevant provisions. They check the IFRS accounting guidelines and make these available to the auditors of companies included in the consolidated financial statements. The auditors of these companies check whether the IFRS accounting guidelines have been applied in full to the financial statements prepared for consolidation purposes and establish the correctness of the annual financial statements prepared in accordance with applicable accounting principles. The audits performed by these auditors also include an assessment of the effectiveness of the accounting-related internal control system based on spot checks in subdivisions.

The Governance Risk Committee, which comprises the heads of Legal, Compliance, Internal Audit, Accounting and Controlling, also discusses the implementation, management and compliance of internal processes at its regular meetings. The Executive Board also addresses the company's risk situation at its monthly Executive Board meetings as part of update reports on the business situation.

Assessment of the general risk and opportunity situation

Assessment of the general risk and opportunity situation

Potential risks for companies in the Rheinmetall Group include, on the one hand, factors that cannot be influenced, such as the national and international economy and the general economic situation, and, on the other, risks that can be influenced directly, which are generally operational risks. The aforementioned risks are not necessarily the only risks to which the Rheinmetall Group is exposed. Risks that have not yet been identified or that are still deemed insignificant can materialize under altered circumstances, hinder business activities and adversely impact the assets, financial situation and earnings of the Group. Our business policy is geared towards maintaining and expanding our current business liberties and financial flexibility. The goal is to ensure the long-term and economically successful existence of Rheinmetall for the benefit of all stakeholders. Opportunities that present themselves must be identified early and systematically and the accompanying potential for success must be exploited. Compared with the previous year, the Rheinmetall Group's opportunity situation has improved overall, particularly thanks to the considerably improved potential opportunities related to the announcement of the German government of considerably increasing its defence spending. In addition – in the light of the war in Ukraine – increasing business opportunities for Rheinmetall are to be anticipated in other European countries.

As part of its audit of the consolidated annual financial statements, the auditor, Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Düsseldorf branch, examined the early risk identification system of the Rheinmetall Group to ensure that it complies with the requirements of Section 91(2 and 3) of the German Stock Corporation Act. In accordance with the basis outlined for the assessment of risk factors and taking into account the overall risk situation, major asset, financial and earnings risks jeopardizing the Rheinmetall Group on a long-term basis were not identifiable during the past fiscal year. Compared with the previous year, the overall risk situation of the Rheinmetall Group did not change significantly in 2021, despite the ongoing coronavirus pandemic, a global supply shortage for semiconductors, price increases for various raw materials such as steel, aluminum, silicon or magnesium as a result of a global shortage of raw materials, and increased energy and freight costs. A large part of these cost increases were hedged using price adjustment clauses. The assessment of the overall risk situation is the product of consolidated consideration of all individual material risks. We are confident that the risks presented are limited and manageable. In our opinion, as of the end of the reporting period, no risks exist from today's perspective on an individual basis, in combination with other risks or as a collectivity that may significantly jeopardize the continued existence of Rheinmetall AG and the Rheinmetall Group as a going concern in the foreseeable future.

Report on expected developments
Economic outlook

High forecast uncertainty – but also opportunities for a dynamic upswing
In its 2021/2022 annual report, released before the outbreak of the war between Russia and Ukraine, the German Council of Economic Experts points to the high degree of forecast uncertainty for the German economy in 2022. This is due to both continuing restrictions resulting from the coronavirus pandemic and supply and capacity bottlenecks: “Uncertainty about the coming economic development is high,” says the German Council of Economic Experts in its annual report. At the same time, experts also see opportunities for economic development: “However, if the bottlenecks are overcome more quickly, opportunities will open up for the built-up consumer and investment demand to provide a dynamic upswing.” With regard to the global economy, the International Monetary Fund (IMF) cites pandemic and inflation events as well as supply chain problems as influencing factors in its World Economic Outlook from January 2022. Against this backdrop, the IMF experts forecast global economic growth of 4.4% for 2022. This is 0.5 percentage points less than assumed in October 2021.

According to the IMF, the omicron variant of the coronavirus and ongoing disruptions in global supply chains were the main contributors to the revision. In the two largest economies, the US and China, special factors also weighed in. These were the real estate crisis in China and the preliminary failure of the US government investment package. For both countries, the IMF has revised its forecasts downward compared with the October 2021 forecast, for the US by 1.2 percentage points to 4.0% and for China by 0.8 percentage points to 4.8%. In contrast, economic output in Japan is expected to rise by 3.3%.

The latest IMF study projects growth of 3.9% for established industrial nations. The forecast for the eurozone is 3.9%.

Germany’s strongly export-oriented industry has been suffering for some time from problems in global supply chains and will feel the impact of the slowdown in Chinese economic growth in 2022. According to the Federal Statistical Office, German exports to China fell by 7.9% year-on-year in December 2021. Against this backdrop, the IMF predicts growth of 3.8% in Germany in its World Economic Outlook for 2022. Compared with the October 2021 forecast, this represents a reduction of 0.8 percentage points.

For developing and emerging economies, the IMF estimates economic growth of 4.8%. In Brazil, the increase will be significantly lower at 0.3%, following a year-on-year increase in economic output of 4.7% in 2021. The IMF forecast for Russia predicts growth of 2.8% in 2022.

Due to the military conflict between Russia and Ukraine, a further determining factor for the economy has been added, which – not least due to the possible consequences of the economic sanctions imposed by NATO and EU countries against Russia and Russia’s potential counterreaction – could develop into a noticeable stress test for economic development in the countries involved. At the very least, the military conflict in Eastern Europe exacerbates existing macroeconomic uncertainties in major parts of the global economy and means additional risks in relation to the security of existing supply chains, particularly in the civilian segment.

Defence spending expected to increase worldwide
Nouriel Roubini, professor at New York University, believes that, in 2022, the world will increasingly be faced with geopolitical risks in addition to the pandemic and systemic risks such as the increase in refugees. According to Roubini, these chiefly include the risks as a result of the Russia-Ukraine conflict, the increasing military pressure from China in the South China Sea and Taiwan, and Israel’s possible response to an Iran on the verge of becoming a nuclear power. In addition, the German Federal Ministry of Defence sees threats such as drones, hypersonic weapons and cyberattacks as becoming increasingly significant.

In her first speech to the Defence Committee on January 26, 2022, the new Defence Minister Christine Lambrecht therefore argued in favor of an increase in the German defence budget and called for procurement to be modernized even before the outbreak of war in Eastern Europe. The U-turn in German security and defence policy announced by Chancellor Olaf Scholz in the German Bundestag on February 27, 2022, is a comprehensive response to this demand. The German government will create a “special armed forces fund” of €100 billion in order to quickly implement the German armed forces’ most urgent procurement projects. In addition, the German government is committed to the NATO spending target and henceforth intends to invest at least 2% of its gross domestic product in defence every year. German defence spending, which most recently amounted to around €47 billion (2021), will therefore increase to between €70 billion and €80 billion.

The trend toward rising defence spending is worldwide. It is also reflected in IHS Markit’s forecast for 2022, which was released before the war in Ukraine started. It suggests that global defence budgets will increase again slightly overall to around $1,662 billion in 2022, compared with $1,626 billion in the previous year. According to IHS Markit’s analysis, defence spending will also increase in Germany’s partner countries such as Australia, France, Great Britain and Hungary in 2022. IHS Markit likewise anticipates an increase in defence spending in the US. In the country with the largest defence budget, the experts from IHS Markit expect spending of $759 billion in 2022, whereas the US defence budget totaled $751 billion in 2021.

Need to catch up provides good growth prospects for the automotive market

Industry experts such as Ferdinand Dudenhöffer, professor at the Center for Automotive Research (CAR), expect automotive markets around the world to continue improving slightly in 2022. The shortage of semiconductors will continue to occupy the German automotive sector in particular, but the President of the German Association of the Automotive Industry Hildegard Müller sees hope for the industry: “The situation should hopefully improve in the second half of 2022.” In addition, the aging vehicle stock means that high growth rates can be expected in the long term.

In 2022, IHS Markit analysts expect growth in global production of passenger cars and light-duty commercial vehicles up to 6.0 t of 8.5% to 82.9 million units. This puts the production volume well above the comparable figure for 2021, when approximately 76.4 million vehicles left the assembly lines.

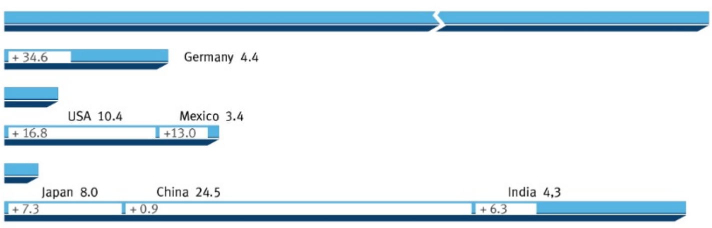
For USMCA, IHS Markit is forecasting strong growth of 16.6%, predominantly in Canada, where growth is expected to reach 24.5%, followed by the US with growth of 16.8%.

The market analysts are also optimistic for Western Europe, where they anticipate production growth of 23.3%. In Germany, growth is expected to amount to 34.6%. An increase of 17.2% is expected for France, while growth in Spain is expected to be 22.8%. IHS Markit forecasts growth of 18.3% for Great Britain. In Eastern Europe, the production volume is expected to increase by 13.0%.

In Asia, IHS Markit expects an increase in production volume of 2.6% in 2022. The forecast projects growth of 0.9% for China, while production in Japan is expected to increase by 7.3%. For the Indian automotive market, growth of 6.3% is estimated for 2022.

Production of passenger cars and light-duty commercial vehicles up to 6 t million

	Change %	2022	2021
World	+ 8.5	82.9	76.4
Western Europe	+ 23.3	11.6	9.4
Eastern Europe	+ 13.0	3.8	3.4
USMCA	+ 16.6	15.2	13.0
Brazil	+ 15.3	2.4	2.0
Asia	+ 2.6	48.3	47.0



Source: IHS Markit, January 2022

Even the ongoing shortage of semiconductors in 2022 will not be able to stop the trend to electromobility. In this area China, the USA and Germany are developing to be the largest sales markets for electric cars. Already in 2021, more than every fourth newly registered car in Germany was equipped with an electric drive. Solely as a result of the stricter CO_2 limits, car manufacturers across the world are being forced to expand their electric share. These also include German manufacturers. They are assisted by the government commitment to continue state support of e-cars unchanged in 2022.l

Truck production struggles with shortage of semiconductors

The shortage of semiconductors also reached commercial vehicle production in 2021. According to estimates by major truck manufacturers, the ongoing supply problems will continue to slow down production in 2022. Against this background, the experts at IHS Markit forecast a year-on-year decline of around -1.5% in the global production volume of heavy trucks over 6.0 t in 2022. However, major regional differences are emerging. While a significant decline of around -17.1% is expected for China in particular, the IHS analysts forecast a production increase of 18.5% for North America. In India, truck production is even expected to increase by 19.5%. For Japan, the IHS Markit experts expect production to remain at the previous year's level. In Western Europe, IHS Markit has forecast a production increase of 9.9%. The signs for the South American market are also good. There, for example, growth of around 9.2% is expected for Brazil.

Production of engines for heavy-duty commercial vehicles over 6.0 t '000

	Change %	2022	2021
World	– 1.5	3,609	3,665
Western Europe	+ 9.9	402	365
Eastern Europe	+ 4.9	49	47
USMCA	+ 18.5	662	558
Brazil	+ 9.2	189	173
Asia	– 8.9	2,240	2,460

Source: IHS Markit, February 2022

Rheinmetall Group expectations

Sought-after system partner for state-of-the-art defence technology – increasing growth momentum

In the area of security and defence, Rheinmetall is an important system partner in matters of modern defence technology for the German armed forces and for the armed forces of a large number of Germany's partner countries. This is demonstrated by numerous sales successes in recent years, which have moved up Rheinmetall's annual order intake and order backlog to a new quantity level and forms the foundation for sales growth over the new few years. As a result of the German government's stated intention to provide considerably more funds for projects related to equipping the German armed forces than were scheduled in previous planning, growth momentum will increase perceptibly. With its international network of locations for munition and vehicle plants, Rheinmetall has sufficient production capacity to react to additional orders in a flexible fashion.

A trend of previous years continued in fiscal 2021: A rising share of incoming orders in the divisions primarily servicing the markets for defence technology originate from NATO member states or their equivalent partner countries. This group of nations makes up 87% of the order backlog to the end of the 2021. This progressively minimizes business risks for Rheinmetall in respect to the export approval business of the relevant responsible governments.

Alongside the German armed forces, which after the announcement of the German defence spending remains by far the most important individual customer at Rheinmetall even over the next few years, we have established ourselves as preferred partner on the armed forces there on additional "home markets" in the context of our internationalization strategy. This applies to Great Britain, where we manage the majority of a joint venture with BAE Systems and also to Australia and since 2020 also to Hungary. In fiscal 2021 we started establishing a new modern production site for our Lynx infantry fighting vehicle. We are in these markets with large volume system orders, but also have significant component business. Furthermore, with our capacities there we are in the position to service increasing requirements in Europe and Germany or to acquire further export business.

In Germany we received two important orders in the last fiscal year. They underscore our growth opportunities on the area of security and defence technology and are of particular strategic importance to Rheinmetall. Firstly for the military service business we concluded a master agreement with the German armed forces on the logistical support of the armed forces in deployment. Secondly, we took an important step on the key strategic market of internal security. The Federal Ministry of the Interior awarded Rheinmetall the contract to supply the new all-terrain, protected multi-purpose vehicle of the Survivor R type as new "Special Vehicle 5". The order initially covers 55 vehicles in variants for the federal police force and the riot police of the German states with a high two-figure million euro order volume, which can be increased to a three-figure euro volume on the basis of an option agreed for additional vehicles.

Rheinmetall will use growth opportunities in the market for new drive forms

With its products and innovations, Rheinmetall is well positioned both for the further optimization of the combustion engine and also for alternative drive forms and electromobility and a recognized development partner for the international automobile manufacturers. There is a rising share in new business booked for components relating to new vehicle models with hybrid or purely electrical drives. But in the last fiscal year considerable new orders were also posted in the area of fuel cell technology, which will have a role to play in the medium term, particularly for commercial vehicles.

As part of its electrification strategy, in January 2022 Rheinmetall announced the foundation of a joint venture with the PolyCharge America, the American start-up, on developing, producing and marketing DC-link capacitors Rheinmetall holds 75% in the new joint venture. With its combined expertise, Rheinmetall is working on the improved efficiency and range of battery-electric powered vehicles and sees great growth potential in this market segment.

In addition, at its Neuss site Rheinmetall is planning a high-performance technology and industrialization center for mobile, and also for stationary, hydrogen technology applications Alongside the secure production and distribution of hydrogen and data security for the hydrogen infrastructure, the focus will be on fuel cell systems. In Neuss it is planned to advance in-house product-related research, development and industrialization of hydrogen technology.

Executive Board statement on expected development in fiscal 2022

In connection with Rheinmetall's strategic orientation and in order to strengthen our profile as an integrated technology group, at the start of the past fiscal year we abandoned our organizational segmentation into the Defence and Automotive sectors. The divisions, as the units responsible for the operating business, are now being managed directly by the Executive Board of Rheinmetall AG. The Vehicle Systems, Electronic Solutions and Weapon and Ammunition divisions operate predominantly in the markets for security and defence products, while the Sensors and Actuators and Materials and Trade divisions supply international automotive manufacturers with essential parts from their current product portfolio. Since the beginning of 2021, the Pistons division, which combines small- and large-bore piston business, has been continued as a non-core business and has been recognized as a discontinued operation since the beginning of May 2021. In light of the imminent transformation of the international automotive industry, Rheinmetall is pursuing the goal of handing over the small- and large-bore pistons business to new owners that will be able to continue the business appropriately. However, offers for individual investments or parts of companies are also being considered.

Macroeconomic uncertainty continues to shape the development of general economic conditions

At the beginning of fiscal 2022, there is still a relatively high level of forecast uncertainty in respect to the development of the economy in Germany and in the international market environment. This results –alongside ongoing uncertainties relating to future restrictions from the coronavirus pandemic – primarily from the apparent supply chain problems and capacity bottlenecks as well as from global inflation. At this moment in time, these uncertainties are being amplified by the unpredictable economic risks due to the military conflict between Russian and Ukraine. Due to this general situation and the resulting potential risks for business performance, we also are facing greater forecast uncertainty regarding sales and earnings performance in fiscal 2022.

General conditions for security technology are positive, further recovery of automotive markets expected

We still consider the framework conditions for our defence activities to be highly stable and positive. In the light of actual or potential conflicts, the modernization or replacement of military equipment is still ranked as a priority in many of the countries we supply. In view of the military conflict in the Ukraine, investments in national security are becoming more important in many places. This is reflected particularly in the increased, and in some countries, further increasing defence spending. Our expectations of a continued growth trajectory in business with products for military and civilian security services are based on this and on the historically high order backlog in the defence technology divisions.

In contrast, the automotive markets that Rheinmetall supplies continue to face comparatively high volatility risks. However, in line with expert forecasts, we expect international automotive production to pick up again in 2022, without reaching the pre-coronavirus level when approximately 89 million vehicles were produced. In February 2022, the experts from IHS Markit forecast annual production of light vehicles (passenger cars and light-duty commercial vehicles up to 6.0 t) of 82.9 million vehicles for 2022, which corresponds to an increase of around 9% compared with the production numbers for 2021.

Rheinmetall Group forecast for 2022: Sales growth with stable high margins

Based on the current market outlooks, in fiscal 2022 we anticipate growth in sales and anticipate a stable, high operating margin combined with an improved operating result.

The Rheinmetall Group's annual sales are expected to increase organically by between 8% and 10% against the previous year's level in fiscal 2022 (previous year's sales: €5,658 million). This growth forecast does not include the currently unquantifiable short-term effects from the intended increase in German defence spending or other business-relevant consequences from the Ukraine conflict. This applies not only to the individual divisional forecasts but also for the forecasts of the development of other key Group key figures.

Based on this sales forecast and taking into account holding costs, in fiscal 2022 Rheinmetall is expecting to see an improvement in the Group operating result and a Group operating margin of between 10% and 11% (previous year's margin: 10.5%).

In line with the relevant current developments, Rheinmetall will make any necessary adjustments to its forecast during the course of the year.

Development of divisions in fiscal 2022

For the Vehicle Systems division, in fiscal 2022 we anticipate a considerable increase in sales, supported in particular by the production ramp-up of the Lynx infantry fighting vehicle for the Hungarian customer (sales for the previous year: €1,883 million). In terms of margin development, on the basis of the planned product mix we expect the operating margin to reach the level of the previous year (previous year's margin: 9.2%).

In the Weapon and Ammunition division, for fiscal 2022 we anticipate, based on the good order situation and rising sales in connection with large projects in the Vehicle Systems division, a slight upturn in sales (sales for the previous year: € 1,233 million). The operating margin is expected to reach the previous year's very high level again (previous year's margin: 17.6%).

For the Electronic Solutions division, in 2022 we anticipate sales at the previous year level, underpinned by deliveries for the large system projects in the Vehicle Systems division and business for air defence systems with international customers (sales for the previous year: €932 million). In terms of the operating margin, we are expecting the figure to be at the previous year's high level (previous year's margin: 10.6%).

The Sensors and Actuators division anticipates a slight sales upturn in the current fiscal year- on the basis of the development in international light vehicle production projected for 2022 and due to planned growth in the truck business (sales for the previous year: €1,315 million). The operating margin is likewise expected to improve slightly (previous year's margin: 7.8%).

For the Materials and Trade division, in fiscal 2022 we are also anticipating slightly higher sales, driven by the expected continuation of the market recovery in automotive production and the ongoing upturn in aftermarket business (sales for the previous year: € 651 million). Based on this growth, the division is also anticipating a slight increase in its operating margin (previous year's margin: 7.8%).

Development of other Group key figures and key performance indicators in fiscal 2022

Based on the expected improvement in Group EBIT, despite a slight deterioration in the net interest result we expect the Group's pre-tax earnings (EBT) to be higher than the previous year's figure of €582 million.

On the basis of the planned business and earnings development, we expect to achieve a return on capital employed (ROCE) of 18% to 20% in fiscal 2022 (previous year (pro forma): 19.3%).

In terms of operating free cash flow (OFCF), in fiscal 2022 we expect to achieve our current target corridor of between 3% and 5% of consolidated sales (previous year: €419 million or 7.4%).

Positive net income of €160 million to €190 million is expected for the Rheinmetall AG management holding in fiscal 2022 (previous year: €180 million).

Rheinmetall Group - forecast business performance in 2022

		2022	2021
Sales			
Group	€ million	organic sales growth between 8% and 10%	5,658
Division Vehicle Systems	€ million	clear increase	1,883
Division Weapon and Ammunition	€ million	slight increase	1,233
Division Electronic Solutions	€ million	on level of previous year	932
Division Sensors and Actuators	€ million	slight increase	1,315
Division Materials and Trade	€ million	slight increase	651
Operating result			
Group	percent	between 10% and 11%	10.5
Division Vehicle Systems	percent	on level of previous year	9.2
Division Weapon and Ammunition	percent	on level of previous year	17.6
Division Electronic Solutions	percent	on level of previous year	10.6
Division Sensors and Actuators	percent	slight increase	7.8
Division Materials and Trade	percent	slight increase	7.8
EBT			
Group	€ million	above previous year	582
ROCE			
Group	percent	between 18% and 20%	pro forma* 19,3
OFCF			
Group	percent	between 3% and 5%	419

* Reclassification of discontinued Pistons business as of January 1, 2021

Non-financial aspects of business activities

We have consistently demonstrated our responsibility toward our employees and products and toward the environment and society for over 130 years. Founded in 1889, our technology company - rooted regionally and globally positioned - with its companies is integrated into the general political, regulatory, economic, ecological and social conditions of various countries and geographical regions. We are committed to fair competition and to lawful business conduct that not only shows integrity but is also social and ethical. Sustainable management has always been an integral component of our business and production processes and helps to secure the long-term future of our company. In addition to continuity, economic growth and compliance with the fundamental principles of good corporate governance, the careful use of natural resources is part of our self-image – to the benefit of our shareholders, our employees, for our locations and for the society in which we have a fixed place as corporate citizen.

Public interest in sustainability is generally rising, even if the European and German understanding on key areas, topics and aspects in the Environment, Social, Governance (ESG) categories may not be equally assessed, weighted and prioritized. Even so, over the past few years – at the United Nation's behest and in line with the objectives of the European Union – many countries, including Germany, have expanded their requirements for companies to take responsibility for upholding recognized human rights, labor, social, environmental and anti-corruption standards, both within and outside the bounds of the company. This relates to the impact of business activities on sustainable development in the world encompassing the entire value-added chain. But customers, shareholders, investors, non-governmental organizations and – not least – the company's own employees are also interested in getting a full picture of the company, its global business activities and their impact on people, the climate, and the environment. Inquiries from all sections of society are thereby increasing, as are expectations for transparency, scope, level of detail, informative value and comparability of company data on the very complex issue of sustainability.

Business model

Our world is changing rapidly in every respect – technologically, economically, politically and culturally. We lead lives that are more global, more connected, more digital than ever before and are constantly faced with new challenges that have to be overcome. For us at Rheinmetall, however, one thing is clear: Mobility and security are – and shall remain – basic human needs.

As an important supplier to the automobile industry, the civilian area makes a contribution that people the world over reach their destinations in a more environmentally friendly manner. In addition to the ongoing development of products for conventional drives, Rheinmetall is focusing on the development of systems for vehicles powered by hybrids, batteries, and fuel cells. We shape the mobility of the future with solutions for reduced emissions and electric drive systems. Hydrogen is considered a key element in the transition to a climate-neutral energy supply of the future. We are addressing mobile and stationary hydrogen technology applications. The spectrum extends from power generation derived from renewable energies across hydrogen production to its storage and distribution right up to its use.

We are a reliable partner for German and international armed and security forces. With its product and capability spectrum, Rheinmetall is a leading European systems supplier offering innovative, state-of-the-art and threat-appropriate security technology for military and civilian applications alike. We protect those who protect us all – against current and future threats.

The Rheinmetall Group's business model is described in detail under the "Basic information on the Rheinmetall Group" section.

Governance

This non-financial statement of the Group, which includes continuing and discontinued operations, was prepared in line with the requirements of Sections 315b, 315c in conjunction with Sections 289c to 289e HGB. Pursuant to Section 315b (1) sentence 3 HGB, reference is made to individual aspects also in non-financial aspects included in another part of the Group management report. We use the standards of the Global Reporting Initiative (GRI) as a reporting basis when preparing the non-financial statement. In this way we want to ensure transparency and comparability. The fiscal year is the reporting period for the non-financial statement of the Group, and there is an annual reporting cycle.

Sustainability organization

At Rheinmetall the responsibility for sustainability lies with the Executive Board as a whole. The central area Corporate Social Responsibility reports directly to the CEO. In consultation with the responsible central department managed by the Head of Corporate Social Responsibility, the Executive Board sets the strategic framework for sustainability activities. In cooperation with the CSR team, the local sustainability officers and the Executive Board, the CSR central department bundles the respective requirements and uses them as a basis to formulate Rheinmetall's future sustainability strategy.

With the Corporate Sustainability Board established in October 2021, sustainably has been even more strongly embedded within the entire company. This board is composed of members of the Executive Board, the divisional heads, the Head of the CSR central department and the heads of the Controlling, Compliance, Strategy, Purchasing, Human Resources, Corporate Communications central departments, the Head of Investor Relations as well as the two Chief Technology Officers. The Corporate Sustainability Board met for the first time in November 2021. At the meeting, the members discussed in detail the current regulatory developments and trends in the ESG area and the related requirements and challenges for Rheinmetall.

Sustainability also includes a material strategic component. As an interdisciplinary and cross-division topic, ESG is a fixed element of the activity of the Supervisory Board. For example, the members of the Supervisory Board deal with current ESG developments, with their importance for the corporation and its stakeholders and the resulting future challenges and opportunities. The Audit Committee treats not only risk management, but also the scope and depth of ESG reporting and the processes and internal controls implemented in collecting the data required for reporting.

Sustainability management

Continuous improvement and ongoing further development aligned to the changing requirements of our time are the basis for sustainability activities at Rheinmetall. Since the Corporate Social Responsibility organizational department was established in 2011, we have been working on an ongoing basis in improving the cooperation with the divisions and the country companies.

Various principles and international guidelines form the basis for our sustainability management:

- Corporate philosophy with vision and mission based on the values of respect, trust and openness;
- Code of Conduct for all employees with binding regulations which include topics such as human rights, anti-corruption, compliance, adherence to competition and anti-trust legislation;
- Principles of social responsibility (international framework agreement with reference to global standards such as the ILO);
- Supplier Code of Conduct;
- Ten Principles of the United Nations Global Compact on human rights, working standards, environmental protection and anti-corruption;
- The United Nations' Sustainable Development Goals;

- Charta der Vielfalt e.V. – a corporate initiative to promote diversity in companies and institutions;
- Six minimum standards on human rights: no forced labor, no child labor, freedom of association, occupational safety, no discrimination and fair remuneration.

Furthermore – alongside key performance indicators – aspects such as environmental protection and health and safety at work are included in target agreements with managers. These define targets for variable remuneration relevant to ESG, including areas such as energy efficiency or health and safety at work.

Reporting

In the context of its reporting on non-financial and sustainability-related performance, Rheinmetall aligns itself to the international standard of the Global Reporting Initiative (GRI).

Since October 2011, we have been reporting on our website about our activities in the area of sustainability under the heading “Responsibility”.

Since fiscal 2017, we have been submitting a non-financial statement every year.

In December 2021, over and beyond the legal requirements, the ESG Factbook reporting was published. On 116 pages we provide information in the Performance, People, Planet and Governance categories on topics defined as material and present our economic, social and ecological performance in the period from 2018 to 2020. In addition, the Factbook includes the GRI Content Index. An additional index refers to the covered reporting requirements of the Sustainability Accounting Standards Board (SASB).

For fiscal 2022, it is planned to extend the reporting to the 17 Sustainable Development Goals and the climate-related reporting in line with the criteria of the Task Force on Climate-related Financial Disclosures Initiative. In April 2022 – after signing the UN Global Compact in fiscal 2021, as tangible expression of our commitment for sustainability – we will publish the annual progress report, the so-called Communication on Progress (CoP). With this report we show transparently what progress the company has made in the area of corporate responsibility over the last year.

We are continuously developing our indicator system in accordance with internationally recognized standards and on the basis of internal and external requirements in order to align our external reporting even more specifically to the demands of groups such as investors and to make our sustainability performance – as well as the challenges and opportunities of long-term company development – more transparent.

Materiality analysis

At the end of 2016, we implemented a comprehensive materiality analysis to determine the material sustainability topics for the business activities of the Rheinmetall Group. In doing so we examined the potential impact of our business activities on sustainable development and determined stakeholder expectations in regard to the company. The GRI reporting standards formed the global reference framework for the analysis. In line with GRI requirements, the topics collected were then prepared in a materiality matrix and published in both the 2017 CSR Report and in the 2017 annual report. Assessed as material were the aspects customers, technology and innovation, competitiveness, ongoing value enhancement, compliance, internationalization, product quality and product safety, investments, supply chain, energy efficiency, fair remuneration, employee satisfaction, training and continuing education and attractive employer. Over the last four years, due to company changes and global trends, additional sustainability aspects such as alignment to climate change, protection of human rights, promoting biodiversity, protection of water resources and strengthening the circular economy have become significantly more important so that we have also integrated these topics in our sustainability reporting.

During the reporting period, Rheinmetall checked whether the analysis results obtained at the time, and the recently added report topics were up to date, and assessed that they remained valid. Nevertheless – also with a view to new strong trends in the area of sustainability and the soon-to-be introduced extensions and new requirements in respect to sustainability reporting — we will implement a new materiality analysis in the first quarter of 2022. As early as fiscal 2019, with an initial input-output analysis we dealt with the impact of the six chapters (financial, manufactured, intellectual, human, social and relationship, natural). A review of the provisional results are planned for fiscal 2022.

Integration of stakeholder groups

Sustainability management at Rheinmetall is based on the precautionary principle. Any possible adverse impact on humans and the environment as a result of the Group's business activities should be considered at an early stage and be excluded or reduced as far as possible. If we know the interests, positions, attitudes, opinions and concerns of our key stakeholders, we can focus our commercial decisions more effectively in line with their expectations. With 165 companies in 33 countries, we have a very prominent presence in our markets and enjoy continual and lively dialogue with various stakeholders, which include customers and business partners, private shareholders and institutional investors, employees, suppliers, representatives of the media, representatives of the worlds of science and research, society, politicians and authorities as well as representatives from associations and organizations. This allows us to establish and develop important relationships as well as to receive inspiration and specific proposals at an early stage, also for our sustainability strategy and activities.

For the exchange with our customers, we use a wide range of formats, such as personal meetings and participation in specialized trade fairs in Europe, America and Asia. In the wake of restrictions due to the COVID-19 pandemic, in fiscal 2021 the focus once again shifted from personal contacts to contact in virtual rooms and platforms.

For Rheinmetall direct contact with capital market participants is extremely important. The Executive Board and the Investor Relations team are engaged in continuous dialogue with investors and analysts and participate in investor conferences and road shows in Europe and the USA. However, as was the case in the previous year, these took place largely on digital communication platforms. In addition, there were numerous telephone calls with investors, analysts and private investors. Because of the pandemic, exchanges with private investors were possible only to a very limited extent due to the virtual Annual General Meeting. Up to two days before the Annual General Meeting, interested shareholders had the opportunity to submit their questions online to the Executive Board. This right was utilized extensively.

In dialog with our employees, a material element of our communication activities in fiscal 2021 was the focus on the transparent explanation of the strategy. In this connection we provided information to our employees, also on the basis of a global employee newsletter. In order to better steer and analyze employee conditions, we implement employee surveys with varying participation numbers and at various intervals. The aim is to determine and analyze employee commitment, employee satisfaction and the possibility to improve working conditions. In the year under review, a new prototype for a pulse check with 25 questions in three categories was developed. The experience and results from the pilot project, in which employees at the German sites of the Sensor and Actuators division participated online, were generally positive. For fiscal 2022, a roll-out is planned to the other four divisions of the Group.

More than ever the world is subject to dynamic change. Today responsible and effective representation of interests means that with their expert knowledge and publication of positions companies are involved on a constructive and and transparent basis in discussions in society and in the political and economic arenas. They can use their expertise for developing general conditions and viable solutions which promote sustainable business and secure the good of today's and future generations. Our lobby work is determined by factual information and is characterized by integrity, fairness and transparency. Rheinmetall participates actively in various associations and organizations to represent its interests in a wide range of ways. Political exchange also takes place in the context of the normal industry and sector association activities. In addition, we have representative offices in Berlin and Koblenz. Furthermore, we have a commitment at European level in Brussels.

ESG rating

At various intervals, many of our customers in the civilian sector assess our measures and results of sustainable corporate governance. For example, in the EcoVadis rating, the Sensor and Actuators and Materials and Trade divisions achieved 58 out of a maximum of 100 points, resulting in confirmation of our previous-year “Silver” status.

In addition to the customer ratings, independent ESG research and ESG rating companies regularly evaluate our business practices in the area of environment, social and governance. The results are used as a decision-making tool, for example by institutional investors. In the MSCI ESG Rating Rheinmetall achieved an “AA” rating (on a scale from AAA to CCC), in the ISS ESG Rating we obtained the score “C” (on a scale from A+ to D-) and with S&P Global in the “Industrial Conglomerates” category obtained 33 points which is better than the average of 29 points. Of the 94 companies which Sustainalytics analyzed in the “Aerospace and Defense” sector in its ESG Risk Rating, we were ranked 10th. In the “Automobile” sector VigeoEiris assessed us with 49 points, equating to position 10 of the 40 rated companies.

Technology and innovation

Management approach

Our corporate responsibility is apparent in our products. Innovative strength and technological competence are key measures of competitiveness in the rapidly changing world of business. Tradition and innovation – the Rheinmetall technology group can draw on more than 130 years of specialist knowledge, system expertise and industry experience in the civilian and military business sectors. Our consistent focus on technology is a prerequisite for not only picking up on the developments of our time, but also for actively helping to shape technological change and, as a result, achieving long-term business success in a diverse range of technologically demanding markets.

Technology and product developments open up growth opportunities

As a longstanding technology and innovation partner to our customers, we have a detailed understanding of their requirements. Rheinmetall invests large sums year after year in research and development in order to increase its technological expertise, expand its market positions and secure the basis for the company’s future success with a diversified product portfolio. Market, industry and technological trends are systematically observed before being analyzed and assessed in terms of their strategic and economic significance. Thanks to close collaboration between Sales, Development, Production, Service and Marketing as well as intensive project work in partnership with our customers, new requirements of products, systems, processes and applications are quickly identified and acted upon with the shortest possible development periods. Product lines are continuously improved and expanded, while new or associated business areas are gradually developed thanks to innovative products, future-oriented systems and customized services.

In the medium to long term, we also intend to support our company’s growth with products that – based on an intensified transfer of technologies between our divisions – are not directly derived from the existing portfolio. Over the next few years, we will continue expanding our activities and develop new activities in the technology fields of (new) mobility, sensor technology, digitalization, artificial intelligence and automation.

Our own application-related research and development work is supplemented by studies into the latest scientific findings from basic research programs. Another key pillar of our research work is collaboration with industrial partners, renowned research institutes and skilled experts, which supports the transfer of knowledge from research into practice. Furthermore, Rheinmetall promotes young scientific staff at an international level with an endowment professorship for alternative drive systems at the Chinese-German College for Postgraduate Studies of the prestigious Tongji University in Shanghai, China and in project-related cooperations with the Shanghai Jiao Tong University, Shanghai, China.

We provided more information on our specific research and development activities over the past fiscal year and the expenses associated therewith in the “Research and Development” part of the “Basic information on the Rheinmetall Group” section.

Risks

Information on reducing or avoiding technology and development risks can be found in the “Risks and opportunities” section.

Environmental protection and conservation

Management approach

Business activities and, in particular, production processes are associated with the consumption of natural resources. From our perspective, environmental protection and conservation play a major role in ensuring we have a sustainable future that is worth living. The careful use of natural resources is part of how the Rheinmetall Group views itself. Using raw materials and energy economically and avoiding environmental damage in business and production processes are also among the key foundations on which the Group companies’ business activities are based, as is dealing with residual materials and emissions responsibly. It is of key importance here that environmental protection – in keeping with a holistic approach – is considered an integral part of our management system in the Rheinmetall companies.

Environmental management

We make every effort to further minimize our environmental impact with the best available, economically viable technology. The careful use of natural resources is supported through the use of modern technology and contemporary process technologies, which help to prevent emissions and waste. Handling materials, energy, water and waste in a considered manner not only protects the environment, but also reduces costs at the same time. We continue to strive to use resources even more efficiently. Safe and modern facilities at certified production sites ensure resource-conserving and low-emission production processes as far as possible. Country-specific regulations and the requirements of international standards for quality (ISO 9001, IATF 16949 and AQAP 2110/2210), environmental protection (ISO 14001) and energy management systems (ISO 50001) are observed and processes are certified accordingly. Regular audits ensure transparency in terms of the status quo and provide objective confirmation of high quality standards.

Energy management*

We need a sufficient energy supply, which is associated with corresponding CO2 emissions, to manufacture our products and operate our buildings and infrastructure. The reduction of energy-related payments is therefore a key component of corporate policy in the Rheinmetall Group. It is a material objective for us to reduce energy consumption and increase energy efficiency as far as possible through stringent processes in day-to-day operations within the context of that which is technically feasible and economic circumstances. Our responsibility in dealing with energy resources requires the achievement and review of specific targets for energy savings and improvements in energy efficiency, where it is technically and organizationally feasible and where it makes economic sense, in addition to the systematic determination, analysis and measurement of the energy aspects of significance for our business models.

We select our energy resources based on supply reliability, economic efficiency and environmental considerations, and use a mix of non-renewable and renewable energies during our everyday business. We currently use green electricity within the scope of how much is fed to us by our selected suppliers. In terms of non-renewable primary energy sources, we use natural gas, district heating and coal as well as a smaller proportion of heating oil, diesel and liquefied natural gas (roughly 6.1% altogether). At Rheinmetall, atmospheric emissions are mainly produced by the combustion of primary energy sources such as gas and oil. They are used to generate the electricity, steam and auxiliary energy (such as heat and cold) required to manufacture our products. Emissions are also produced by other sources such as our vehicle fleet.

Across the Group, we calculate our greenhouse gas emissions based on the internationally recognized Greenhouse Gas Protocol. It distinguishes between three categories of emissions. At our locations, direct emissions into the air (Scope 1) arise from the combustion of fossil energy sources, particularly natural gas. Indirect emissions (Scope 2) cover all emissions that are associated with purchased energy, such as electricity. Scope 3 emissions are indirect upstream and downstream emissions that occur in the value-added chain. They are linked, for example, to the procurement of goods and services, the manufacturing of products, production processes, and transport and logistics. We will prepare the reporting of emissions under Scope 3 in several phases over the next few years.

Rheinmetall Group's carbon footprint

tCO_2e	2021	2020
Total emissions	450,882	410,404
Scope 1 | Direct greenhouse gas emissions	144,151	128,128
Scope 2 | Indirect greenhouse gas emissions	306,730	282,276

A total of 85 out of the 165 subsidiaries were included in the figures recorded for fiscal 2021. Around 90% of CO2e at the Rheinmetall Group can be attributed to the top 20 companies alone. CO2e for fiscal 2021 was calculated using the location-based method. The country-specific emissions factors were taken from the ecoinvent 3.8 database.

The data in these tables were determined on the basis of internal processes. They come from existing management systems and are based on meter readings or invoice amounts (if available in each case) and estimates by the companies. The data are requested in the operating units, collected with great care and processed. Nevertheless, errors cannot be entirely ruled out in the collection, processing or transmission. The data in these tables is not audited as part of the audit of the annual financial statements by Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Düsseldorf branch.

The continual reduction of energy consumption is a challenge for the Rheinmetall Group companies as well. Between 2016 and 2021, the Rheinmetall Group's energy consumption was lowered by 6.5%; energy intensity (MWh/€ million in sales) fell by 15.2% in the same period, while the intensity of greenhouse gas emissions recorded under Scope 1 and Scope 2 (tCO_2e/€ million in sales) decreased by 26%.

* Contents not reviewed by the auditor

Climate change

The great tasks of today include containing climate change as far as possible and achieving an alignment to its consequences and impact. As a company with a sense of responsibility and with a global value added chain, Rheinmetall attaches great significance to this global challenge. The core of the matter is avoidance, reduction, substitution and compensation of the CO_2 emissions produced by the Rheinmetall Group in Scopes 1, 2 and 3 in line with the Greenhouse Gas Protocol. For its targets, Rheinmetall aligns itself to the Paris Climate Agreement which envisages limiting global warming to below 2°C, or even better to 1.5°C, compared with the pre-industrial era.

To ensure that the Rheinmetall climate targets make an effective contribution, after intensive preliminary work in the year under review – especially on the initial assessment of the 15 Scope 3 sub-categories – it was decided to join the internationally recognized Science Based Targets initiative (SBTi), a partnership project between the CDP, the UN Global Compact, the World Resources Institute and the WWF, in the first quarter of 2022. SBTi provides companies with methods with which they can set science-based CO_2 reduction targets. The criteria give particular consideration to the different stages of a company's value-added chain.

By December 2023, a roadmap for reaching the targets will have been prepared. As reported on various occasions, Rheinmetall also sets itself ambitious CO_2 reduction targets for its business activities. We are striving to cut our production of climate-damaging CO_2 emissions to zero by 2035. In the first phase we refer to our own emissions (Scope 1) and energy supplier emissions (Scope 2). To do this the company will invest primarily in improving the energy efficiency of its locations and production facilities and develop and expand internal power generation from renewable sources. For example, in the medium to long term, the CO_2 emissions in Scope 3 are also to be reduced. This is where the large part of Rheinmetall's carbon footprint originates – why is also why it is the biggest lever for reducing emissions. This task is a very complex one. Nevertheless, Rheinmetall is approaching these challenges systematically and in this area will also set a target in line with the methodology of the Science Based Targets Initiative. To obtain an initial assessment of the dimension of the CO_2e in Scope 3 which relates to us, in the year under review on the basis of data from fiscal 2020 an analysis was made of eight upstream and seven downstream categories in line with the Greenhouse Gas Protocol in the fields 3.1 (Purchased goods and services), 3.2 (Capital goods), 3.3 (Fuel- and energy-related activities), 3.4 (Upstream transportation and distribution), 3.5 (Waste generated in operations), 3.6 (Business travel), 3.7 (Employee commuting), 3.9 (Transport and distribution of sold products) and 3.10 (Processing of sold products). This showed that approximately 90% of our entire CO_2e falls under Scope 3.

CDP

The CDP (formerly Carbon Disclosure Project) is an independent, non-profit organization which states it maintains the world's biggest database on the environmental impact of major corporations. The organization aims to establish the management of greenhouse gas emissions as a key economic success and risk factor in companies. Each year, on behalf of more than 500 institutional investors, the CDP collects information on corporate strategies to combat climate change and company-specific greenhouse emissions. In the Climate Change Questionnaire, alongside questions on the organization, targets, projects and programs, companies are surveyed in respect to information about risks and opportunities of climate changes and measures in the area of climate protection. In the year under review, Rheinmetall took part in this demanding CDP sustainability ranking for the first time. Our climate protection activities up to now were assessed with the grade “D” on a scale from “A” to “F”.

TCFD

According to a press release from the World Meteorological Organization, 2021, with a plus of 1.11°C, 2021 is the seventh year in succession (2015-2021) in which the global temperature was more than 1°C higher than the pre-industrial era (1850-1900). The Task Force on Climate-Related Financial Disclosures (TCFD) of the G20 has published recommendations on consistent climate reporting for companies. They are urged to analyze and evaluate the opportunities and risks presented by climate change. The aim is to enable companies and investors to quantify the financial impact of climate change on their business models and strengthen the resilience of their business strategies.

The TCFD's four-pillar framework helps companies not only to integrate climate-change-related risks and opportunities in their businesses, but also to produce more consistent reporting. Physical risks result from long-term changes of climatic and ecological conditions (e.g. increase in the sea level, temperature and change of climatic conditions) as well as through extreme individual weather events and their consequences. There are transition risks in connection with the move to a more economically sustainable economy with a lower carbon footprint (e.g. as a result of relatively suddenly implemented political measures on climate protection, due to technical progress or from changes in market sentiment and consumer preferences).

After the assessment of the risk analysis report from insurance companies on the 60 production facilities in 2020, on the basis of a CSR risk database roughly 130 production sites were examined in respect to various risk types (physical risks acute/chronic with nine and ten categories respectively, transitory risk with six categories, and socio-economic risks with two categories). Account is to be taken of the results in the context of the business continuity management measures. In fiscal 2022, using a risk-based approach for production sites it is planned to implement scenario analyses for 2022, 2045 and 2070 for the following parameters: Representative Concentration Pathways (RCP) 4,5 and 8,5 (according to IPCC).

Waste management

In all our production processes, we strive to be efficient in our use of materials. We prevent, reduce or recycle waste or dispose of it in a safe and environmentally friendly way. We aim to keep disposal quantities to as low a level as possible. Production- and material-related recycling takes place individually based on the requirements of the specific site. This entails waste separation, secure disposal methods and economically viable recycling processes. Waste quantities and recycling methods are also impacted by production quantities and renovation work in buildings and on business premises. In the year under review, the amount of waste generated across the Group was 63,140 t, compared with 57,648 t the year before.

Waste generation

t	2021	2020
Non-hazardous waste for disposal	5,203	5,355
Non-hazardous waste for recycling (excluding scrap)	16,638	15,857
Scrap for recycling	28,486	24,574
Hazardous waste for disposal	6,086	5,615
Hazardous waste for recycling	6,727	6,247
Rheinmetall Group	**63,140**	**57,648**

Water management

Responsible use of water is an integral part of our commitment to sustainability. The water consumption of the Rheinmetall locations was 3,591,460 m³ in fiscal 2021 (previous year: 3,376,984 m³). In the period from 2016 to 2021, water consumption was reduced by around 22%. On the basis of the 2020 figures, we set ourselves the target of reducing water use by a further 10% in the 2021/2022 years.

Water use

m^3	2021	2020
Fresh water	3,591,460	3,376,984

*On the basis of new input data for individual companies the overall figure for 2020 was restated

In the year under review, a risk analysis in line with the Aqueduct Water Risk Atlas of the World Resource Institute (WRI) was implemented for certain of our companies in Germany, Switzerland, the Czech Republic, Mexico and Brazil. This is a publicly accessible global online database with indicators for water risks at local level and a global standard for measuring and reporting geographic water risks. Subsequently there was a more in-depth risk analysis for 130 production sites on the basis of data records of a renowned specialized service provider. This analysis includes the water scarcity indicator. According to this locations in India, China, South Africa, Mexico and Italy have an elevated risk exposure. The three production sites in Germany, Switzerland and South Africa, which require huge amounts of water to manufacture products, have all found individual solutions tailored to the circumstances and challenges of the specific locations.

Conservation – encouraging biodiversity

Our responsibility also includes preserving the diversity of natural habitats, especially for future generations. We are convinced that industrial use does not have to conflict with active conservation. On the contrary: For over a hundred years Rheinmetall has tested some of its military products on heathland near Unterlüss, not far from Celle, in Lower Saxony. A far-reaching prohibition order for the public, no traditional agricultural use and the size of the sprawling areas make this company-owned, 55-square-kilometer site, which encompasses 3,400 hectares of forest and 800 hectares of heathland, in an otherwise relatively densely populated Germany a rather special nature reserve. Active landscaping and forestry management creates individual habitats for the unique fauna and flora. The result is an unusually rich array of flora, which in turn attracts a rare diversity of insects and birds and also provides a habitat for large wild animal populations.

Our South African subsidiary Rheinmetall Denel Munition is also engaged in protecting nature and species at risk of extinction at three of its four production sites. Similar to in Unterlüss, large, demarcated safety areas far from residential areas enable rare animals to expand their habitats unimpeded. We develop partnerships locally to preserve these conservation areas along with their great biodiversity and rare species.

For biodiversity and climate protection, peatlands are very important. In 2019, dehydrated moor soil emitted approximately 53 million tonnes of carbon dioxide equivalent, almost 7% of all greenhouse gas emissions in Germany. For this reason, with its 2030 Climate Protection Program, the German government decided that improved moorland protection and the reduction of peat use are important measures for achieving the climate protection targets. In addition, in September 2021, the Federal Ministry for the Environment published a National Peatland Strategy which includes voluntary rewetting measures. Wetlands and peatlands serve as the habitat for highly specialized animal and plant species whose alignment to the environment have made them rare and endangered. With their water absorption capacity, the moorlands fulfill important functions in regulating temperature and moisture. In the year under review, together with the relevant authorities, the Rheinmetall Forestry Management examined conditions for potential rewetting of moorland on company land in Unterlüss.

Employees

Management approach

Rheinmetall's success depends to a great extent on the ideas, expertise, motivation and commitment of its employees. The Rheinmetall Group is faced with increasingly tough competition from other companies to gain qualified personnel. Acquiring skilled employees for the companies is therefore a key task in our HR work. In addition to performance-based remuneration and progressive benefits, we attach particular importance to having a wide spectrum of career opportunities on offer in the Rheinmetall Group companies. We offer interdisciplinary career paths, deployment opportunities to international locations, and tailored training opportunities for individual professional and personal development. A customer-focused corporate culture, based on the values of respect, trust and openness and in which the performance and commitment of each individual is appreciated, is a key requirement for being attractive as an employer.

Recruiting and employer branding

In an environment characterized by dynamic development, growing requirements and increasing complexity of technology, products and processes, experienced managers, qualified specialist personnel and ambitious junior staff make a big contribution to achieving the company's goals with their knowledge, skills, experience and motivation. In addition to traditional and modern means of recruitment, Rheinmetall also relies on its own training and development of junior employees and is also in close contact with universities, colleges and research institutes. This helps us to get to know suitable science, technology and business graduates at an early stage.

The Rheinmetall Group's jobs portal features the user-friendly platform "Careers worldwide," which displays announcements from 20 countries in Europe, North and South America, Africa, Asia and Australia. Potential applicants can also read brief descriptions of the different companies. In 2021, our careers website was visited some 406,000 times.

The centrally organized recruiting center is responsible for the internal and external recruiting of managers and employees (with the exception of contract workers) at Rheinmetall's 46 sites throughout Germany and is responsible for end-to-end applicant management. 58,020 applications were registered on our TalentLink online platform in 2021 (previous year: 60,678). In 2021, 2,287 positions (previous year: 1,844) were vacant at the Rheinmetall companies, of which 1,480 were then filled (previous year: 1,111). In the past fiscal year, we recorded a total of 3,696 people joining and 2,606 people leaving the Rheinmetall Group (previous year: 2,503 and 2,770 respectively).

As they did in previous years, various institutes once again assessed the corporate image of German companies in 2021. Rheinmetall was again selected as one of the 100 most attractive employers. In the trendence "Mechanical Engineering Students" category we were ranked 24 (previous year: 43) and in "Automation Engineering" segment 27, after 43 in the previous year. In the Universum rankings (Germany Top 100 Ideal Employers) in the category of young engineering professionals, we were ranked in 25th place in the year under review, after reaching 34th the year before. For the young IT professionals Rheinmetall was among the Top 100 most attractive employers, with an 86th ranking (previous year: 62). In the "Germany's Best Employer" ranking from "Stern" magazine, we were placed No. 18 in the "Automobile and Suppliers" sector. In the "Rail, Ship and Plane Construction" sector we reached No. 24.

Training and professionalization

Training in the Rheinmetall Group – Rheinmetall remains heavily committed, including with respect to social responsibility, to providing sound, multifaceted and practical business training to young people in technical, commercial and IT occupations, including the opportunity to complete a dual course of study with a technical or commercial focus. In 2021, 796 young people (previous year: 746) in Rheinmetall companies in Germany and abroad received vocational training, 406 of whom were based in Germany (previous year: 405). Within the wide array of 41 training courses for skilled occupations and dual courses of study on offer, industrial mechanic, machining mechanic, mechatronics engineer, qualified IT specialist for application development and industrial business manager represented the most popular professions for trainees in Germany.

In the year under review, 80% of the young people in the Rheinmetall Group received training for industrial and technical occupations, and 20% received training for commercial occupations. The apprenticeship ratio was 3.5% of the workforce for the German locations (previous year: 3.6%) and 3.4% for the Rheinmetall Group as a whole (previous year: 3.3%). The proportion of female trainees in the Rheinmetall Group was 13.7% (previous year: 13.5%), while the proportion in Germany reached 18% (previous year: 17%). In 2021, 382 people in the Rheinmetall Group (previous year: 270) and 129 people (previous year: 125) at the Rheinmetall companies in Germany started their training, while 137 trainees (previous year: 112) took up temporary or permanent employment after successfully completing their training.

In a survey conducted by CAPITAL magazine, in November 2020 Rheinmetall was named one of the best training companies in Germany with five stars. In December 2021, Rheinmetall again achieved an accolade from this business magazine for its particular commitment in the area of human resources. In its survey it rated Rheinmetall AG with five stars for training and four stars for dual study courses, thus making it one of the best training companies in Germany. The study implemented by CAPITAL for the fifth time between March and May 2021 examined corporate training and dual student courses. The result of the Rheinmetall Group with its 796 trainees and apprentices and 98 persons following a dual course of study inside and outside Germany was 22 out of a maximum of 25 points for the training area and 19 out of a maximum of 25 for the dual course area.

Further training for employees – Further training, assuming responsibility and promotion opportunities have a high degree of relevance for the commitment and satisfaction of our employees. To ensure the continued growth and future viability of the Rheinmetall Group, in consideration of additional demographic factors and the shortage of specialist staff that is expected in many places, the development of employees, talented management trainees and experienced specialist and managerial staff in line with current and future requirements constitutes a key factor for the company's success. Thus strategic personnel planning is aligned to securing and continuously raising the high skill levels to ensure that the Group companies can achieve their business goals.

Annual appraisal interviews between management and employees are deployed to talk about performance, targets and individual development options. A range of training opportunities are in place to support Rheinmetall employees with planning their own development, achieving individual learning objectives and expanding their skills to meet the requirements of their current positions or to obtain new positions. Personnel development and training activities are offered on the basis of regular needs assessments. Various sources are used for needs assessment. These include not only the results of the potential assessment and personnel development appraisals, which are conducted in accordance with the collective agreement on training, but also Group-wide successor planning, the target-setting process and capacity and investment planning. Training objectives can also be derived from strategic objectives (e.g. from the increased internationalization of the Group).

Established development programs for managerial and junior staff – Top performers and employees with potential are identified as part of systematic assessments and their skills are selectively developed. This is based on the Rheinmetall "Management by Objectives" program, which incorporates the relevant leadership and management skills in five key areas. The performance and development potential of managers and prospective management candidates is identified, assessed and evaluated at regular intervals as part of a consistent, multistage selection and assessment process. This personal stocktaking enables an open discussion on strengths and weaknesses and structured feedback on individual development and promotion opportunities.

Individually determined personnel development plans help to improve the candidates' business, technical, methodical and social skills. Furthermore, prospective managers can take part in management potential analyses and/or individual assessments, which analyze their abilities and skills profiles in more depth.

The Rheinmetall Academy successively prepares these employees at various stages in their careers for assuming leadership or specialist roles. The modular course programs and content are systematically designed around the topics of strategy, management, leadership, methodical competence, project management and internationalization. The Executive Development Program and Manager's Leadership Program focus on "Leading my business" and help experienced managers to perform their organizational and managerial duties successfully. In particular, they help managers to build on their knowledge of corporate controlling, employee leadership and change management. Junior staff are prepared to take on their first managerial challenges in the Young Manager Program. The content of the Project Manager's Program is tailored to the tasks and activities performed by employees of the Rheinmetall Group. These supplement the technical and methodical project management skills acquired in certification courses with training on "How to manage project teams."

In the year under review, 2,732 employees (2,061 men, 671 women) attended 221 (previous year: 107) one-day or multi-day events at the Rheinmetall Academy, compared with 1,236 (899 men, 337 women) in the previous year. 60% of participants come from the Vehicle Systems, Weapon and Ammunition and Electronic Solutions divisions, 30% from companies of the Sensors and Actuators and Materials and Trade divisions. As in the previous year, the share of female participants was 27.3%. Around 98.6% of the participants completed an online training session, and around 1.4% a classroom seminar.

In the past fiscal year, the conditions and possibilities for implementing a new e-learning platform for standardizing courses and achieving better availability was examined. 400 persons took part in the pilot project in the period from January to December 2021 and dealt with digital learning contents on twelve topics in the Business, Technology and Future categories. The objective was to determine whether and to what extent classroom seminars could be substituted by or supplemented with online training. Qualitative and quantitative aspects on the use of e-learning were addressed in two surveys. The results are currently being evaluated.

Demographic change

In Germany and other developed countries, demographic change is confronting companies with new challenges. As a result of low birth rates and increasing life expectancy, the population structure is changing in an unprecedented fashion. This trend is also impacting the composition of the workforce. Competition for suitable specialist and junior staff is becoming more intensive, the number of employees in the 40 to 49 year old age group is declining with a successive shift to the over 50s.

The employees, the type of working places and the general regional conditions at the individual Group sites are as varied as the products. Our challenge is to recognize existing potential with an appropriate HR policy, to recruit junior staff and to (further) develop the skills of our employees to ensure a smooth transition. On the basis of detailed structural analyses and simulation calculations, interdisciplinary teams are developing new HR programs which factor in the different initial situations and developments at the national and international sites and their impact on the employee age structure. The measures which are tailored to the individual location cover in particular the targeted transfer of knowledge and experience from older colleagues to junior staff, establishing teams with an age mix, systematic training of junior staff and intensified recruiting and HR marketing activities with a focus on the relevant target groups. Also integrated are adjustments to working and organizational flows as well as additional measures and offers for health promotion so as to maintain learning ability and fitness for work, motivation as well as the physical and mental agility of employees who have been working for many years.

Whether employees are young or a little older, whether they have only recently joined Rheinmetall or have been at the company longer, our corporate culture aims to ensure that each individual employee can make an active contribution with their qualifications, skills, personal qualities and commitment to help the company achieve its targets on a lasting basis. The average age of employees (excluding trainees and interns) in the Rheinmetall Group was 43.5 (previous year: 43.5). In 2021, the average age in the German companies was 44.5 (previous year: 44.7); in the companies outside Germany, it was 42.4 (previous year: 42.2).

Age structure

		2021	2020
Post-war generation	(Years 1946-1955)	117	230
Generation Babyboomer	(Years 1956-1965)	4,560	4,935
Generation X	(Years 1966-1980)	9,367	9,125
Generation Y	(Years 1981-1995)	9,700	9,039
Generation Z	(Years from 1996)	1,097	766
Rheinmetall Group		**24,841**	**24,095**

Salaried staff | on the reporting date

At Group level, the average tenure in the year under review was 11.8 years (previous year: 11.9 years). In the past fiscal year, 494 people had been employed at the company for more than 40 years (previous year: 471).

On average, employees in the Rheinmetall companies outside Germany had worked at the company for 10.0 years (previous year: 9.8), while those in the German companies averaged 13.5 years (previous year: 13.9).

Tenure at the company

Years	2021	2020
Rheinmetall Group	11.8	11.9
Germany	*13.5*	*13.9*
Abroad	*10.0*	*9.8*

Salaried staff | on the reporting date

Modern remuneration systems

Appropriate, fair and standard market pay systems are a key aspect in recruiting and retaining dedicated staff at the company. Rheinmetall offers attractive contractual terms. In addition to the category of work, these are based on the content of the role and the amount of responsibility and are linked to market rates. In addition to fixed remuneration components in line with market requirements, performance-related bonuses and variable salary components are also paid.

The “Management by Objectives” concept is linked to variable salary components for managers and employees not covered by collective wage agreements. An individual variable portion of income is paid in accordance with the achievement of individually agreed targets and depending on the company’s performance. Depending on the extent to which targets are achieved, this amounts to between 0% and 200% of variable target income. The fact that these income components are based on targets provides incentives for employees to act independently and to take on challenges. Division heads, managers and executives receive a long-term incentive (LTI) in addition to this short-term component. This is geared towards long-term corporate success and for 2021 includes payment of 40% of the long-term incentive amount in Rheinmetall shares, which are subject to a four-year lock-up period. The number of shares granted is based on a reference share price, which corresponds to the average price on the last five trading days in February of the subsequent fiscal year. A total of 60% of the long-term incentive amount is paid in cash and is also used for the immediate payment of tax on Rheinmetall shares. To bring the interests and targets of management and stakeholders into alignment, non-financial targets have been taken into account in Executive Board remuneration since 2020. From 2022 onwards, the long-term incentive for middle and senior management is to be revised and adjusted appropriately in line with the changed structure for Executive Board remuneration. Achieving ESG targets will thus account for 20% in the LTI in 2022.

The company’s success benefits employees, including staff covered by collective wage agreements in Germany, in two ways: First, employees receive an annual share of profits subject to the annual performance of the Rheinmetall Group; second, the increase in the value of the company achieved is paid out in a success-oriented component in the company pension, thus leading to improved support in old age.

Employee subscription to Rheinmetall shares

Under the scope of the "My piece of Rheinmetall 2.0" program, which was offered by 27 German companies of the Group in the year under review (previous year: 25), employees can acquire shares in the company at attractive conditions and participate as part-owners in its business success. It involves an individual monthly savings plan in two versions, basic and extended, to which Rheinmetall contributes a 30% employer allowance. Shares are allocated after a two-year holding period. In the year under review, an examination was made for extending the offer to further European countries in 2022, 2023 and 2024. It included an assessment about how it can be implemented, also in relation to legal and tax issues. In the year under review, the employee share purchase program was successfully rolled out in Austria and Switzerland, so that participation is possible from 2022.

Employee share programme

	2021	2020
Shares acquired	105,118	95,219
Participating companies	27	25
Eligible employees	12,551	12,024
Participating employees	3,321	2,829
Participation rate	26	24

Diversity

In times of accelerating change in technology, business and society, ensuring equal opportunities and promoting diversity is an important task for HR at Rheinmetall. For us diversity is a key value, and in times of transformation a major factor for innovation and steady growth. We value all people regardless of gender, age, sexual identity, educational background, state of health, ethical or social background, skin color, religion, culture, ideology or other personal characteristics. For us it is important to create a secure and integrative working environment, one marked by respect, in which each person is equal, treated fairly and can maximize his or her potential.

Across the Group, Rheinmetall wants to create a higher level of awareness about the potential embedded in a diverse professional and life experience, perspectives and values. The corporate philosophy, the Code of Conduct, the principles of social responsibility and the Diversity Policy establish the framework for promoting diversity and equal opportunity as well as acting against discrimination. Signing the Diversity Charter in 2017 underlines this stance and makes a clear public commitment. In May 2021, we took part in the German-wide Diversity Action Day. To create a more pronounced awareness for diversity and to break down prejudices, various online formats were directed to employees at the locations in Germany, Austria and Switzerland. "People at Rheinmetall" from the different divisions provided insights into their special tasks and activities.

With locations on six continents, 26,163 employees in 33 countries and 69 nationalities represented at Rheinmetall in Germany, internationality and diversity have long been part of everyday life in the Rheinmetall Group and are key factors for intercultural competence. At the end of fiscal 2021, 837 employees at our German companies were foreign nationals (previous year: 826).

We attach importance to the fact that this internationality is evident not only in the workforce but also at management level. Where possible, local talent is used when filling management positions outside Germany. We encourage our workforce to network within the company and to move to another unit or site. In the year under review, 61 German employees (previous year: 61) used the ex-pat program, strengthening international cooperation and supporting the willingness of employees in other countries to make an internal move. Another example of how we promote mobility in the Group is the "Job Matchpoint" project in which Talent Acquisition Consultants from the Recruiting Center provide advice on searching for new professional perspectives within the Group to employees, trainees and apprentices or those on a dual course of study when they come toward the end of their training period.

In the European “Diversity Leaders 2022” ranking complied by the Financial Times, we were placed 28 among the Top 30 leaders. A total of 850 companies were listed in the ranking. The survey was anonymous and took place online on the basis of an independent selection of more than 100,000 employees of European companies in the period between April and August 2021.

Around 20.4% of employees were female in the year under review (previous year: 20.6%).

Female employees by divisions

	2021	2020
Rheinmetall Group	5,328	5,222
Division Vehicle Systems	795	702
Division Weapon and Ammunition	1,151	1,137
Division Electronic Solutions	674	623
Division Sensors and Actuators	1,261	1,321
Division Materials and Trade	1,243	1,245
Rheinmetall AG and services companies	204	194

Total workforce | on the reporting date

The percentage of women occupying management positions in our technology group remains lower than in other industries or branches of industry. Generally, the security and defence as well as automotive sectors are preferred by men, who predominantly tend to choose technical or scientific subjects for study and professional training. What is more, due to what in some cases is a heavier physical burden in the commercial area, at 18% the share of female applications is relatively low in the year under review.

Despite the difficult initial situation, which is inherent to the industry, the goals which have been pursued for several years now in the area of diversity, which include recruiting more women to work at Rheinmetall, supporting female talents more strongly and increasing the overall number of women at all levels, are being advanced by a mix of strategic and operating measures. At the initiative of the Head of HR, in July 2021 there was a Working Conference with representatives from the areas of Diversity, Human Resources, Corporate Communications and Corporate Social Responsibility in which the future strategy of diversity management together with goals and measures were drafted. A follow-up meeting was held in September 2021 with the participation of the Executive Board.

Together with Diversity, Recruiting and Employer Branding, the Human Resources department at the Rheinmetall Group develops systematic recruitment approaches, training concepts and personnel development measures designed to ensure a fair share of women in management, and through which it also prepares itself for future management tasks. At the same time, the internal management development programs set the respective line managers ambitious targets for the participation of women in these programs, which are as follows: The Top Potential Program aims to increase the proportion of women to at least 15% by 2025 (base figure for 2018: 4%). In the Executive Development Program, the ratio moved up to 4.1% in the year under review; the share of women in the International Young Manager Program now totals 29.5%. Increasing the share of woman among the high potentials will result in significantly increasing the proportion of women in management positions, without specifying a fixed ratio for the share of women. Female young potentials are encouraged in a targeted fashion, and are supported in setting ambitious professional objectives and to continue pursuing them across any family phases. Here Rheinmetall is accommodating with family-friendly work conditions.

In December 2021, the international community of female employees at Rheinmetall, organized since 2018 in the Linked-in network, women@Rheinmetall, held its first international conference. There some 200 participants presented focus topics from the Diversity working group which included internationality, gender, generations and LGBTQ, female role models provided insights into their professional history and Indian colleagues explained their diversity activities at their local sites. The platform offers its over 500 members from 20 countries a forum for transferring knowledge, exchanging experience and providing advice in professional matters.

The targets and deadlines for increasing the proportion of women on the Supervisory Board, management bodies and the two management levels below the management body that are defined for Rheinmetall AG and its German subsidiaries subject to codetermination in due consideration of sector-specific circumstances are published for the period from July 1, 2017, to June 30, 2022, on our company's website in the section "Corporate Governance – Ratio of Women."

Management functions across the Rheinmetall Group are classified on a hierarchical basis into eight management levels which correlate to the five management clusters. Determining factors for classifying a job to a management cluster include the level of operating, professional and management responsibility. In the year under review, 553 persons were assigned to the upper three management clusters, 63 of which were women (11.4%).

Management Cluster

	2021	2020
Executives	18	-
Top Management	125	-
Senior Management	410	-

Data for 2020 not available | Change of the parameters

Inclusion

People living with a disability are in particular need of protection and solidarity in society. Their inclusion in work and training opportunities is an important expression and prerequisite for equal participation in social life. It is our aim to create a working environment that is based on individual commitment, cooperation, recognition and appreciation of all employees within the company.

Our open corporate culture ensures that employees with health problems or disabilities are fully integrated in working life at Rheinmetall, where they have every opportunity to bring their talents and skills to the table and prove what they can do. Once again, the focus here is on developing existing strengths and potential. It is vital here that workstations are individually adapted to the type and degree of disability, enabling (further) employment with physical disabilities or easing reintegration into normal working life. In the year under review, the German-based Rheinmetall Group companies employed 606 severely disabled people (previous year: 582), who are represented by the Group representative body for severely disabled employees.

We champion self-determined and equal participation, and create the necessary working conditions for this. The first core principles and integration goals were formulated in a framework integration agreement together with the Group representative body for severely disabled employees back in 2002. In accordance with the action plan developed in 2018 for the German companies concerning the employment of people with disabilities, in February 2020 an inclusion agreement was negotiated between the Group representative body for severely disabled employees and the Group Works Council that, among other things, sets targets for recruitment and employment ratios of severely disabled trainees and people with a disability. A holistic assessment is carried out to check that workstations are designed in an inclusive way. We also aim to ensure as much accessibility as possible on our site premises and during the recruitment process. Furthermore, we ensure that representatives for severely disabled employees are consulted during the planning phase for new building projects. Inclusion teams at the locations monitor the process to ensure that the agreed regulations are implemented.

In September, representatives from the Working Group of the Severely Disabled Representatives in the German Automobile Industry, in which Rheinmetall has long been a member, met for a conference in Düsseldorf in the facilities of the Rheinmetall Academy. Invited for this occasion were also the Minister of North Rhine Westphalia in charge of Employment, Health and Social Affairs as well as politicians and academics. In his address, the Head of HR underlined the great importance of inclusion and enabling people with disabilities at Rheinmetall.

Occupational safety and health management

Rheinmetall is aware of its responsibility toward its employees and strives to ensure that the working environment is safe, healthy and clean. The Group ensures occupational and health protection at the workplace within the context of the national provisions in place at its various locations. Workplaces are designed in accordance with the legally and generally recognized safety and industrial medicine regulations, thereby allowing everyone to perform their work without incident and without being subjected to undue stress and strain.

Each and every employee of the Rheinmetall Group is obligated to familiarize themselves with all the relevant safety regulations and to observe these in their own working area diligently and at all times – in the interests of not only themselves, but also the company as a whole. Rheinmetall is committed to minimizing to the greatest extent possible all risks and hazards that could potentially endanger the health and safety of employees and third parties. Through continuous improvements in the workplace, suitable measures (e.g. ergonomic aids and protective equipment) and a broad range of prevention programs and health-promoting measures, Rheinmetall seeks to maintain and promote the health, performance and satisfaction of its employees.

During the course of the year, employees benefit from not only medical checkups but also a range of prevention programs. The spectrum includes everything from free vaccinations and regular health checkups, through internal and external sporting opportunities and consulting services, to medically appropriate reintegration following a period of long illness. In the year under review, the rate of illness in the German Rheinmetall companies was 4.5% (previous year: 4.7%). The accident frequency rate (number of accidents per million hours worked) determined for the Rheinmetall Group in fiscal 2021 was 6.5 (previous year: 5.9).

In the year under review, the COVID-19 pandemic again shaped large parts of business life and society. The global spread of coronavirus continued to present Rheinmetall with challenges. We made every effort to secure the health of our employees, our delivery capacity and the stability of our business processes which were impacted by the changed general conditions and numerous restrictions.

The global coronavirus pandemic has altered the way of working on a sustained basis and presents employees with new challenges. We took early action to set up interdisciplinary coronavirus action teams at all the locations, which coordinated and arranged the measures required locally to contain the crisis. The Executive Board and Corporate Security were kept apprised with up-to-date information by way of status reports on the situation at the individual companies. Decisions and measures were taken in a number of areas including social etiquette and hygiene rules. Trade shows and events were canceled in some cases, and strict travel restrictions were announced. Canteen operations were adapted, taking into account the local situation. Meetings were conducted via conference call or held on video platforms. We adopted a “social bubble” approach in production and logistics, and as far as possible people in office roles were asked to work from home. In an approach managed by Corporate Communications, the workforce is given regular updates on the coronavirus situation at the company via various communication channels, including the intranet, letters from the CEO and the Rheinmetall Inside app.

Parallel to the state vaccination program, from the time the vaccine was available, Rheinmetall ensured that the basis immunization of the workforce was significantly accelerated at company level by company vaccination programs. On this basis, roughly 7,000 employees across the Group were vaccinated against the corona virus.

Work–life balance

Career success depends, among other things, on how content an employee is outside of their working hours. Many employees want to take greater account of individual life stages and specific life situations in their working life and wish to create a healthier balance between their professional goals and their family and private interests through more flexible working hours. For us, it is important to support our employees with a family-friendly HR policy. Options including working hour models with varying weekly working hours and a range of part-time options as well as flexitime on trust all give employees a more flexible time frame and, in turn, greater freedom. During the COVID-19 crisis, which severely restricted social life and had a massive impact on our everyday business, extensive options for remote working were created to protect and support employees.

We also provide a family service throughout Germany to support employees in matters concerning career and children/care through advice and assistance. In 2021, 164 employees (previous year: 136) were on parental leave in the German companies (115 female employees, 49 male employees; previous year: 96 female employees, 40 male employees). In the year under review, the opportunity to be temporarily released from work, either fully or partly, to care for close relatives was taken up by one employee.

Employee mobility

Megatrends such as urbanization, digitalization and individualization are shaping social life today. There is a transition in terms of mobility, not least as a result of the repercussions of the coronavirus pandemic. In addition, the world of work is changing rapidly. New working models, such as mobile work, a shift in values to more sustainability and new drive forms are only some examples. Innovative, needs-oriented and sustainable mobility concepts for employees are gaining traction. In the year under review, in a pilot project we laid the groundwork for a new mobility strategy which does justice to the changed needs of our employees and fits our corporate culture. Examples of standard elements for each individual company cover benefits financed by the employer including the use of a bus shuttle, contributions to a public transportation ticket and a free parking space. In addition, in a "basket" – categorized by hierarchy level – there are employer / employee financed models such as company bicycles, train tickets and company cars.

HR / IT systems

The digital transformation in the Human Resources (HR) department was continued with the Group-wide introduction of SAP SuccessFactors. The platform which went live in November 2021 is being used to supplement existing systems for managing master HR data. Under the "HR4you" name the new system harmonizes various operating process, such as employee starts and departures as well as internal moves. With effect from January 1, 2021, for companies at the Düsseldorf site a new system to record presence and absence for mobile work and vacation absences has been introduced. On the basis of the project objectives for developing and implementing a holistic HR IT strategy, including the roadmap and investment planning passed in 2019, in the year under review there was approval for the HR Digitalization Strategy 2.0 which specifies the next phases and the individual modules and processes for consolidating the HR infrastructure and standardizing the Group's HR development processes.

Constructive dialogue for fair working conditions

Corporate co-determination is a long-standing tradition at Rheinmetall. We respect the concerns of our employees and protect their fundamental right as part of the freedom of association to join trade unions and to be represented by them internally and externally on the basis of national laws and regulations. Working with the employee representative organizations and trade unions we strive to treat each other fairly and to achieve a trustful and constructive exchange of views to reconcile the interests of the company and the employees. While the codetermination of employees in Germany is regulated by law, in other countries it is based on the respective national laws and regulations. The principles on this matter have been laid down by Rheinmetall and IndustriALL in a Social Partner Agreement which applies worldwide.

Important partners include the Group's Works Council and European Works Council, which looks after employees' rights to information, consultation and advice in the case of cross-border issues. Workforce representation is based on local works councils or general works councils. They represent the rights of employees to the managers of the companies of the Rheinmetall Group. Topics, which can only be dealt with uniformly for all Group entities in Germany, are discussed in the Group Works Council. We keep the Economic Committees of the Group Works Council and the general works councils informed about the economic situation and the changes in the Rheinmetall Group.

In the Supervisory Board of Rheinmetall AG, which is based on joint representation, the employees are also represented by two trade union representatives, five elected employee representatives and one representative of the managerial staff. Furthermore, the Audit, Personnel, Strategy and Mediation Committees of the Supervisory Board contain the same number of employer and employee representatives.

In the last fiscal year, Rheinmetall's German companies employed 9,803 staff covered by collective wage agreements (previous year: 9,532), 1,582 staff with contracts not covered by collective wage agreements (previous year: 1,540) and 219 managerial staff (previous year: 227).

Risks

Information on avoiding or reducing personnel risks can be found in the "Risks and opportunities" section.

Procurement and the supply chain

Management approach

Management approach The quality of our products is significantly affected by the quality of the raw materials, parts and components supplied. We expect a high quality assured by internationally recognized standards such as ISO 9001, IATF 16949 and AQAP 2110/2210 from our suppliers. They are selected on the basis of the quality, reliability, performance, suitability and price of the products or services offered. ESG criteria are also integrated in the selection process and taken into account when reviewing business partners.

Transparency in the supply chain

We procure goods and services from countries all over the world to manufacture our products. Due to the extensive and highly diverse product portfolio, some of the supply chains of the Rheinmetall Group are extremely complex, globally fragmented and also subject to constant change. In a company that has international production plants and sales activities in 139 countries in fiscal 2021, upholding environmental and human rights due diligence obligations is a major challenge connected with a significant responsibility.

We are aware of the environmental and social risks inherent in complex, international supply chains. They can range from the negative environmental impact of raw materials procurement all the way through to upholding social standards in countries with some problematic socio-political conditions. We are committed to meeting the growing regulatory requirements and increasing expectations of our stakeholders with respect to a sustainable value-added chain, but we face a range of challenges here. This is not least of all due to a lack of transparency, significant complexity of material flows and different targets among actors along the value-added chain.

The central Compliance Assessment & Monitoring Center of Competence uses a set of defined criteria to perform business partner reviews for new and existing suppliers, which also include CSR aspects such as human rights and environmental factors. In the event of any anomalies, the central area Corporate Social Responsibility is informed and then, in conjunction with the specialist department in question, checks and clarifies the issue identified.

We keep a close eye on regulatory developments in Germany and the European Union. The conclusion is that the methodical and objective evaluation of whether the respective due diligence obligations – including respect for environmental, employment and social standards as well as internationally recognized human rights – are complied with in the supply chain will become increasingly significant in the future. We too will have to improve the transparency of our suppliers' sustainability efforts if we want to manage the opportunities and risks in our supply chains in a more targeted way. After publication of the German Supply Chain Due Diligence Act in July 2021, the “Transparency in the Supply Chain” working group commenced activities.

The methodical, objective and reliable assessment in terms of sustainability across the very complex international supplier basis requires a Group-wide, standardized, system-supported process for recording and analyzing supplier information to assess the sustainability performance of our most important suppliers. In doing so, we will use the web-based platform of an internationally renowned service provider. In the process we want to increase not only the transparency of the sustainability performance of the individual suppliers, but also achieve more targeted management of the risks and opportunities in relation to sustainability in our supply chains. In a structured assessment process, on the basis of self-disclosure using a risk-based approach suppliers are requested to present their processes for securing the individual sustainability criteria, especially on environment, working conditions, human rights, fair working practices and sustainable procurement. In this way, suppliers which represent a risk can be identified more quickly and more reliably. The identified risks are then transferred into corresponding risk-mitigating action plans. On the basis of the results obtained here, further measures are defined.

In 2020, the critical materials used by the Rheinmetall Group were compiled into a matrix. We also identified potential environmental and social risks in the countries where key raw materials that we use for our business activities are extracted. The results of this preliminary analysis were validated in fiscal 2021 by a recognized external service provider, who will consider specific data.

The geographic distribution of suppliers was also determined for 2021:

Supplier by region

		2021	2020
Production material			
Share Germany	%	49	47
Share EU (without Germany)	%	21	15
Share OECD (without Germany and EU)	%	21	22
Share of non-OECD suppliers (without Germany and EU)	%	9	16
Non-production material		-	-
Share Germany	%	46	47
Share EU (without Germany)	%	17	20
Share OECD (without Germany and EU)	%	19	19
Share of non-OECD suppliers (without Germany and EU)	%	18	14
Total	**Number**	**43,280**	**40,015**

Supplier Code of Conduct

We also wish to anchor our values and principles in our supply chains and therefore expect our business partners to share our principles regarding responsible and fair conduct to employees, customers, suppliers and the public and demonstrate this responsibility accordingly. We expect our suppliers to take into account and to apply the principles laid down in our Supplier Code of Conduct in their own corporate policy and to view them as an advantageous basis for further business relationships. In the year under review, work was continued to update the Supplier Code of Conduct, which was scheduled for fiscal 2022. Desktop research, for example, was also carried out to evaluate the supplier codes of companies in the peer group.

Supply chains in the automotive industry

The automotive industry consists of a complex network of globally active players. A distinction is made between original equipment manufacturers (OEMs), first-tier suppliers and second- and third-tier suppliers. Manufacturers and suppliers are closely linked in working together to develop and produce vehicles. Automotive manufacturers have been working for some time on anchoring economic, ecological and social objectives vertically, i.e. across all stages of the value-added chain. These include respect of international ESG standards, reduction of carbon footprint in production, a higher proportion of recyclable material, responsible use of substances and materials, and future supply CO_2-neutral products. The recent trend is that the degree of fulfillment of these aspects, which include a number of criteria, is increasingly being taken into consideration when contracts are awarded.

The automotive manufacturers BMW Group, Daimler Truck, Ford, Honda, Jaguar, Land Rover, Mercedes Benz, Scania, Toyota, Volkswagen Aktiengesellschaft, Volvo Group and Volvo Car Corporation as well as GWM, Stellantis and UD Trucks are either partners or participants of Drive Sustainability (as of February 5, 2022). Under the leadership of CSR Europe, the European Business Network for Corporate Social Responsibility, this group is working on integrating corporate social responsibility even more firmly in the automotive supply chain. The self-assessment questionnaire that they developed and that covers 17 items in six categories is currently used by these OEMs. The score of suppliers on sustainability issues is increasingly being taken into account as a mandatory element when contracts are awarded. With the larger share of their product spectrum, our Sensors and Actuators and Materials and Trade divisions hold a first-tier position in the value-added chain of automotive production, i.e. we supply the automotive manufacturers directly and not via other suppliers or system integrators. The self-assessment questionnaire mentioned previously has to be submitted in updated form by the European plants of both divisions at regular intervals, so that the OEMs can analyze and assess the services and progress in terms of sustainability and determine the degree to which their requirements have been met.

Individual OEMs now also conduct in-depth on-site checks and audit suppliers' manufacturing facilities based on sustainability criteria from the areas of environment, social responsibility, and integrity. This includes the review of documents, talks with employees and a site visit.

Supply chains in the security and defence industry

Supply chains in the defence industry are characterized by very complex structures, easily comprising up to eight stages for the needs of, for example, Rheinmetall Waffe Munition and Rheinmetall Landsysteme. The high proportion of specific materials and processes combined with a broad product range leads, as is generally the case in this industry, to a high proportion of single sourcing, also because only a few companies throughout the world completely manufacture or command the very specific products and processes. In the defence technology industry, switching to new suppliers is very costly, both from a financial and time-related perspective. The qualification of products carried out by military authorities is linked not only to the performance of the product itself but also to the manufacturing process, manufacturing location and suppliers. A change of suppliers therefore automatically results in costs for requalification. The procurement business in the area of ballistic protection has the characteristics of a project, i.e. it is characterized by intermittent production by our suppliers. This requires a high number of quality assurance measures. Furthermore, specific legislation, such as the War Weapons Control Act, the Foreign Trade and Payments Act, the International Traffic in Arms Regulations (ITAR), to cite just a few, must be taken into consideration for procurement in the divisions operating in the security technology sector.

Risks

Information on reducing or avoiding procurement risks can be found in the “Risks and opportunities” section.

Compliance

Management approach

The reputation of Rheinmetall, the success of the business and the trust of customers, investors, employees and the general public depend not only on the quality of our products and services, but also to a large degree on good corporate governance and, in particular, on effective compliance processes. In line with our values and our Code of Conduct, we are committed to conduct characterized by responsibility, integrity, respect and fairness. We are an honest, loyal and reliable partner for all our stakeholders.

Our compliance policy serves to safeguard our business success on a lasting basis. The members of the Executive Board and managers, executives and employees naturally have an obligation to comply at all times in their working environment with all the applicable country-specific laws, regulations and other provisions, to conduct themselves correctly in business dealings, to preserve the company's tangible and intangible assets and to avoid anything that may result in operational or financial disadvantages or damage to the image of individual companies or the Rheinmetall Group. We do not tolerate any damage to our company's standing and to the reputation of our employees or agents as a result of unlawful and/or unethical behavior or corrupt business practices.

International business activities

In the day-to-day business of an international company, the different national political and legal systems as well as cultural values, customs and societal norms of different cultural groups have to be taken into account. In addition to the applicable legislation of the countries of exportation, European Union regulations as well as anti-corruption laws such as the US Foreign Corrupt Practices Act, the UK Bribery Act and the French Sapin II Anti-Corruption Act must be observed. The requirements that Rheinmetall Group companies have to fulfill are therefore many and varied. With deliveries made to 139 countries around the globe in 2021, management and employees now more than ever need guidance when it comes to national and international business and in relations with business partners, office holders, authorities and other state bodies in order to avoid potential errors and any resulting reputational, business or liability risks.

Rheinmetall is regularly assessed by Transparency International, a non-government organization dedicated to the global fight against corruption. For the Defence Companies Index on Anti-Corruption and Corporate Transparency 2020 from Transparency International Defence & Security, which was published in early 2021, a total of 134 companies in the defence industry from 38 countries in ten risk categories were examined. Based on publicly available information, Rheinmetall was rated "C (moderate commitment)" on a scale from "A (very high commitment)" to "F (very low commitment)," putting it in 29th place.

According to the 2021 Corruption Perceptions Index from Transparency International, which ranks 180 (previous year: 180) countries in terms of the degree of corruption perceived in the public sector, we generated 75.9% of our sales in countries with a very low or low corruption risk in the year under review (previous year: 75.3%).

Compliance organization

Illegal conduct can cause many different types of damage and can have serious consequences, such as the discontinuation of business relationships, exclusion from orders, negative assessments on capital markets, imposition of fines, absorption of profits, claims for damages as well as civil or criminal proceedings. There is also the risk of significant and lasting damage to the Group's reputation and thus a detrimental effect on its market position. Compliance at Rheinmetall is therefore taken very seriously and has for a long time been an integral part of the corporate culture.

To provide its employees with guidance and allow them to conduct business with confidence, Rheinmetall took a holistic approach and set up a compliance organization very early on providing standardized general conditions and clear guidelines for legal and rule-compliant, ethically correct and fair conduct in day-to-day business.

At the holding company level, the four functional areas of Prevention (with the functions "awareness and risk" and "due diligence"), Regulation Management, Investigation and Data Privacy each have their own staff and are assigned to the Chief Compliance Officer, who is directly accountable to the Chairman of the Executive Board. Working on an independent or interdisciplinary basis, they pursue various fundamental and improvement projects. They give rise to new or adapted structural requirements, regulations, training measures and communication formats. This area structure is mirrored at division level in the local team structures, which makes it easier for the compliance organization to implement the corporate guidelines in a manner that is as efficient as possible and commensurate with the risk. The compliance organization provides its employees with advice on everyday and project business matters in consideration of local laws and regulations.

The Chief Compliance Officer reports to the Executive Board and the Supervisory Board's Audit Committee on a regular basis, by attending meetings, on the status and effectiveness of the compliance management system and on the latest developments. In serious cases, the committees are informed immediately. In addition, the heads of the divisions are also kept apprised monthly by Corporate Compliance or the Division Compliance Officer of current developments, new rules, planned training measures or possible compliance infringements as well as the status of possible investigations.

Compliance management system

Compliance is taken into account as an aspect of risk in decision-making processes, not only when it comes to considerations regarding the strategic and operational alignment of the Rheinmetall Group, but also in day-to-day business. The central compliance management system, with its integrated and dynamic focus on constantly updated key risk aspects, such as corruption, data protection violations or attempted fraud, is firmly anchored in the Group-wide management and control structures and includes all instruments, processes and extensive measures intended to ensure that procedures in the companies of the Rheinmetall Group comply with the applicable country-specific legislation, general legal conditions, regulatory provisions and the company's own regulations. It also creates an organizational structure that allows the applicable standards to be publicized across the divisions and their implementation status to be tracked. If binding legal regulations in individual countries deviate from the rules set out in the compliance management system, the stricter regulation shall apply where permissible. In the case of changes to the content, the Chief Compliance Officer's approval is also required.

The compliance management system is updated at regular intervals, not only in line with the applicable legal requirements but also in the light of new findings from reporting, comparisons with other compliance systems and the assessment of external specialists (benchmarking). It is also reviewed on an ad-hoc basis if any breach of compliance regulations is suspected or discovered.

Implementation of the compliance management system is monitored by regular reports to Corporate Compliance and by routine and special audits conducted by the internal audit team and the compliance organization.

Compliance officers also monitor important transactions in the companies, such as mergers and acquisitions, the establishment of joint ventures, pre-employment checks and the integration of sales brokers or integrity and sustainability risk assessments for the supply chains, thereby supporting the respective departments in their work. In addition, compliance officers advise the people responsible in the operational units on how to take compliance into account in operational business processes.

In the area of sales support, there is a platform containing information on around 160 countries and regions. Moreover, the tender process in the security and defence technology divisions is structured to the effect that in the course of the bid/no bid decision a compliance audit using defined criteria is obligatory for projects over a certain value threshold. Various IT tools are also used in all divisions to support compliance processes.

Prevention

A compliance risk prevention guideline was implemented in 2019 with the aim of ensuring a standardized procedure for systematic risk prevention and creating the structural and organizational preconditions required for this at all levels in the company. Procedures for taking an initial inventory of compliance risks, deriving response measures and plan regular repeat measures are defined for different applications.

As a shared service center, the central Compliance Due Diligence center of expertise conducts not only pre-employment checks on applicants for key positions, but also all compliance due diligence checks on new and existing business partners (e.g. purchasing, cooperation and sales partners) on a Group-wide basis. The focus lies here on determining whether the commitment is legally permissible, whether all attributable people can be identified ("know your customer – KYC" and "know your supplier – KYS") and whether conflicts of interest are excluded. The general performance and integrity of the business partner are also assessed. The local compliance organization will continue concentrating on assessing the transaction-specific compliance risk associated with the commitment of a business partner at company level. The center of expertise will be integrated in day-to-day operational business through various technical and procedural interfaces. There is already a relatively high degree of digitalization in the due diligence organization. In addition to a specific management database for selecting, managing and monitoring cooperation and sales partners, the whole integrity due diligence process can now be performed via a secure online platform as well. In the past fiscal year, 2,675 business partners and people who applied for key positions at the Rheinmetall Group were subjected to a check in a procedure of varying complexity depending on the risks involved, using new technical processes and an associated high level of automation.

To help continuously identify compliance risks and to develop and improve mitigation measures, a new Compliance Awareness & Risk (CAR) team was established in the third quarter of 2021, which focuses on structural compliance-related prevention topics on an ongoing or project basis. In addition to the courses available in the HR system Empower Learn in the categories of the Code of Conduct, anti-corruption, anti-trust law and data protection, CAR introduced the TRACE learning management system internationally, which offers around 20 training modules in various languages outside the Germany/Austria/Switzerland region, too. Progress was also achieved in a regulatory compliance project launched in 2020, with which the "litigation-proof organization" is to be expanded. Here, around 30 function-specific regulatory areas to be observed globally (e.g. occupational safety, environmental protection, export, customs and logistics regulations, and anti-money-laundering standards) were identified centrally and compared against correlating corporate policies. In the next step, minimum governance standards were defined and a gap analysis with the existing internal regulations was performed in order to detect potential gaps in regulation. Next, an IT toolkit is to be introduced to enable the employees concerned in over 30 countries – those who have increased contact with regulatory areas subject to liability in their everyday and project business – to deal with the complex regulations more easily and reliably.

In the year under review, the Rheinmetall Risk Indicator (RRI) was developed, which is to serve as the basis for various internal risk calculations and replace the previously used TI Corruption Perception Index. The RRI is made up of various informative governance, compliance and ESG indices. These are included in the arithmetic with different weightings and thus reflect the risk priorities set by the Rheinmetall Group. To improve it further, the Group plans to incorporate additional country-specific datasets on ESG aspects in 2022.

The guideline on identifying and avoiding conflicts of interest in the Rheinmetall Group that was adopted in the past fiscal year sets out regulations established by the Rheinmetall Group in connection with the recognition, documentation, escalation and handling of conflicts of interest.

Regulation

Taking account of or on the basis of external conditions such as laws, regulations, etc. and internal organizational requirements, the Executive Board of Rheinmetall AG issues regulations for the Rheinmetall Group so that all employees concerned act in line with standardized processes. Regulation Management, which is based in the central Corporate Compliance department, provides support with the preparation and management of conduct- and process-related regulations of Rheinmetall AG for the Rheinmetall Group. To ensure a standardized procedure, the Regulation Management Manual 2.0 has been available since October 2020. This manual is aimed primarily at publishers and authors as well as members of the Executive Board and management bodies, but also includes several interfaces at all organizational levels. In the Central Regulations Register on the Group's intranet, all regulations approved by the Executive Board can be called up at any time. These are provided in German and English in line with the corporate languages.

Investigation

If employees have information on questionable activities that have been observed, specific breaches of regulations or business practices that may be prohibited, they can contact not only their line manager but also – and in full confidence – various internal offices as well as an independent, external ombudsman (lawyer) and so avert losses for the company. Incident management is also supported by the electronic whistleblower platform "Integrity Line," which has been implemented throughout the Group. In addition, employees can contact the compliance organization directly if they suspect or know of breaches of regulations or business practices. In addition to employees, external parties can also contact the ombudsman by telephone or e-mail, send an e-mail to speakup@rheinmetall.com or contact a specialist compliance officer by telephone.

Protection is guaranteed for all whistleblowers, who need not fear discrimination. Employees involved in investigations into possible breaches of compliance will be assumed to be innocent until proven otherwise. Any information that is received will be systematically analyzed. An incident management guideline on how to deal with suspected cases and on the standardized processing of compliance cases aims to ensure that the handling of information is also independent, transparent and fair as well as being subject to high standards that are comparable across the Group. It also offers legal certainty when carrying out investigations, meaning that appropriate account can be taken of the interests of employees and the employer. Systematic follow-up checks are performed on the basis of this incident management guideline and appropriate measures are taken to properly clarify the facts that have been reported, if necessary with the involvement of external specialists. Confidentiality and discretion take top priority here. If necessary, we will involve the relevant authorities and cooperate with them to resolve the matter. Proven misconduct is sanctioned and entails organizational measures and, for the employees who committed the offense(s), consequences under labor law, civil law and criminal law. The 21 Incident Response Committees established to conduct rapid, interdisciplinary initial evaluations of reports help to ensure that suspected cases can be identified and clarified without delay. In the year under review, a total of 92 reports were received, 35 of which were compliance-relevant. 20 of these cases are still being processed. Historically, misconduct has been identified for around 70% of all reports in the Rheinmetall Group on average.

Data privacy

The Executive Board is responsible for setting up a Group-wide data protection management system. Within the compliance organization, the structures required for the Group-wide implementation of legal data protection requirements were established and an effective data protection management system (DPMS) was introduced. The Corporate Data Privacy Officer manages the data privacy officers at the five company divisions, liaises with them to manage the implementation of the DPMS and further develops the DPMS where required. He reports regularly to the Chief Compliance Officer and, where required, to the Executive Board and Supervisory Board directly. At the start of fiscal 2022, the data protection organization was strengthened with two functions: In January, the Data Privacy Officer responsible for the Rheinmetall holding company and the Corporate Data Protection Officer started their work.

Data protection management relates to the organizational setup and processes required to safeguard the implementation of legal requirements involved in the planning, organization, management and shutdown of automated or data-protection-compliant personal data processing operations.

The Rheinmetall Group companies that process personal data or arrange to have it processed are responsible for ensuring that the procedures in place for processing this personal data function reliably and appropriately. To ensure effective implementation of data protection requirements, the DPMS sets out the possibilities and limitations for allocation and responsibilities for processes and requirements.

The companies of the Rheinmetall Group take a variety of steps to ensure the protection of personal data. The DPMS contains standards for data-protection-related processes. In the Rheinmetall Group, the implementation of data protection requirements for the global handling of personal data is regulated by the data protection rules and specified further by the data protection manual on the DPMS for the EU/EEA jurisdiction. Control processes and documentation requirements for the findings of data-protection-related processes and controls are also being implemented.

In the year under review, data protection management software was introduced, which can be used for tasks such as creating processing registers and managing data protection and compliance risks. In this context, around 130 departments were incorporated and more than 170 users were trained in using the management tool.

Training and advice

To make employees at all levels of the company aware of compliance risks, numerous introduction events, training seminars and workshops are held, some of which are tailored to specific functions such as management, buyers or sales staff. Legislation and important regulations are explained and further content is provided at these sessions. Attention is also drawn to internal compliance requirements, risks and possible sanctions and, based on case studies, practical advice is given on correct conduct in specific situations during everyday work. These classroom training sessions, which also serve as a practical forum for discussions, are accompanied by interactive online programs. Each year, as part of compliance awareness training, employees at sites in Germany and abroad not only receive training in general compliance topics but also in the prevention of corruption, conflicts of interest, money laundering and CEO fraud, export control and anti-trust and competition law. The compliance training matrix, which forms part of the procedural instructions for compliance training, provides an overview of the training content geared toward the different target groups and management levels. Its content is adjusted in accordance with the needs of the participants or supplemented with country-specific or regional peculiarities. In the past fiscal year, around 4,200 Group employees were trained in various compliance topics in classroom training sessions. In addition, around 7,500 employees completed compliance training via e-learning modules in the year under review.

Our employees also receive regular instruction and training in matters relating to data protection. In the past fiscal year, 2,227 people took part in e-learning programs. The content of data protection training is adapted for individual departments in line with the specific requirements in their spheres of work. In the year under review, the training material was revised and updated. For new employees, general data protection training is part of the induction process. All levels of the company are provided with data protection advice on an ad hoc basis.

Risks

Information on reducing or avoiding compliance risks is provided in the “Risks and opportunities” section.

Social responsibility

Management approach

Social acceptance is an important requirement for companies’ economic success. Many Rheinmetall companies can look back on a long history. They have been connected with their sites for many years and are strongly rooted in the local community – after all, this is where their employees and business partners live. In some cases, major customers are based there. Rheinmetall is a living, breathing part of society and participates actively in it and not just in a financial sense. We get involved in the areas of education, sport and culture and also provide direct support for local social projects and charitable organizations. By adding value locally, we also contribute to regional development. Flourishing production sites do not only mean attractive, highly skilled jobs and training places close to home but also orders for local suppliers and service providers. In addition, a large part of the sales generated by the companies returns to the respective economies via the employees, public sector and the shareholders. Capital expenditure in future growth is financed via the funds remaining in the Rheinmetall Group. We also make major contributions to society as an employer and client as well as with our products and the transfer of knowledge.

Corporate citizenship

Corporate citizenship is part of corporate social responsibility and refers to citizenship in and of companies that pursue a medium- and long-term business strategy on the basis of responsible action and, in addition to their actual business operations, are also actively involved in local civil society and/or for social/charitable, environmental, sporting and cultural causes as “good citizens.” Social engagement is a long-standing tradition at Rheinmetall. It always goes beyond the plant boundaries. As the locations where we operate have very different requirements, the decision on which project to support is incumbent on the respective management teams of the companies, the division heads or the Executive Board of Rheinmetall AG. In December 2021, Rheinmetall entered into a cooperation with the sports city of Düsseldorf that provides for sponsorship of a national handball league club. The package also includes the promotion of Olympic, youth and amateur sport.

We were dismayed by the devastation and suffering caused by the flooding in some regions of Germany and made a company donation of €100 thousand to the German Red Cross (DRK) to help the victims of this disaster. In addition, a central emergency fund was set up to provide individually calculated financial assistance to severely impacted Rheinmetall employees who faced particular hardship in the disaster areas. In view of the great willingness to donate among the workforce, too, in response to the flooding disaster, the fund-raising campaign “Rheinmetallers Help Rheinmetallers” was also launched. This fund-raising aimed to show solidarity with affected colleagues and to provide immediate financial assistance to those who had suffered material losses as a result of the flooding but had not lost the absolute essentials, for example due to the destruction of their home.

In May 2021, the effects of the coronavirus pandemic intensified in India, too. To help effectively in this crisis situation, we cooperated with the DRK to arrange for the provision of four intensive care ventilators worth several tens of thousand of euros from a well-known producer of medical devices via our Indian subsidiary. The ventilators, which are suitable for treating children and adults, were supplied to hospitals in Pune and Ahmednagar in the Indian state of Maharashtra.

Product responsibility

Specialist working groups in the divisions deal, for example, with safety and environmental standards for Rheinmetall products. They are responsible for tracking new regulations and developments, defining and implementing the required internal processes and conducting relevant training. Products in civilian business are subjected to extensive testing in accordance with the regulations prescribed by automotive quality and development standards. The Sensors and Actuators division, for example, uses a database-supported process for product safety management, which maps out the entire product lifecycle. The Materials and Trade division uses special design and simulation tools. To prove product safety, in addition to tests carried out in testing facilities outside the engine, engine operation tests are also carried out with customers under various stress scenarios. Internal and external audits are carried out to regularly monitor compliance with the parameters of the quality management system and the relevant processes. In the third quarter of 2020, the Corporate Research & Technology Defence area introduced a new guideline for implementing product safety that applies to the divisions operating in security technology. It sets out the basic requirements for ensuring the safety of Defence products in line with common standards and methods.

In the past year, Rheinmetall Technology Management also dealt with developments regarding the digital product pass at the level of Germany (German Environment Agency: Product Information 4.0) and the European Union (Sustainable Product Initiative and Incubation Forum for Circular Economy in European Defence). This is particularly intended to advance the circular economy. It compiles information on a product’s components, materials and chemical substances, as well as its reparability, replacement parts and proper disposal. Environmental data are thus grouped together in a comparable format, making it easier for the players in the value and supply chain to work toward a circular economy.

In the Materials and Trade division, the St. Leon-Rot and Papenburg locations are working intensively on the materials portfolio to replace substances containing lead. In order to implement environmentally friendly solutions, new lead-free materials such as EASECAST® were developed in the area of continuous casting, which have a similar performance and properties to materials containing lead.

Respect for human rights

Within its own sphere of influence, Rheinmetall supports the protection of internationally recognized human rights. Our commitment is reflected in the current Code of Conduct for employees of the Rheinmetall Group and in the international framework agreement Fair2All, which lays down the principles of social responsibility agreed upon with the European Works Council and the Industrie-All trade union. We also appeal to all our business partners, and in particular our suppliers, to follow our social principles. Our expectations of this stakeholder group are described in the Supplier Code of Conduct.

Protecting human rights in our own company and in the supply chain is an important priority of Rheinmetall. We still rate the risk that human rights will be violated in the employment of staff at our locations to be low as this is covered under the relevant national legislation. However, extensive analyses of the human rights risk situation in the countries where we maintain locations were performed for our own business area in the year under review in light of the requirements of the German Act on Corporate Due Diligence in Supply Chains.

In April 2021, Rheinmetall joined the United Nations Global Compact (UNGC). As a signatory, we pledge to promote the UNGC’s ten principles for sustainable and responsible business and development. In addition, signatories are required to report annually on their progress in implementing them. Based on the ten principles and the 17 United Nations Development Goals (SDGs), the UN organization, in collaboration with UNGC participants, pursues an inclusive and sustainable global economy for the benefit of all people, communities and markets.

We are playing an active role in discussions within the German automotive industry regarding the national human rights action plan launched by the federal government and are a member of the CSR/human rights working group established by the German Institute for Compliance. We are also involved in the corporate responsibility consortium of the Federal Association of the German Security and Defence Industry.

One of the focal points of our work in the Corporate Social Responsibility area is to evaluate the environmental and human-rights-related due diligence obligations of companies in our supply chains. Please refer to the section on “Procurement and the supply chain” for more information. At the same time, we follow regulatory developments in these areas in our customer countries outside the EU, including Switzerland, Australia, Japan, Norway and Canada.

In fiscal 2020 already, potential complainants and their potential complaints were identified in four categories. Complaints and reports of suspected or actual human rights violations can be submitted externally through a variety of communication channels. Points of contact are also already established in the companies/locations. The Incident Management unit, which is part of Corporate Compliance, ensures that these reported incidents are looked into in a structured and unbiased manner, paying particular attention to protecting the identities of the whistleblowers.

EU taxonomy

Sustainable finance

Sustainable finance means taking account of environmental, social and governance considerations when making investment decisions in the finance sector, which should lead to longer-term investments in sustainable economic activities and projects. In additional to climate protection, the ecological aspects also include adapting to climate change and environmental factors such as preserving biodiversity, avoiding pollution, and the circular economy. Social parameters may, for example, relate to issues of inequality, working conditions, investments in local communities, and human rights. The management of public and private-sector companies and institutions – including management structures, relations between employers and employees, and the remuneration of managers and employees – plays a crucial role when it comes to including social and environmental considerations in decision-making processes.

The European Green Deal aims to help achieve the transition to a modern, resource-efficient and competitive economy. This attitude is also characterized by a commitment to implement the 2030 Agenda for Sustainable Development adopted by the United Nations and the associated 17 Sustainable Development Goals as well as the Paris Climate Agreement (COP21). All 27 EU member states have undertaken to make the EU the first climate-neutral continent by 2050. As an intermediate step, they have agreed to reduce emissions by at least 55% by 2030 as compared to the level in 1990.

In the European Commission's view, these ambitious targets cannot be achieved solely using public funds. Involvement of the private sector, and particularly the financial and capital markets, is required here. To finance sustainable growth while also reducing the environment impact and taking account of social and governance aspects, the Commission wants private capital to be directed toward sustainable economic activities, projects and investments and environmentally friendly sectors with the aim of making economies, companies and societies more resilient. This also includes transparency on ESG risk factors that could affect the financial system and the reduction of such risks by means of appropriate governance of financial and corporate players.

One important measure was therefore the definition of a taxonomy of sustainable activities with the aim of establishing a shared understanding of the environmental sustainability of economic activities and investments. The starting point for defining an economic activity as environmentally sustainable is the six environmental objectives of the EU Taxonomy Regulation: (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 and (6) the protection and restoration of biodiversity and ecosystems. Economic activities are considered environmentally sustainable if they make a significant contribution to one or more of these defined environmental objectives, do not significantly negatively impact the achievement of any environmental objective ("do no significant harm" principle) and comply with minimum safeguards for occupational health and safety and human rights, such as those arising from the OECD Guidelines for Multinational Enterprises and the United Nations Guiding Principles on Business and Human Rights.

Based on these complex screening criteria, the extent to which products, processes and business models are sustainable as defined in the EU Taxonomy Regulation is specified. These are currently in place for two of the six environmental objectives defined in the EU Taxonomy Regulation ("climate change mitigation" and "climate change adaptation"). In addition to the delegated regulations on the technical screening criteria for the six environmental objectives of the EU taxonomy, the EU Taxonomy Regulation stipulates another delegated regulation on the taxonomy-related disclosure obligations in accordance with Article 8 of the EU Taxonomy Regulation, which contains more detailed provisions on content, methodology and presentation.

The central reporting parameters for non-financial companies that are already required to publish a non-financial statement are the taxonomy-eligible and taxonomy-compliant sales, capital expenditure (CapEx) and operational expenditure (OpEx). For fiscal 2021, the disclosures are initially limited to the share of taxonomy-eligible activities in the company's overall economic activities. The addition of another four environmental objectives and conformity with the taxonomy will take place when further acts are published in 2022 and will thus cover the entire range of the EU Taxonomy Regulation for non-financial companies.

EU taxonomy in the Rheinmetall Group

Rheinmetall welcomes the fact that the new EU Taxonomy Regulation establishes uniform terminology for European companies and their investments in sustainable business activities.

In the first step, the environmental objectives of “climate change mitigation” and “climate change adaptation” were examined for the Group. In the context of the transformation processes in mobility, and particularly in the automotive industry, our heterogeneous portfolio has been undergoing a gradual realignment process for a number of years. It already comprises a wide range of electric and hydrogen-specific components that are likely to be reflected in sales in the future. Various products that are ready for series production and several development projects no longer relate to the combustion engine, but instead are the result of a strategic realignment toward CO_2-free or CO_2-reduced mobility.

The second environmental goal comprises business activities that can be regarded as a response to current and future climate change. After an initial analysis with regard to Rheinmetall’s product range and the investments made, it was ascertained that the second environmental objective of “climate change adaptation” was not directly covered and it therefore was not assessed further for the first reporting year.

Measurement of business activities

The environmental objective “climate change mitigation” was examined in a top-down approach for all business activities. The following values were determined for fiscal 2021:

in %	Sales	Investments	Business expenses
Economic activities eligible for taxonomy	0.5	5.5	12.7
Economic activities not eligible for taxonomy	99.5	94.5	87.3

The sales analysis of taxonomy-eligible products was performed for all companies in the Group, but only the sales of the Sensors and Actuators division, the Materials and Trade division and the Rheinmetall real estate company were included in the result. The divisions that particularly develop and manufacture products for security and defence technology were not included due to the lack of evidence for the efficiency of comparable technology available on the market. Our coolant pumps developed specifically for electric drive systems generated a large share of taxonomy-eligible sales. Their efficiency makes them particularly suitable for electric vehicles, as they achieve a high cooling performance with relatively low energy requirements. For this reason, these products are used in the electric models of many premium manufacturers. We also record taxonomy-eligible sales with automotive manufacturers for the development of pioneering prototypes for electric and hydrogen applications that promise sustainable growth in the future. In addition, the year under review saw the establishment and expansion of our business areas with regard to the energy industry and renewable energy sources. The first significant sales were generated here in the field of brake and transmission technology for wind turbines. Many innovative products from Rheinmetall were not included in the considerations due to the unclear definition for the activity “production of other low-CO_2 technologies.” Components from our combustion engine-specific “Road to 95g CO_2/km” therefore were not included to any significant degree, although technically significant reductions in greenhouse gas emissions can be achieved by using these products in a vehicle. European automotive manufacturers will be enabled to reduce the CO_2 emissions of their vehicles to under 50g CO_2/km with these components, combined with a battery, and thus to meet a consideration portion of the requirements for taxonomy conformity. Further information on sales is presented in the “Rheinmetall Group business performance – results of operations” section.

Investments as defined in the EU taxonomy include additions to property, plant and equipment and intangible assets during the fiscal year before amortization, depreciation and remeasurement, including additions from business combinations. These investments primarily related to energy optimization measures at the Group's locations. Both the efficient use of electricity and water and the use of waste heat in our production to save natural resources for heat generation were focus areas of the taxonomy-eligible investment volume. In addition, there were investments in the development of pioneering products such as the tank shut-off valve for hybrid vehicles, which allows for electric drive mode without letting fuel vapor escape, and the innovative hydrogen recirculation blower for use in fuel-cell-driven vehicles. Further information on investments is presented in the "Rheinmetall Group business performance – net assets and financial position" section.

Operational expenditure includes direct, non-capitalized expenses for 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 operational readiness. The majority of our taxonomy-eligible operational expenditure is attributable to research and development. They will lead to taxonomy-eligible additional sales and indicate the importance that alternative drive technologies will hold for Rheinmetall in the future.

Avoiding double counting

While recording this, a distinction was made between business activities that are always associated with the intention of generating sales and those that are not. The activities aimed at generating sales – regardless of whether sales, CapEx or OpEx were concerned – were examined for possible double-counting effects, as there is a risk of this with regard to internal value added in particular. By means of this approach, existing uncertainties were eliminated. Activities that pursue a goal other than generating sales – particularly energy-related measures – were analyzed on the basis of itemizations. This did not reveal any anomalies.

Outlook for the application of the EU taxonomy in the Rheinmetall Group

Rheinmetall will use the experience gained from the first year of collecting and evaluating taxonomy data to expand the Group's standard reporting processes accordingly and create the IT conditions to facilitate the necessary recording of data. This particularly applies in the context of the upcoming analysis and assessment of the four additional environmental objectives and an extensive evaluation of all taxonomy-eligible and taxonomy-compliant activities of the company, and for the expansion to include the technical screening criteria to be examined in the future.

Corporate governance
Corporate governance statement

In the following chapter, the Executive Board and Supervisory Board report on corporate governance in the Rheinmetall Group in accordance with the fundamental principles of the German Corporate Governance Code (GCGC), specifically principle 22 of the GCGC. The corporate governance statement in accordance with sections 289f and 315d of the German Commercial Code can also be found here.

Corporate governance

Rheinmetall AG has traditionally been committed to a responsible, fair and reliable corporate policy that is geared towards the use and expansion of entrepreneurial potential, achieving medium-term financial targets and increasing the value of the company on a systematic and sustainable basis.

The law on stock corporations, capital market law and the right of co-determination, the company's Articles of Association and the German Corporate Governance Code, which is based on internationally recognized standards, form the basis for the organization of management and monitoring at the company, with the aim of making structures transparent and thus strengthening the trust of national and international investors, business partners, analysts, media, employees and the public in Rheinmetall AG's business policy, management and supervision and securing it in the long term.

Declaration of conformity in accordance with section 161 AktG

The implementation of the recommendations of the German Corporate Governance Code at the Rheinmetall Group was discussed at the Supervisory Board meeting on August 18, 2021. The Executive Board and Supervisory Board issued the following "Joint declaration of the Executive Board and the Supervisory Board in accordance with section 161 of the German Stock Corporation Act on the recommendations of the Government Commission on the German Corporate Governance Code," which can be found – together with older versions – on the company's website in the section "Company – Corporate Governance."

> "Since issuing the last declaration of conformity dated August 18, 2020, Rheinmetall AG has complied and will continue to comply with the recommendations of the "Government Commission on the German Corporate Governance Code" as published by the Federal Ministry of Justice and Consumer Protection in the official section of the Federal Gazette on March 20, 2020 (version dated December 16, 2019 – "Code") with the exception described below:
>
> The recommendation in section B.5 of the Code is not fully followed. This specifies that an age limit should be set for Executive Board members and stated in the corporate governance statement. The employment contracts with the Executive Board members stipulate an age limit such that the contract shall end, without needing to be terminated, at the end of the month in which the Executive Board member reaches the standard retirement age under the statutory pension scheme or at the time when they draw a statutory retirement pension (sections 35 – 42 of the German Social Security Code (SGB) VI), for whatever legal reason, before reaching the standard retirement age. The CFO Helmut P. Merch would thus originally have left his position as of December 31, 2021. However, his employment contract has been extended temporarily until December 31, 2022. A clause on the standard age limit was not included in his new employment contract due to its temporary nature. Mr. Merch will thus leave the Executive Board as of December 31, 2022 at the age of 66. From the company's point of view, this individual deviation from recommendation B.5 of the Code is in the company's interests. Due to the recently implemented strategic realignment of the Group and the associated start of corporate restructuring, it is in the company's interests for Mr. Merch to continue supporting this corporate restructuring with his many years of experience in the Group and on the Executive Board.
>
> Düsseldorf, August 2021
> Rheinmetall Aktiengesellschaft
> The Executive Board   The Supervisory Board"

Contents not reviewed by the auditor

There are some recommendations of the German Corporate Governance Code that Rheinmetall does not implement: Pursuant to recommendation A.5 of the Code, in the event of a takeover offer, the Executive Board should convene an Extraordinary General Meeting at which the shareholders will discuss the offer and possibly adopt corporate law measures. Convening a General Meeting is an organizational challenge for large listed companies – even taking into account the shorter deadlines provided for in the German Securities Acquisitions and Takeover Act (WpÜG). It is questionable whether the level of effort involved is even justified in such cases where there are no relevant resolutions put forward for the General Meeting. Convening an Extraordinary General Meeting should therefore be reserved for appropriate cases only.

According to recommendation D.8 sentence 2, second clause, participation in meetings of the Supervisory Board and its committees by telephone or video conference should not be the rule. It is general practice at Rheinmetall AG to attend these meetings in person. Participation by telephone is reserved for exceptional circumstances only. Owing to the exceptional circumstances triggered by the COVID-19 pandemic, several meetings of the Supervisory Board and its committees were held by telephone or video conference in fiscal 2021.

Description of the working methods of the Executive Board and Supervisory Board

With its Executive Board and Supervisory Board, Rheinmetall AG has a two-tier management and monitoring structure. Both bodies are responsible for and obligated to operate in the interests of the shareholders and the well-being of the company. They work together closely and trustfully in the interests of Rheinmetall.

The Supervisory Board and its committees have adopted rules of procedure that set forth, among other things, the supply of information to the Supervisory Board by the Executive Board. In accordance with recommendation D.1 of the GCGC, the Rules of Procedure of the Supervisory Board have been made permanently available to the public on the company’s website.

The Executive Board reports in the meetings of the Supervisory Board and committees. The chairs of the Executive Board and Supervisory Board also maintain regular contact between the scheduled meetings and discuss issues relating to strategy, business development, planning, risk management and compliance within the company.

Remuneration system and remuneration of Executive Board members

At the 2020 Annual General Meeting, a resolution on the approval of the remuneration system for the Executive Board members of Rheinmetall AG had been held. No majority approval was achieved here. In accordance with section 120a(3) AktG, the Supervisory Board therefore reviewed the remuneration system in detail, particularly taking account of the comments by Rheinmetall shareholders. The Supervisory Board therefore – on the basis of the recommendations of its Personnel Committee – proposed that the 2021 Annual General Meeting approve the revised remuneration system for Executive Board members passed by the Supervisory Board with effect from January 1, 2022. The 2021 Annual General Meeting approved the remuneration system by 92.61%. The remuneration report in accordance with section 162 AktG can be found in the section of the same name of this annual report. In addition, the remuneration report including the auditor’s report, the applicable remuneration system and the last remuneration resolution of the Annual General Meeting are published on our website.

Contents not reviewed by the auditor

Composition of the Executive Board

In accordance with Article 6(1) of the Articles of Association, the Executive Board of the company is composed of at least two persons. The number of members is determined by the Supervisory Board. In the year under review, Armin Papperger, Helmut P. Merch, Peter Sebastian Krause and (until April 22, 2021) Jörg Grotendorst were appointed as members of the Executive Board.

Members of the Executive Board and mandates of the Executive Board members

	Position/area	Appointments	Membership in Supervisory Boards
Armin Papperger **Engineering graduate**	Chairman	January 1, 2017, to December 31, 2021	Rheinmetall Automotive AG*) Chairman
Born 1963 Nationality | German			Rheinmetall Denel Munition (Pty) Ltd*) Chairman
			Rheinmetall MAN Military Vehicles GmbH*) Chairman
			The Dynamic Engineering Solution Pty Ltd Deputy Chairman of the Supervisory Board
			Rheinmetall Landsysteme GmbH *) Chairman (since November 23, 2021)
Helmut P. Merch **Business graduate**	CFO	January 1, 2013, to December 31, 2017	Rheinmetall Automotive AG*)
Born 1956 Nationality | German	Finance and Controlling	January 1, 2017, to December 31, 2021	Rheinmetall Denel Munition (Pty) Ltd*)
			ElringKlinger AG (since July 7, 2020)
Peter Sebastian Krause **Lawyer**	Director of Industrial Relations	January 1, 2017, to December 31, 2019	Rheinmetall Electronics GmbH*)
Born 1960 Nationality | German	Human Resources	January 1, 2020, to December 31, 2024	Rheinmetall Landsysteme GmbH*) Chairman
			Rheinmetall Waffe Munition GmbH*) Chairman
Jörg Grotendorst **Engineering graduate**		October 1, 2020, to April 22, 2021	HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)
Born 1970 Nationality | German			Kolbenschmidt Huayu Piston Co., Ltd.*) Vice Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)
			KS HUAYU AluTech GmbH*) Vice Chairman (since December 1, 2020 to April 22, 2021)
			Pierburg Huayu Pump Technology Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)

*) Internal mandates
December 31, 2021

Contents not reviewed by the auditor

In accordance with Article 6(4) of the Articles of Association as amended on May 11, 2021, the Executive Board issues Rules of Procedure. In accordance with the Rules of Procedure for the Executive Board, the responsibilities were defined as follows as of December 31, 2021:

Responsibilities of members of the Executive Board of Rheinmetall AG

Armin Papperger	Helmut P. Merch	Peter Sebastian Krause
		Director of Industrial Relations
DIVISIONS		
Vehicle Systems Weapon and Ammunition Electronic Solutions Sensors and Actuators Materials and Trade		
AREAS		
Business Excellence	Accounting	HR Policies
Compliance	Controlling | Risk Management	HR Strategy
Corporate Social Responsibility	Finance | Treasury	Labour Relations and Labour Law
Corporate Strategy and Development	Insurance	Management Development | Rheinmetall Academy
Corporate Communications (internal and external)	Offset Management	Payroll
Internal Audit	Purchasing Nonproduction Material	Recruiting
Investor Relations	Tax	
Legal and IP	Information Technology	
Real Estate		
Security		
Organisation & Projects		
Social Responsibility		
New Technologies		

December 31, 2021

As Head of the Executive Board HR area, the Director of Industrial Relations is appointed in accordance with section 33 of the German Codetermination Act (MitbestG).

Up until his departure on April 22, 2021, Jörg Grotendorst headed the New Technologies department in accordance with the resolution of the Executive Board of Rheinmetall AG dated December 18, 2020. Responsibility for this department was assumed by the Chairman of the Executive Board, Armin Papperger, in accordance with the resolution of the Executive Board of Rheinmetall AG dated May 27, 2021, after Jörg Grotendorst left.

With the support of members of the Personnel Committee and the Executive Board, the Supervisory Board is responsible for long-term successor planning for the Executive Board. In addition to the provisions of the Stock Corporation Act, German Corporate Governance Code and Rules of Procedure for the Personnel Committee, the target defined by the Supervisory Board regarding the number of women on the Executive Board and the criteria for the composition of the Executive Board for successor planning of Executive Board positions are taken into account.

Under consideration of the different requirements – depending on the Executive Board area – regarding specialist qualifications, character, skills and experience, an ideal profile is drawn up that can be used as a basis – when the need for a successor on the Executive Board becomes apparent – for checking potential internal candidates or, with the support of external consultants, searching for external candidates. The Supervisory Board is then given a recommendation for their consideration. If necessary, external consultants help the Supervisory Board/Personnel Committee to draw up the requirements profiles and select ideal candidates.

Contents not reviewed by the auditor

Working methods of the Executive Board

The Executive Board is responsible for the overall management of the company. It defines long-term strategic orientation and corporate policy as well as the structure and organization of the Rheinmetall Group and allocates resources. The Executive Board manages the company on its own initiative in the interests of the company, i.e. taking into consideration the concerns of shareholders, customers, employees and other groups connected to the company (stakeholders), with the aim of creating sustainable value added free from instructions of third parties in accordance with the relevant laws, the company's Articles of Association and the applicable Rules of Procedure and having regard for the resolutions of the Annual General Meeting. It represents the company to third parties.

The Rules of Procedure for the Executive Board govern the Board's work, the allocation of duties among the respective Executive Board members, matters reserved for the Executive Board as a whole and the majority required for Executive Board resolutions. In accordance with the Rules of Procedure for the Executive Board, each member of the Executive Board manages the area of responsibility assigned to them under the business distribution plan independently and on their own responsibility, whereby the Executive Board as a whole must be informed on an ongoing basis of key processes and developments relating to business and important measures. Any matters that are of fundamental importance or that have far-reaching consequences require a resolution to be passed by the Board as a whole.

The Executive Board develops the strategic orientation of the company, agrees it with the Supervisory Board and ensures its implementation. It decides on basic issues relating to business policy and on annual and multi-annual planning. In addition to effective management of opportunities, it establishes risk controlling at the company. It implements appropriate measures to ensure that laws, provisions, official regulations and internal corporate guidelines are observed and helps to ensure that subsidiaries comply with these. Furthermore, the Executive Board keeps diversity in mind when filling management positions at the company and makes sure that adequate attention is given to women.

Details of cooperation between the Executive and Supervisory Boards can be found in the company's Articles of Association and the Rules of Procedure for the Supervisory Board of Rheinmetall AG, which govern the Executive Board's information and reporting requirements as well as transactions and measures requiring approval. This applies, for example, to the acquisition and sale of shareholdings, investment planning, issuing bonds and taking out long-term loans. The Executive Board informs the Supervisory Board regularly, promptly and comprehensively regarding business performance, financial position and results of operations, planning and achievement of targets, as well as regarding compliance issues, strategy and the risk situation. On the basis of these reports, the Supervisory Board monitors the legality, correctness, appropriateness and economic efficiency of management by the Executive Board.

The Chairman of the Supervisory Board is informed immediately by the Executive Board of any important events or business developments that could have a significant influence on the company's financial position, results of operations and net assets.

Composition of the Supervisory Board

The statutory provisions by which the Supervisory Board of the company is elected are explained below. When candidates are proposed for election to the Supervisory Board, attention is paid to their professional qualifications and personal skills as well as to legal regulations on diversity in the composition of the Board and the recommendations of the German Corporate Governance Code. As a rule, members of the Supervisory Board are elected for three to five years. They may be re-elected. The Supervisory Board members have the same rights and obligations, are required to perform their mandate in the best interests of the company and are not bound by any orders or instructions.

New members of the Supervisory Board familiarize themselves with the company's business activities while preparing for their mandate on the Supervisory Board. By consulting written documentation and talking to other members of the Supervisory Board and Executive Board, they can familiarize themselves with the relevant issues and learn about the working methods of the Supervisory Board and its committees.

Contents not reviewed by the auditor

To ensure the prevention of potential conflicts of interest, the Supervisory Board does not include any members who hold board positions or perform advisory activities for key competitors of Rheinmetall AG and its Group companies. Former Executive Board members of Rheinmetall AG are not represented on the Supervisory Board.

According to the rules of the Corporate Governance Code, a person is considered to be independent above all if they have no business or personal relationship with Rheinmetall AG or its bodies, a controlling shareholder or any company associated with it that could constitute a significant or longer-term conflict of interest. According to the assessment of the shareholder representatives in the Supervisory Board, on the shareholder side the Supervisory Board has a sufficient number of independent members. Even though Ulrich Grillo and Professor Susanne Hannemann formerly held management positions in the Rheinmetall Group (1993–2001 and 2003–2007 respectively), on the shareholder side the Supervisory Board considers these two Supervisory Board members to be independent due to their now many years of work outside the Group. Professor Andreas Georgi is also considered to be independent. He may have been a member of the Supervisory Board for more than twelve years, but since his appointment in May 2017 to the position of Chairman of the Audit Committee, he has, in the view of the members of the Supervisory Board, continued to provide highly professional support for the work of the Executive Board with his critical judgment skills and, as a sparring partner to the Executive Board, compellingly represents the interests of the shareholders through his farsightedness and sound judgment. The experience and expertise obtained through his former position as a member of the Executive Board of Dresdner Bank AG and his current position as a professor specializing in corporate management and control problems at the Ludwig-Maximilians-Universität Munich also serve him well. The professional, specialized qualifications more than outweigh any doubts concerning his independence due to the mere length of service. As such, all shareholder representatives on the Supervisory Board are considered to be independent. The composition of the Supervisory Board and the terms of office of its members are outlined in the “Letter to shareholders” section in the Supervisory Board report.

Working methods of the Supervisory Board

The Supervisory Board performs its activities in accordance with statutory provisions, the Articles of Association of Rheinmetall AG and its Rules of Procedure. The main contents of the Rules of Procedure, which are published on the company’s website, concern the composition, tasks and responsibilities of the Supervisory Board, the convention, preparation and chairing of meetings, the rules pertaining to committees and quorum requirements. The Chairman of the Supervisory Board coordinates the work of the Supervisory Board, chairs its meetings and represents the Board externally. Each year, he explains the activities of the Supervisory Board and its committees in the report of the Supervisory Board printed within the annual report and orally at the Annual General Meeting.

The Supervisory Board advises the Executive Board on the management of the company and monitors its management activities. The Chairman of the Supervisory Board is elected from among its members. Supervisory Board meetings are held in accordance with the provisions of the German Stock Corporation Act (AktG). As a general rule, four Supervisory Board meetings take place each calendar year, which are attended by members of the Executive Board unless otherwise stipulated by the Chairman of the Supervisory Board. Resolutions may be passed in writing, by telex (fax or e-mail) or by telephone. The Supervisory Board passes its resolutions by means of a simple majority of members participating in the passing of the resolution. In the event of a tied vote, the Chairman of the Supervisory Board has the casting vote.

The Supervisory Board of Rheinmetall AG reviews the efficiency of its activities at regular intervals either internally or with the support of external consultants, as required by the provisions of the German Corporate Governance Code. Here, the working methods of the Supervisory Board and its committees, the routing of information from the Executive Board to the Supervisory Board and the interaction of the two boards is discussed and evaluated. The plenary assembly debates possible improvements in an open discussion and decides on any measures.

The Supervisory Board also governs the remuneration of the Executive Board members. Details of Executive Board remuneration can be found in the remuneration report.

Contents not reviewed by the auditor

The remuneration of the Supervisory Board members is determined by the Annual General Meeting. It was most recently approved by the Annual General Meeting on May 11, 2021, with a majority of 99.75% of the share capital represented at the Annual General Meeting. The remuneration attributable to the individual members is presented in the remuneration report.

No consultancy agreements or other service or work contracts existed between members of the Supervisory Board and Rheinmetall AG during the period under review.

Structure and working methods of the Supervisory Board's committees

In compliance with legislation and commercial interests, the Supervisory Board has created five committees to perform its control and monitoring tasks efficiently. In doing so, it pursues the aim of making its work more efficient by having complex, time-consuming matters requiring extensive discussion dealt with in smaller groups and prepared for the entire Supervisory Board in the same way as proposed resolutions for decision by the Supervisory Board as a whole. In individual cases, the committees also have decision-making powers if these have been transferred by the Supervisory Board. The meetings are convened by the committee chair.

With the exception of the Nomination Committee, which consists of three solely shareholder representatives, the committees are based on joint representation, with two or three shareholder representatives and two or three employee representatives in each case.

Each of these committees has adopted rules of procedure that set forth their composition, their responsibilities and rules of procedure for resolutions in these bodies.

Strategy Committee – The Strategy Committee deals with the strategic prospects, focus and development of the Rheinmetall Group. It discusses the principles for the Rheinmetall Group's overall strategy including the business policy and corporate orientation of the company and its divisions with the Executive Board and addresses significant, specific strategic programs and measures. The Strategy Committee advises and monitors the Executive Board with regard to determining business strategies for sustainable development of the company and to establishing processes for planning, implementing, assessing and adjusting strategies.

As of December 31, 2021, the following people were members of the Strategy Committee: Ulrich Grillo (Chair), Dr. Klaus Draeger, Professor Sahin Albayrak, Dr. Britta Giesen, Dr. Daniel Hay, Dagmar Muth, Sven Schmidt and Markus Schaubel.

Audit Committee – The Audit Committee has the task of supporting the Supervisory Board when performing its supervisory functions. It looks in particular at the consolidated and single-entity financial statements and quarterly accounts and – in addition to the accounting process – the adequacy and effectiveness of the internal control system, internal auditing, the risk management system and the compliance management system. In addition to the qualifications and independence of the auditor, the Audit Committee checks the services performed by the auditor in terms of the quality and effectiveness of the audit and is responsible for issuing the audit engagement to the auditor, determining the focal points of the audit and agreeing the fees.

In accordance with the Stock Corporation Act, at least one member of the Supervisory Board must also sit on the Audit Committee, acting as a financial expert in the areas of accounting and auditing. With Professor Andreas Georgi and Professor Susanne Hannemann, two members of the Audit Committee possess specialized knowledge and experience in the application of accounting principles and internal control processes. In accordance with the German Corporate Governance Code, the Chairman of the Audit Committee is to possess extensive knowledge and experience in the application of accounting principles and internal control processes and know the details of the audit. They are also to be independent and not a former Executive Board member whose tenure ended fewer than two years prior. The Chairman of the Audit Committee, Professor Andreas Georgi, fulfills these requirements.

Contents not reviewed by the auditor

As of December 31, 2021, the Audit Committee comprised the following members: Professor Andreas Georgi (Chair), Ulrich Grillo, Professor Susanne Hannemann, Ralf Bolm, Dr. Haniel Hay and Sven Schmidt.

Personnel Committee – Tasks that are the responsibility of this committee include selecting suitable candidates to fill Executive Board positions, making preparations for the appointment and withdrawal of Executive Board members and concluding, amending and terminating employment contracts for members of the Executive Board and other agreements with them. It is also responsible for appraising the performance of the Executive Board, regularly examining the amount, suitability and customary level of Executive Board remuneration and overseeing the structure of the Executive Board remuneration system.

As of December 31, 2021, the Personnel Committee comprised the following members: Ulrich Grillo (Chair), Professor Andreas Georgi, Dr. Daniel Hay and Reinhard Müller.

Nomination Committee – The Nomination Committee submits recommendations to the shareholder representatives on the Supervisory Board for the nomination of shareholder representative candidates for election to the Supervisory Board by the Annual General Meeting.

As of December 31, 2021, the Nomination Committee comprised the following members: Ulrich Grillo (Chairman), Dr. Franz Josef Jung and Klaus-Günter Vennemann.

Mediation Committee – The law demands the establishment of the Mediation Committee. In accordance with section 31(3) of the German Codetermination Act, it submits the Supervisory Board a slate of candidates if in the first ballot the required two-third majority of Supervisory Board member votes is not received for the appointment or dismissal of Executive Board members. The Mediation Committee convenes only when required.

As of December 31, 2021, the Mediation Committee comprised the following members: Ulrich Grillo (Chair), Professor Andreas Georgi, Dr. Daniel Hay and Reinhard Müller.

The Supervisory Board is regularly informed by the chairs of the committees in the subsequent plenary meeting of the activities of the committees and of the content and outcome of discussions held in the respective committee meetings.

Supervisory Board and Executive Board members' membership of other supervisory boards

In accordance with recommendation C.5 of the German Corporate Governance Code in the version dated December 16, 2019, none of the Executive Board members performed more than two mandates on supervisory boards of listed stock corporations that were not part of the Group or on supervisory boards of companies external to the Group with comparable requirements. An overview of the memberships of members of the Supervisory Board and Executive Board of Rheinmetall AG in other statutory supervisory boards and comparable control bodies of commercial enterprises in Germany and abroad can be found in the overview earlier in this section.

Diversity

In accordance with sections 96(1) and (2) and 101(1) of the German Stock Corporation Act in conjunction with section 7(1) no. 2 MitbestG, the Supervisory Board of Rheinmetall AG comprises eight shareholder representatives and eight employee representatives, at least 30% of whom are women and at least 30% of whom are men. In the year under review, the Supervisory Board had four female members – two female employee representatives and two female shareholder representatives, which means that the regulation on a minimum quota for women and men on the Supervisory Board is complied with, having regard to the provisions of section 96(2) sentence 3 of the German Stock Corporation Act.

The Supervisory Board and Executive Board of Rheinmetall AG must be filled with persons who provide a balanced mix of all the qualifications, knowledge, skills and personal characteristics needed for the management and supervision of a capital-market-oriented, large company operating in the global automotive and defence industry.

Contents not reviewed by the auditor

The members of the Supervisory Board should possess, individually and collectively, the necessary prerequisites and experience, which are appropriate to the type, scope and complexity of the business as well as the risk structure of the company so that they can act as constructive supervisors and competent advisors to the Executive Board.

In the Supervisory Board of Rheinmetall AG, which is based on joint representation, the employees are represented by two trade union representatives, five elected employee representatives and one representative for the managerial staff.

The shareholder representatives are determined by the Annual General Meeting. The nominations to the Shareholders' Meeting are based on the recommendations of the Nomination Committee, which take account of balance and the differences in the knowledge, skills and experience of the shareholder representatives proposed for election to the Supervisory Board. Details of the length of time the individual members have belonged to the Supervisory Board can be found in the overview in the section "Letter to shareholders – Supervisory Board report."

In its Rules of Procedure, the Supervisory Board has stipulated that, as a rule, consideration cannot be given in the nominations to people who have reached the age of 75 at the date of the election. It takes the view that a mixed age structure in the Supervisory Board serves the interests of the company more effectively. On average, the members of the Supervisory Board were aged around 58 at the end of the year under review, with the youngest and oldest members aged 42 and 73 respectively.

After the targets for the composition and membership of the Supervisory Board resolved in the Supervisory Board meeting in December 2010 in accordance with item 5.4.1 of the German Corporate Governance Code in force at the time were supplemented and made more specific in fiscal 2017 by a comprehensive skills profile, comprising various parameters, for the shareholder representatives, in August 2020 in line with the recommendation in item C.1 of the German Corporate Governance Code the Supervisory Board resolved changed targets for its composition including a skills profile for the executive body as a whole, taking account not only of structural and functional aspects, but also strategic expertise. Appropriate consideration will be given to them in the Supervisory Board elections scheduled for 2022.

The composition of the Supervisory Board of Rheinmetall AG – focused on the specific requirements of the company – is balanced as a whole and thus serves to ensure that qualified individuals advise the Executive Board and monitor its management activities effectively. Individually and as a whole, the members of the Supervisory Board have the necessary qualifications, knowledge, skills and specialist and professional experience to perform their advisory and monitoring duties properly in an international technology group, and they possess the necessary qualities to successfully carry out the activities of the Supervisory Board. In addition to commitment, the ability to work as a team and debating skills as well as having adequate time available, these include integrity and confidentiality in particular.

The members of the Supervisory Board reflect the international activities of Rheinmetall AG. Supervisory Board members have in-depth knowledge of the branches of industry, sectors and core areas of expertise that are key to the company. They have managerial experience in a corporate or operational context and complement each other in terms of their different educational and professional background, age structure, professional career and qualifications.

In accordance with Article 6(1) of the Articles of Association, the Executive Board of the company is composed of at least two persons. The number of members of the Executive Board is determined by the Supervisory Board. In the year under review, the Executive Board of Rheinmetall AG consisted of four members between January 1 and April 22, 2021, and of three members from April 23, 2021, after Jörg Grotendorst left. The current responsibilities of the members are shown on the third page of this section.

Contents not reviewed by the auditor

In accordance with the decision of the Supervisory Board from August 2017, the Executive Board of Rheinmetall AG does not have any female members for the time being and will not have any until June 30, 2022. This is due – in addition to a continuing lack of supply of external female managers in the sectors concerned – to the still insufficient number of women in the management tiers of the Rheinmetall Group. The Supervisory Board supports the Executive Board's objective of preparing female managers successively and systematically for assuming higher management positions. In addition to the setting of targets for personnel development programs up to 2026 and the employment of women in the management levels, various measures and activities as part of career planning and career development have already been adopted with the aim of qualifying women for management positions, both in terms of content and on a personal level, in the medium and long term, to ensure that more women will be available in the future as candidates to assume management responsibility.

The weighting and nature of diversity criteria are based on the specific Executive Board position to be filled and the associated tasks within the specialist areas. The Supervisory Board of the company is of the opinion that in the year under review the members of the Executive Board of Rheinmetall AG form a managing committee with strong leadership qualities and, considering the respective requirements profile of the area of responsibilities and in light of their character, training, professional qualifications, expertise, management qualities, previous performance, experience and success, have proven the best choice, both professionally and personally, for the company and believes that they are appropriate appointments for the respective management areas. The Supervisory Board considers relative continuity in terms of staffing in the top management in the best interests of the company and additionally a key component for the further sustainable economic success of Rheinmetall AG.

Over many years, Armin Papperger, Helmut P. Merch and Peter Sebastian Krause were systematically prepared for more demanding management roles in various functions and hierarchical levels and have constantly assumed more responsibility for larger entities during their career. They know the relevant industries, the industry cycles of the entities and the challenges facing an international technology group today, and are confronting future issues such as digitalization and transformation, especially in the automotive industry. They also have the ability to align business models and processes in a dynamically changing world. Furthermore, the Supervisory Board gives attention to supplementary profiles and professional experience as well as an adequate age mix. On the reporting date, ages in the Executive Board ranged from 59 to 66, with an average age of approximately 62.5.

The targets for the period from July 1, 2017, to June 30, 2022, for the share of women at the first and second management levels below the Executive Board of Rheinmetall AG were set at 14.8% for the first management level and 27.3% for the second management level. In addition, other co-determined Group companies have resolved targets for the share of women in the Supervisory Board, the Executive Board, the senior management and in the two management levels below for the period from July 1, 2017, as well as a deadline for their achievement, and have published both in line with statutory requirements. The implementation deadline is June 30, 2022, in each case.

Further information on diversity can be found in the “Non-financial aspects of business activities” section.

Preventing conflicts of interest

In making decisions and performing their duties, members of the Executive and Supervisory Boards must not pursue their personal interests or take advantage of any business opportunities arising for the company for their own personal gain, or grant unfair advantages to other persons. In accordance with recommendations E.1 and E.2 of the German Corporate Governance Code as amended on December 16, 2019, any potential conflicts of interest involving members of the Supervisory Board or Executive Board must be disclosed immediately. No conflicts of interest were reported to the company by any members of the Executive or Supervisory Board in the year under review.

Contents not reviewed by the auditor

Shareholders and Annual General Meeting

Shareholders of Rheinmetall AG exercise their rights within the framework of the options provided by law or the company's Articles of Association before or during the Annual General Meeting, which is convened by the Executive Board or Supervisory Board as prescribed by law, or when it appears necessary in the interests of the company.

The Annual General Meeting is convened, the agenda items on which a vote will be taken are announced, and the conditions of participation and rights of shareholders are explained within the deadlines prescribed by law and the company's Articles of Association. All documents and reports required by stock corporation law, supplementary information on the Annual General Meeting and explanations of shareholder rights will be made available on the company's website, on which any countermotions or nominations from shareholders will also be published. Each share grants one vote in ballots. This does not include treasury shares held by the company. Further information on treasury shares held by the company is provided in the notes to the consolidated financial statements – other explanatory information under (17) Equity.

On the basis of the German Act Concerning Measures Under the Law of Companies, Cooperative Societies, Associations, Foundations and Commonhold Property to Combat the Effects of the COVID-19 Pandemic of March 27, 2020, the Executive Board, with the approval of the Supervisory Board, resolved to hold the company's Annual General Meeting on May 11, 2021, at the headquarters of the company in Düsseldorf as a virtual Annual General Meeting without the physical presence of its shareholders or their authorized representatives. During voting, 25,785,519 shares (previous year: 22,443,290), accounting for 59.20% of the share capital (previous year: 51.52%), were represented. The shareholders and shareholder representatives voted with majorities of between 80.48% and 99.98% in favor of the twelve resolutions on the agenda that were proposed by the management. Information about attendance and the results of votes were published online on Rheinmetall's website after the Annual General Meeting.

D&O insurance

Rheinmetall has taken out Directors' and Officers' liability insurance (D&O insurance), which covers the activities of members of the Executive Board and Supervisory Board. This insurance provides for the statutory deductible for the Executive Board under section 93(2) sentence 3 of the German Stock Corporation Act.

Managers' transactions

Any transactions involving shares or debt instruments of Rheinmetall AG or derivatives or other financial instruments relating to them that have been carried out by members of the Supervisory and Executive Boards or related parties (managers' transactions in accordance with Article 19 of Regulation (EU) No. 596/2014 of the European Parliament and of the Council on Market Abuse (Market Abuse Regulation – MAR)) were published by the company in the prescribed manner immediately after notification of the transaction was received, including on the company's website.

Contents not reviewed by the auditor

Managers' Transactions 2021 EUR

Publication	Name	Status	Transaction	Shares	Price	Platform
22/03/2021	Florian Krause	Related party of Peter S. Krause	Purchase	100	83.70	Tradegate
26/03/2021	Armin Theodor Papperger Allocation of shares as a remuneration component as part of the Executive Board remuneration	Chairman of the Executive Board	Allocation	8,961	83.69	Off-exchange
26/03/2021	Helmut P. Merch Allocation of shares as a remuneration component as part of the Executive Board remuneration	Member of the Executive Board	Allocation	4,480	83.69	Off-exchange
26/03/2021	Jörg Grotendorst Allocation of shares as a remuneration component as part of the Executive Board remuneration	Member of the Executive Board	Allocation	771	83.69	Off-exchange
26/03/2021	Peter Sebastian Krause Allocation of shares as a remuneration component as part of the Executive Board remuneration	Member of the Executive Board	Allocation	2,756	83.69	Off-exchange
26/03/2021	Dr. Michael Mielke Allocation of shares as a remuneration component as part of the long-term incentive program for managerial staff	Member of the Supervisory Board	Allocation	358	66.95	Off-exchange
06/05/2021	Helmut P. Merch	Member of the Executive Board	Purchase	3,000	84.42	TGAT
06/05/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	10,000	84.46	TGAT
06/05/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	2,000	84.68	TGAT
28/05/2021	Dr. Jutta Roosen-Grillo	Related party of Ulrich Grillo	Purchase	300	83.22	Xetra
28/05/2021	Theresa Marie Grillo	Related party of Ulrich Grillo	Purchase	35	83.32	Xetra
28/05/2021	Paulina Karin Grillo	Related party of Ulrich Grillo	Purchase	35	83.36	Xetra
01/06/2021	Peter Sebastian Krause	Member of the Executive Board	Purchase	200	85.46	Tradegate
01/06/2021	Peter Sebastian Krause	Member of the Executive Board	Purchase	3,300	85.60	Tradegate
18/06/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	23,600	84.96	Tradegate
18/06/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	23,900	83.98	Tradegate
20/08/2021	Dr. Britta Giesen	Member of the Supervisory Board	Purchase	850	81.00	Tradegate
23/08/2021	Prof. Dr. Susanne Hannemann	Member of the Supervisory Board	Purchase	100	81.16	Xetra
23/08/2021	Prof. Dr. Susanne Hannemann	Member of the Supervisory Board	Purchase	200	81.16	Tradegate
23/08/2021	Bastian Hannemann	Related party of Prof. Dr. Susanne Hannemann	Purchase	124	81.22	Tradegate
24/08/2021	Prof. Dr. Susanne Hannemann	Member of the Supervisory Board	Purchase	300	82.04	Stuttgart
30/08/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	4,250	82.78	Tradegate
08/09/2021	Helmut P. Merch	Member of the Executive Board	Purchase	1,200	77.12	Xetra
20/09/2021	Armin Theodor Papperger	Chairman of the Executive Board	Purchase	2,600	77.61	Tradegate
26/11/2021	Dr. Michael Mielke	Member of the Supervisory Board	Employee participation program	Not quantifiable		Off-exchange

Contents not reviewed by the auditor

Transactions involving related third parties are listed in the notes to the consolidated financial statements under note (36) Other information on related parties.

Compliance

An essential requirement for sustainable economic success is consistent attention to comprehensive compliance. This also includes integrity in dealings with employees, business partners, shareholders and the public, which is expressed through exemplary conduct.

Compliance includes all instruments, guidelines and measures that ensure procedures in the companies of the Rheinmetall Group comply with country-specific legislation, general legal conditions, regulatory provisions and the company's internal directives and that ensure conduct is based on values and conforms to the law and regulations.

Compliance activities focus on corruption prevention, export controls and cartel law. The function of the Chief Compliance Officer is performed by Michael Salzmann, Düsseldorf.

Additional statements on compliance in the Rheinmetall Group are provided in the section "Non-financial aspects of business activities – compliance."

Accounting and auditing

Rheinmetall AG prepares the single-entity financial statements that are relevant for the dividend payment in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act. The company's consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted in the European Union and in accordance with the supplementary provisions of section 1 of the German Commercial Code. Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich, Düsseldorf branch, was elected by the Annual General Meeting on May 11, 2021, to audit the single-entity and consolidated financial statements for 2021. The Audit Committee had previously satisfied itself that the auditor was independent.

Transparency in reporting

In a time in which markets are interconnected and the flow of information is becoming increasingly globalized, communications and the quality of information are becoming more and more important to the company's success. Rheinmetall AG communicates openly, actively and in detail. Investors, potential investors, customers, employees, lenders, business partners, analysts and interested members of the public are informed regularly, promptly and without discrimination of the company's economic and financial situation, key developments, significant changes in business and any facts of relevance to valuation on the Internet at www.rheinmetall.com.

Facts and circumstances that may influence the share price on the stock market are published immediately in ad hoc notifications in accordance with the legal regulations. On April 20, 2021, we informed the market that the provisional figures for sales and earnings in the first quarter of 2021 exceeded the previous year's key figures and the current market expectations. In addition to a recovery on the international automotive markets, the positive development in the first quarter of 2021 also resulted from ammunition deliveries that had originally been scheduled for the second quarter of 2021 but were moved forward by the customers. The cost reduction measures initiated in the previous year in response to the coronavirus pandemic also took full effect. In view of the still relatively high level of uncertainty in the macroeconomic environment and given the situation on the procurement markets, it was also noted that the forecast for the year as a whole that was published in the previous month still applied.

Contents not reviewed by the auditor

On August 3, 2021, we reported – in addition to the record result in the first half of the year – on another non-cash write-down for the discontinued Pistons business unit of €110 million in connection with the announced process of selling the small- and large-bore pistons business. This impairment had no impact on liquidity or earnings of the Group's continuing operations. The annual forecast for the sales and profitability development for Rheinmetall's continuing operations, as updated in May 2021, also remained unaffected.

On October 28, 2021, we explained that the stagnating sales performance in the third quarter as compared to the previous year was chiefly attributable to the limited availability of raw materials and semiconductor components, which had led to lower delivery call-offs by major customers. Primarily due to the ongoing bottlenecks for semiconductors, we slightly reduced our forecast for sales growth over the year as a whole from between 7% and 9% to around 6%. As a result of strict cost management and thanks to further savings in the context of the Group restructuring, we still expected to be able to achieve the upper end of the original forecast for the operating margin of between 9% and 10%. An operating margin of around 10% is now anticipated for 2021. The announced process of selling the small- and large-bore pistons business had not yet led to any result and was still continuing. Not least because the entire market has been impacted by supply bottlenecks, a financially sound buyer has not yet been found. The goal was still to hand over the small- and large-bore pistons business and its employees to new owners that would be able to continue the business appropriately.

Rheinmetall AG publishes securities transactions subject to reporting requirements in the media required by law and on its website.

Contents not reviewed by the auditor

Disclosures required by takeover law

Explanatory report by the Executive Board in accordance with section 176(1) sentence 1 of the German Stock Corporation Act on disclosures required under takeover law in accordance with sections 289a(1) and 315a(1) of the German Commercial Code as of December 31, 2021.

Composition of the subscribed capital

The subscribed capital (share capital) of Rheinmetall AG amounted to €111,510,656 as of December 31, 2021 (previous year: €111,510,656), and was divided into 43,558,850 (previous year: 43,558,850) ordinary bearer shares with no nominal value (no-par value shares), each of which represented €2.56 of the share capital. The shares are fully paid. Different classes of shares do not exist. In accordance with Article 5(2) of the Articles of Association, no shareholder is entitled to a physical share certificate. The company is authorized to issue bearer share certificates that document several shares.

Shareholder rights and obligations

The same rights and obligations are attached to all shares, as set out in the German Stock Corporation Act, in particular sections 12, 53a et seq., 118 et seq. and 186. The shareholder is entitled to asset-related and administrative rights. Asset-related rights primarily include the right to a share in the profits under the terms of section 58(4) of the German Stock Corporation Act, the right to net liquidation assets following the dissolution of the company in accordance with section 271 of the German Stock Corporation Act and share subscription rights in the event of capital increases in accordance with section 186(1) of the German Stock Corporation Act.

Administrative rights comprise the right to attend the Annual General Meeting and the right to speak there, ask questions, submit motions and exercise voting rights. Any shareholder may enforce such rights, in particular through actions for information, avoidance or rescission.

Each share in Rheinmetall AG grants one vote at the Annual General Meeting. This does not include treasury shares held by the company in accordance with section 71b of the German Stock Corporation Act, which do not entitle the company to any rights, particularly any voting rights.

The Annual General Meeting elects shareholder representatives on the Supervisory Board as well as the auditor. It decides on the appropriation of net income and approval of the activities of the members of the Executive Board and Supervisory Board. The Annual General Meeting passes resolutions on the Articles of Association and the objective of the company, key corporate measures such as affiliation agreements and conversions, the issuing of new shares, convertible bonds and bonds with warrants and authorization to acquire treasury shares, as well as the performance of a special audit, the early removal of Supervisory Board members and the dissolution of the company.

Subject to other overriding legal provisions, the Annual General Meeting adopts its resolutions by means of a simple majority of votes cast and, where the law prescribes both a voting and shareholding majority, by means of a simple majority of the share capital represented in the passing of the resolution.

On April 1, 2021, the invitation to the Annual General Meeting of Rheinmetall AG on May 11, 2021, in Düsseldorf as a virtual Annual General Meeting without the physical presence of its shareholders or their authorized representatives was published in the electronic Federal Gazette.

There was a video and sound broadcast of the entire meeting via the Rheinmetall AG shareholder portal. Shareholders were able to exercise their voting rights via absentee ballots and electronic communication (in writing or electronically) or by issuing powers of attorney to company-appointed proxies. Up until midnight on May 9, 2021 (CEST), shareholders were given the opportunity to direct questions to the Supervisory Board and Executive Board about fiscal 2020 using electronic communication via the Rheinmetall AG shareholder portal.

Restrictions on voting rights and share transfer

The shares of Rheinmetall AG were not subject to any voting restrictions under the Articles of Association or legislation as of December 31, 2021. To the extent that Rheinmetall AG issues shares under its long-term incentive program to Executive Board members and other senior management staff, these shares are subject to a four-year lock-up period, although this ends automatically on retirement. As part of the employee participation program, eligible staff in Germany were offered Rheinmetall AG shares to purchase on preferential terms by way of a contribution by the respective employer company during the period under review. A lock-up period of two years after the end of the respective calendar year of participation applies to these shares.

In the case of acquisition of shares in defence technology companies in Germany, sections 60 et seq. of the German Foreign Trade and Payments Regulation allow the German government to prohibit foreign investors from acquiring 10% or more of the shares. This regulation aims to safeguard material security interests of the Federal Republic of Germany.

Shareholdings exceeding 10% of voting rights

In the year under review, the company did not receive any notifications from investors pursuant to sections 33 and 34 of the German Securities Trading Act (WpHG) stating that their shareholdings had risen above the threshold of 10%.

Shares with special rights conferring controlling privileges

None of the shares issued by Rheinmetall AG vest rights that confer special control privileges on their holders.

Type of voting control if employees have shareholdings and do not exercise their rights of control directly

To the extent that Rheinmetall AG issues shares under its long-term incentive program, these shares are directly transferred to these individuals subject to a resale lock-up period of four years. The lock-up period for shares under the employee share purchase program ends two years after the end of the respective calendar year of participation. The lock-up period ends automatically on retirement.

As with other shareholders, these beneficiaries are also able to directly exercise the rights of control to which they are entitled based on the transferred shares, subject to the provisions of the law and Articles of Association.

Appointment and removal of Executive Board members, amendments to the Articles of Association

The appointment and removal of the members of the Executive Board of Rheinmetall AG is based on sections 84 and 85 of the German Stock Corporation Act and section 31 of the 1976 German Codetermination Act in conjunction with Article 6 of the Articles of Association. Executive Board members are appointed by the Supervisory Board for a maximum of five years and may be reappointed or have their term of office renewed, for a maximum period of five years in each case.

The provisions of sections 179 et seq. of the German Stock Corporation Act apply to any amendment of the Articles of Association of Rheinmetall AG.

In accordance with Article 12 of the Articles of Association, amendments that affect only the version or wording of the Articles of Association with regard to the amount and utilization of authorized capital can be performed by the Supervisory Board without the passing of a resolution by the Annual General Meeting.

Executive Board authorizations to issue new shares and repurchase treasury shares

According to section 202 of the German Stock Corporation Act, the Annual General Meeting can authorize the Executive Board for a maximum period of five years to increase the share capital by issuing new shares in return for capital contributions. The authorized capital resolved at the Annual General Meeting on May 10, 2016 expired on May 9, 2021 and thus before the 2021 Annual General Meeting. This authorized capital was not utilized. The Annual General Meeting on May 11, 2021 authorized the Executive Board, with the approval of the Supervisory Board, to increase the company's share capital in the period up to the end of May 10, 2026, by issuing, once or several times, new no-par bearer shares in return for contributions in cash and/or in kind up to a maximum total of €22,302,080.00 (Authorized Capital 2021). The new shares can also be issued to employees of Rheinmetall AG or any subsidiary it controls. The disapplication of pre-emption rights that the Executive Board can resolve with the approval of the Supervisory Board is governed by Article 4(3) of the Articles of Association. Further information on treasury shares held by the company is provided in the notes to the consolidated financial statements under note (17).

The authorization resolved by the Annual General Meeting on May 10, 2016, to issue bonds with warrants and/or convertible bonds with rights or obligations for conversion into shares in the company with a total nominal value of up to €800,000,000.00 and to disapply pre-emption rights expired on May 9, 2021, without having been used. The same applied to the contingent capital of €20,000,000 that was also resolved at the Annual General Meeting on May 10, 2016. For the purpose of granting shares to the holders of bonds with warrants, convertible bonds, participation rights or income bonds issued on the basis of the authorization when bonds with warrants, convertible bonds, participation rights or income bonds are exercised or fulfilled, the company's share capital was contingently increased by up to €22,302,080.00 by issuing up to 8,711,750 new no-par bearer shares by resolution of the Annual General Meeting on May 11, 2021 (Contingent Capital 2021). The Annual General Meeting on May 11, 2021 authorized the Executive Board by way of resolution to issue bearer (i) convertible bonds, bonds with warrants or income bonds, (ii) participation rights that can also be combined with conversion rights or options or with conversion obligations, or (iii) combinations of these instruments (together referred to as "bonds") with or without a term limit, once or several times, with a total nominal value of up to €1,045,410,000.00 until May 10, 2026. In accordance with the more detailed provisions of the bond conditions, the respective bonds, which carry the same rights, may grant options or conversion rights for no-par bearer shares in the company representing a pro-rata amount of the share capital of up to €22,302,080.00, corresponding to around 20% of the share capital at the time of the resolution by the Annual General Meeting. The bonds may bear interest at a variable rate instead of a fixed rate, in which case the interest rate may also be fully or partly dependent on the amount of the company's dividend, as with an income bond. The disapplication of pre-emption rights that the Executive Board can resolve with the approval of the Supervisory Board arises from the authorization resolution of the Annual General Meeting on May 11, 2021.

The authorization to purchase and use treasury shares that was resolved at the Annual General Meeting on May 10, 2016 expired on May 9, 2021 and thus before the 2021 Annual General Meeting. In accordance with section 71(1) no. 8 AktG, the Annual General Meeting on May 11, 2021 authorized the Executive Board to purchase treasury shares in Rheinmetall AG representing up to 10% of the company's share capital until May 10, 2026 for any permissible purpose in line with the legal regulations (i) via the stock exchange, (ii) by way of a public bid directed at all shareholders, (iii) by way of a public invitation to submit offers for sale or (iv) by granting put options. The decisive figure for the company's share capital here is the lowest level either when the Annual General Meeting adopted the resolution on this authorization, when this authorization took effect or when this authorization was exercised. Together with other company shares that the company has already purchased and still owns or that are attributable to it, the shares purchased on the basis of this authorization must not account for more than 10% of the share capital at any time.

Significant agreements of the company subject to a change of control due to a takeover offer

The granting of extraordinary rights of termination in the event of a change of control is standard practice especially in long-term credit business.

In the case of the syndicated credit facility for €500 million, the contract provides for negotiations on the continuation of the loan, if more than half of the Rheinmetall AG shares are held directly or indirectly by one person or several persons acting in concert, or if the person or persons acting in concert fulfill the conditions for appointing members of the Supervisory Board. In the event of a change of control such as this, the lending banks may terminate the agreement in part or in full.

The "change of control" clause in the existing loan agreement with the European Investment Bank for €250 million provides for the possibility of negotiations on continuation of the loan, after which the loan is repaid early in full if more than half of the Rheinmetall AG shares are held directly or indirectly by one person or several persons acting in concert, or if the person or persons acting in concert fulfill the conditions for appointing members of the Supervisory Board (change of control). The European Investment Bank is not obligated to take part in any negotiations. In addition, a second loan agreement for a credit facility of up to €100 million was concluded with the EIB on December 1, 2021. The regulation on the change-of-control clause agreed here has identical content to the regulation for the first loan agreement for €250 million. Under the agreement for €100 million, the payment can also be denied before the payment date scheduled for 2022 if the change-of-control event occurs.

The contracts relating to the promissory note loans totaling €375 million outstanding as of December 31, 2021, which mature between 2022 and 2029, include an extraordinary right of termination in the event of a change of control.

No precautions have been taken against a public takeover bid, the successive acquisition of a controlling stake via share purchases on the stock markets or control being gained by buying blocks of shares.

Compensation arrangements of the company in the event of a change of control due to a takeover offer

There are no compensation arrangements with members of the Executive Board or employees in the event of a change of control due to a takeover offer.

Remuneration report
Remuneration of the Executive Board

The remuneration report explains the remuneration systems for the Executive Board and Supervisory Board of Rheinmetall AG and reports on the level and structure of the remuneration for the executive bodies. To this end, the individual remuneration granted and owed to current and former members of the Executive Board and the Supervisory Board is disclosed. The remuneration granted and owed that is shown is the remuneration for which the underlying activity was fully completed as of the end of fiscal 2021. With the explanation of the remuneration system for the individual remuneration components, particular attention is paid to the transparency of the resulting remuneration and its promotion of the company's long-term development. The report is based on section 162 of the German Stock Corporation Act (AktG) and the recommendations and suggestions of the German Corporate Governance Code (GCGC) in the version dated December 16, 2019.

The remuneration report below can also be accessed using the following link: www.rheinmetall.com/geschaeftsbericht. The current remuneration system for the Executive Board and the Supervisory Board is also available on Rheinmetall's website: www.rheinmetall.com/verguetungvorstand. Beyond the requirements of section 162(3) AktG, an audit of the remuneration report was also conducted in a material respect by Deloitte GmbH Wirtschaftsprüfungsgesellschaft. The corresponding report on this audit can be accessed using the following link: www.rheinmetall.com/geschaeftsbericht.

The remuneration report will be submitted for approval by the Annual General Meeting in accordance with the requirements of section 120a(4) AktG on May 10, 2022.

Remuneration of the Executive Board

The new remuneration system approved by the Annual General Meeting on May 11, 2021 applies to all Executive Board members from January 1, 2022. Due to previously concluded Executive Board contracts, the Executive Board remuneration for fiscal 2021 was still based on prior remuneration systems. A distinction is to be made here between the remuneration system proposed at the Annual General Meeting on May 19, 2020 (referred to subsequently as the *"2020 remuneration system"*) and the remuneration system that preceded it (referred to subsequently as the *"2019 remuneration system"*). The 2020 remuneration system applies to the Executive Board members Peter Sebastian Krause and Jörg Grotendorst. The remuneration of the Chairman of the Executive Board, Armin Papperger, and the Chief Financial Officer, Helmut P. Merch, is determined in line with the 2019 remuneration system.

The Executive Board remuneration at Rheinmetall AG firstly provides for remuneration not linked to performance, which consists of three components: the basic remuneration, fringe benefits and a company pension. Secondly, it includes performance-related variable remuneration comprising two components: the one-year short-term incentive (STI) and the long-term incentive (LTI).

Overview of remuneration systems

Compensation system 2019	Aspect	Compensation system 2020
• Mr. Armin Papperger • Mr. Helmut P. Merch	**Scope**	• Mr. Peter Sebastian Krause • Mr. Jörg Grotendorst
Performance period: 1 year Performance targets: • Earnings before taxes (EBT) • Return on capital employed (ROCE) • Non-financial/individual/collective targets Payment in cash Cap at **200%** of the target amount	**Short Term Incentive (STI)**	Performance period: 1 year Performance targets: • Earnings before taxes (EBT) • Return on capital employed (ROCE) • Non-financial/individual/collective targets **Modifier: Adjustment option of +/- 20% in the event of extraordinary developments** Payment in cash Cap at **300%** of the target amount (including modifier)
Performance period: 3 years (retroactive) Performance targets: • 50% earnings before taxes (EBT) from the past three years multiplied by a personal EBT factor Payment 50% in cash and 50% in shares (shares are subject to a four-year blocking period) Cap at 150% of the target amount Additional cash payment in the amount of 20% of the share value	**Long Term Incentive (LTI)**	Performance period: 3 years (retroactive) Performance targets: • 50% earnings before taxes (EBT) from the past three years multiplied by a personal EBT factor • **50% relative total shareholder return (TSR) compared to the MDAX** Payment 50% in cash and 50% in shares (shares are subject to a four-year blocking period) Cap at 150% of the target amount Additional cash payment in the amount of 20% of the share value
• No clawback clause	**Malus and clawback provisions**	• **Clawback clause, which covers the event of a serious deterioration in the company's situation for serious company-specific reasons**
• No determination of a maximum remuneration	**Maximum compensation**	**Maximum compensation without fringe benefits and pension plan** • **Automotive division: EUR 3,037,500** • **Personnel division: EUR 2,725,500**

1. Review of fiscal 2021

Fiscal 2021 was dominated by the transformation within Rheinmetall. A new management structure was established in connection with the strategic realignment into an integrated technology group in fiscal 2021. After the dissolution of the automotive holding company and the resulting direct management of all divisions by the Executive Board of Rheinmetall AG, the Board will consist of only three members instead of the previous four. For this reason, Jörg Grotendorst asked the Supervisory Board to relieve him of his duties as the Executive Board member responsible for automotive business at Rheinmetall AG. Following Jörg Grotendorst's departure as of April 22, 2021, the Group's management structure was adjusted in line with the upcoming challenges of the strategic realignment.

In addition, the extension of two Executive Board members' contracts sent a signal of continuity in turbulent times. Armin Papperger's contract was extended by another five years until December 31, 2026. In addition, Helmut P. Merch's contract was extended by one year until December 31, 2022. Peter Sebastian Krause's position as a member of the Executive Board was confirmed in 2020 already until December 31, 2024.

At the 2020 Annual General Meeting, a resolution on the approval of the remuneration system for the Executive Board members of Rheinmetall AG had been held. No majority approval was achieved here. In accordance with section 120a(3) AktG, the Supervisory Board therefore reviewed the remuneration system in detail in fiscal 2021, particularly taking account of the comments by Rheinmetall shareholders. The remuneration system for the Executive Board was therefore completely revised ahead of the Annual General Meeting on May 11, 2021.

Taking account of the German Act to Implement the Second Shareholder Rights Directive (ARUG II) and of the GCGC, the Supervisory Board resolved extensive amendments to the remuneration system for members of the Executive Board of Rheinmetall AG (referred to subsequently as the *"2022 remuneration system"*) with effect from January 1, 2022 and submitted the remuneration system to the Annual General Meeting on May 11, 2021 for approval under agenda item 7. The Annual General Meeting approved the remuneration system for members of the Executive Board by a significant majority of 92.61%. A presentation of the main adjustments in comparison to the 2020 remuneration system can be found in the section "Outlook on the new remuneration system for the Executive Board" within this remuneration report.

2. Principles of Executive Board remuneration

The remuneration for members of the Executive Board of Rheinmetall AG is geared towards sustainable and long-term corporate development. It thus makes a contribution to promoting the business strategy and to the long-term development of the company. It offers incentives for the value-creating and long-term development of the company. The members of the Executive Board are properly remunerated according to their sphere of activity and responsibility, taking into reasonable account both the personal performance of each and every Executive Board member as well as the economic situation and success of the company. The intention is to ensure that the remuneration is competitive on a national and international scale and thus creates incentives for dedicated and successful work.

2.1 Target total and maximum remuneration of members of the Executive Board

The Supervisory Board defines a target total remuneration for each Executive Board member. The target total remuneration is an amount granted in the event of 100% target achievement for variable remuneration. The maximum total remuneration for each individual member of the Executive Board corresponds to the amount calculated from the sum of all remuneration components for the fiscal year in question, taking into account the modifier and defined caps for variable remuneration.

In line with the definition in the 2020 remuneration system, the maximum total remuneration comprises all remuneration components allocated for fiscal 2021 with the exception of fringe benefits and the company pension. The 2020 remuneration system stipulates maximum total remuneration of €2,725,500 for Peter Sebastian Krause and of €3,037,500 for Jörg Grotendorst as the former Executive Board member responsible for automotive business, in accordance with section 87a(1) no. 1 AktG. This maximum total remuneration was not exceeded in fiscal 2021. By limiting the individual remuneration components, compliance with the defined maximum total remuneration for both Peter Sebastian Krause and Jörg Grotendorst was ensured.

2.2 Appropriateness of Executive Board remuneration

In fiscal 2020, the Supervisory Board – with the support of the Personnel Committee – reviewed the appropriateness of the Executive Board remuneration, with the Supervisory Board receiving advice from an independent external remuneration expert.

The detailed examination of the Executive Board remuneration included primarily a horizontal remuneration comparison in which the level of the target and maximum remuneration received by the members of the Executive Board were set in relation to the usual remuneration for companies in the DAX and MDAX. This comparison took into account sales, number of employees, internationality and complexity of the Rheinmetall Group.

In addition, a vertical remuneration comparison was performed, which analyzed the ratio of remuneration levels between the CEO, the ordinary Executive Board members, the three levels of management below the Executive Board and the pay-scale employees of the Rheinmetall Group in Germany, not only during the fiscal year but also over time.

3. Remuneration components in detail

The following section describes the remuneration components in detail and shows how the performance criteria and targets for variable remuneration were applied in fiscal 2021.

3.1 Basic remuneration

Each Executive Board member receives a basic remuneration not linked to performance, which is paid every month in twelve equal parts.

3.2 Fringe benefits

In addition to their basic remuneration, the Executive Board members receive fringe benefits. Fringe benefits include not only the reimbursement of reasonable expenses, but also subsidies for health and long-term care insurance and the provision of a company car that can also be used privately in accordance with current guidelines. Accident insurance is also taken out for each Executive Board member, which may also include a payment to heirs of the Executive Board member in the event of his/her death. The tax burden resulting from these fringe benefits is borne by the respective Executive Board member.

3.3 Company pension plan

Executive Board members receive a company pension in the form of a modular capital plan. They receive an annual basic contribution in the amount of 16% of the respective basic remuneration and 100% of the target amount of the STI. The basic contribution may also be supplemented by a performance-related additional contribution. The additional contribution is capped with an upper limit equal to 30% of the basic contribution.

The basic contribution and, if applicable, performance-related additional contribution are converted annually to a capital component with a capitalization factor linked to the benefits age. The sum of the capital components acquired in the past few calendar years yields the total pension capital. The total pension capital is converted to a lifelong pension when benefits become due. The retirement age is 65.

For Executive Board members who had acquired pension claims before January 1, 2014 or were previously a member of the Executive Board of Rheinmetall Automotive AG, a transitional regulation applies. The average defined benefit for these Executive Board members is 27.5% of the respective basic remuneration and the respective 100% target amount of the STI before retirement. The retirement age is 63. The expenses and present values of the pension obligations for Executive Board members active in fiscal 2021 are shown below:

Executive Board pensions in accordance with IFRS 19

	Expenses in fiscal year				Net present value of pension obligation as of December 31	
	Total		Of which interest payable			
€ thousand	2021	2020	2021	2020	2021	2020
Armin Papperger from January 1, 2013 [1]	1,643	1,586	91	117	13,807	13,435
Helmut P. Merch from January 1, 2013	66	92	66	92	9,435	9,742
Peter Sebastian Krause from January 1, 2017	820	783	33	39	5,236	4,787
Jörg Grotendorst from October 1, 2020	224	533	4	-	-	533
Total	**2,753**	**2,994**	**194**	**248**	**28,479**	**28,497**

[1] Member of the Executive Board since January 1, 2012

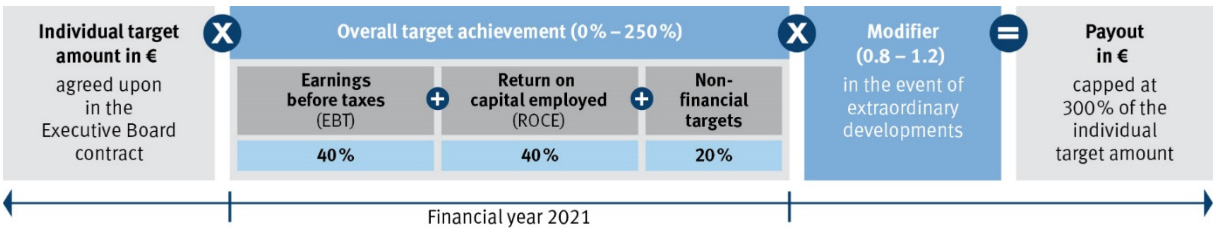
3.4 Short-term incentive (STI)

3.4.1 STI – 2020 remuneration system

The 2020 remuneration system, which is applied for fiscal 2021 for Peter Sebastian Krause as well as for Jörg Grotendorst, who left as of April 22, 2021, provides for a one-year STI the level of which depends on an individual target amount in euro agreed in the Executive Board member's employment contract and on the achievement of financial and non-financial targets. In the context of the cancellation agreement with Jörg Grotendorst, he did not receive any STI allocation for fiscal 2021. The key figures of earnings before taxes (EBT) and return on capital employed (ROCE) are the financial targets – each of which has a weighting of 40%. EBT is particularly well-suited for assessing the economic success of the Rheinmetall Group's operational entities. In addition, ROCE is used as a key performance indicator for ensuring profitability. The non-financial targets are weighted at a total of 20% and determined by the Supervisory Board for the respective fiscal year.

The weighted total of the target achievements across the financial and non-financial targets results in the overall target achievement. The STI provides for a modifier; in other words, a restricted margin of discretion that enables the Supervisory Board to adjust the values resulting from the achievement of targets upward or downward in the event of extraordinary developments. The margin by which the payment amount can be adjusted is limited to +/-20%. A single modifier is set for the two Executive Board members, covering as it does solely extraordinary developments.

STI – 2020 remuneration system



For each financial target, a target figure is determined each year on the basis of operating planning, with a linear calculation made between the target achievement levels shown below.

Target achievement is capped at 2.5 times the target value, with this figure being achieved with a +20% target overachievement (maximal target fulfillment). If the target achievement is -20% or lower (minimal target achievement), the STI for the fiscal year in question is €0.

Degree of achievement of agreed annual targets			STI payment
□	20 %	under agreed targets	-
	10 %	under agreed targets	50 %
	100 %	of agreed targets	100 %
	10 %	over agreed targets	150 %
	15 %	over agreed targets	200 %
□	20 %	over agreed targets	250 %

The table below shows the respective targets for earnings before taxes and return on capital employed, the figures actually achieved in fiscal 2021 and the resulting target achievement levels that are relevant for calculating the payment amount from the STI of the 2020 remuneration system:

Achievement financial targets STI – remuneration system 2020

	Target value	Actual value	Achievement
			in %
Earnings before taxes (€ million)	463	538	210.2
Return on capital employed (in %)	14.0	17.2	250.0

In contrast to the figures published in the consolidated financial statements, the actual figures shown for earnings before taxes and return on capital employed were calculated without applying IFRS 5, i.e. including the loss before taxes of €89 million from pistons activities. For this adjustment, it was assumed that half of the impairment loss of €91 million was chiefly due to the change in accounting. The adjustment thus amounts to €44 million for earnings before taxes and 1.8 percentage points for ROCE. At the time when the targets for 2021 were defined by the Supervisory Board, the application of IFRS 5 could not be assumed and the change in accounting therefore was not taken into account in the targets. The other 50% of the impairment loss is required to be taken into account in the target achievement, as it is the result of deterioration in the business environment.

For fiscal 2021, the Supervisory Board set the following non-financial targets and calculated target achievement levels that are relevant for calculating the payment amount from the STI of the 2020 remuneration system:

Achievement non-financiel targets STI – renumeration system 2020

	Achievement	Explanation of achievement	Weighting	Overall target achievement non-financial targets
	%		%	%
CO_2 reduction Rheinmetall group	137.5	Successful implementation of a valid planning and control system for reducing power consumption across the group. Trend-setting projects for increasing efficiency have been started. Clear optimization of CO_2 reduction could have been achieved at low cost increase (e.g. shift to power supply by wood).	50	
Occupational Health and Safety	199.5	Successful implementation of lost time incident rate as part of the annual reporting across the group. Reported on a monthly basis with effect from January 1, 2022. Successfull free vaccination across the group: In total more than 6,800 doses of vaccine have been given as primary, second or booster vaccination at more than 20 locations. Successful implementation of a working global health management at the group´s locations by establishing operational local steering groups.	50	168.5

As there have been no extraordinary developments, the value of the modifier for Peter Sebastian Krause is set at 1.0. Based on the individual target amount, the overall target achievement in line with the weighted target achievement levels for the financial and non-financial performance targets and a modifier of 1.0 for fiscal 2021, this results in the following payment from the STI:

Payment amount STI – remuneration system 2020

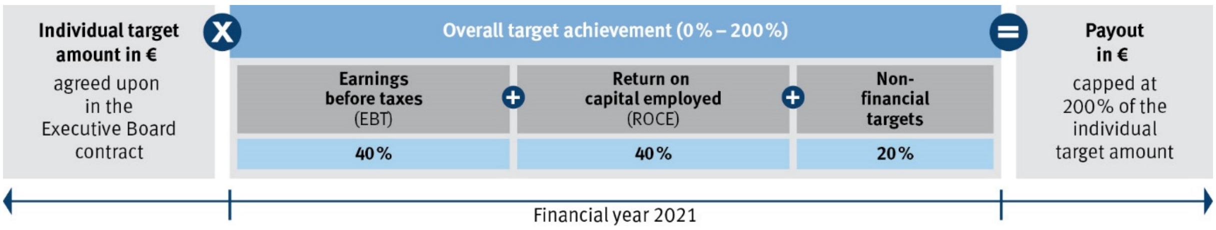
	Target amount	Target achievement non-financial targets (20%)	Target achievement EBT (40%)	Target achievement ROCE (40%)	Overall target achievement	Modifier	Payment amount
	€ thousand	in %	in %	in %	in %		€ thousand
Peter Sebastian Krause	360	168.5	210.2	250.0	217.8	1.0	784

Following approval of the financial statements by the Supervisory Board, the resulting payment amount for the STI is transferred to the Executive Board member with the next salary statement.

3.4.2 STI – 2019 remuneration system

Due to the 2019 remuneration system in place, the STI is designed differently for Armin Papperger and Helmut P. Merch. There is no option for the Supervisory Board to subsequently adjust the payment amount by a modifier of +/- 20%. Moreover, the payment is capped at 200% of the target amount. In addition, the minimal/maximal target achievement for the financial targets is set to -30%/+10%.

STI – 2019 remuneration system



The table below shows the respective targets for earnings before taxes and return on capital employed, the figures actually achieved in fiscal 2021 and the resulting target achievement levels that are relevant for calculating the payment amount from the STI of the 2019 remuneration system:

Target achievement financial STI – remuneration system 2019

	Target value	Actual value	Target achievement
			in %
Earnings before taxes (in € illion)	463	538	200.0
Return on capital employed (in %)	14.0	17.2	200.0

In contrast to the figures published in the consolidated financial statements, the actual figures shown for earnings before taxes and return on capital employed were calculated without applying IFRS 5, i.e. including the loss before taxes of €89 million from pistons activities. For this adjustment, it was assumed that half of the impairment loss of €91 million was chiefly due to the change in accounting. The adjustment thus amounts to €44 million for earnings before taxes and 1.8 percentage points for ROCE. At the time when the targets for 2021 were defined by the Supervisory Board, the application of IFRS 5 could not be assumed and the change in accounting therefore was not taken into account in the targets. The other 50% of the impairment loss is required to be taken into account in the target achievement, as it is the result of deterioration in the business environment.

For fiscal 2021, the Supervisory Board set the following non-financial targets and calculated target achievement levels that are relevant for calculating the payment amount from the STI of the 2019 remuneration system:

Achievement non-financiel targets STI – renumeration system 2019

	Achievement	Explanation of achievement	Weighting	Overall target achievement non-financial targets
	%		%	%
CO_2 reduction Rheinmetall group	110	Successful implementation of a valid planning and control system for reducing power consumption across the group. Trend-setting projects for increasing efficiency have been started. Clear optimization of CO_2 reduction could have been achieved at low cost increase (e.g. shift to power supply by wood).	50	
Occupational Health and Safety	159.5	Successful implementation of lost time incident rate as part of the annual reporting across the group. Reported on a monthly basis with effect from January 1, 2022. Successfull free vaccination across the group: In total more than 6,800 doses of vaccine have been given as primary, second or booster vaccination at more than 20 locations. Successful implementation of a working global health management at the group´s locations by establishing operational local steering groups.	50	134.8

Based on their respective individual target amounts and the overall target achievement in line with the weighted target achievement levels for the financial and non-financial performance targets for fiscal 2021, the payment from the STI for the two Executive Board members Armin Papperger and Helmut P. Merch is as follows:

Payment amount STI – remuneration system 2019

	Target amount	Target achievement non-financial targets (20%)	Target achievement EBT (40%)	Target achievement ROCE (40%)	Overall target achievement	Payment amount
	€ thousand	in %	in %	in %	in %	€ thousand
Armin Papperger	864	134.8	200	200	187	1,615
Helmut P. Merch	475	134.8	200	200	187	888

Following approval of the financial statements by the Supervisory Board, the resulting payment amount for the STI is transferred to the relevant Executive Board member with the next salary statement.

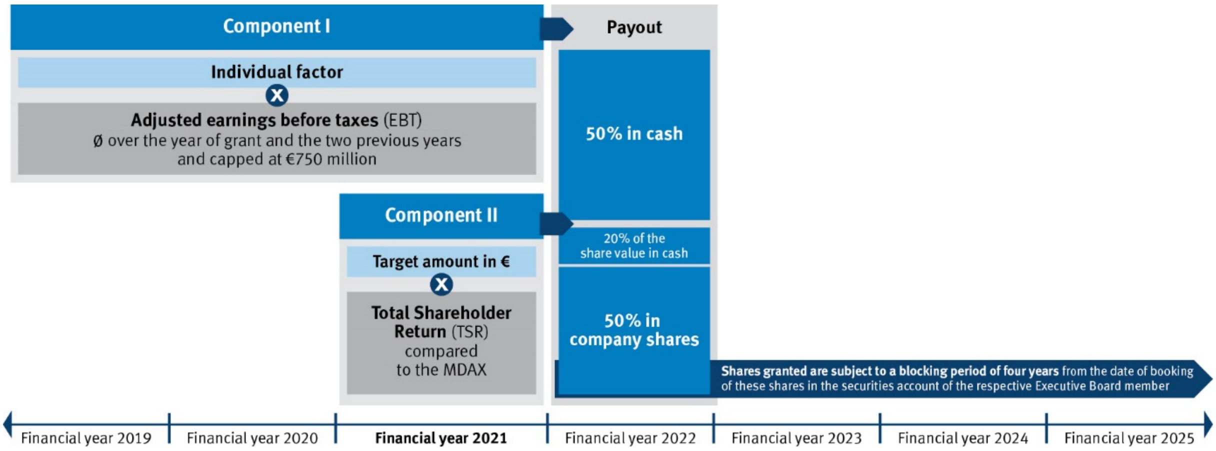
3.5 Long-term incentive (LTI)

To achieve an even stronger alignment of Executive Board remuneration to sustainable and long-term corporate development and factor in shareholder interests, the Executive Board members take part in the company LTI program applicable to them.

3.5.1 LTI – 2020 remuneration system

In the 2020 remuneration system, the LTI is based on two equal components with an equal weighting and is allocated in yearly tranches. In fiscal 2021 (2021 tranche), the LTI of the 2020 remuneration system applies to the Executive Board member Peter Sebastian Krause. In the context of the cancellation agreement with Jörg Grotendorst, he did not receive any LTI allocation for fiscal 2021.

LTI – 2020 remuneration system



Component I of the LTI is based on the average adjusted EBT of the company in the year for which the remuneration is allocated as well as for the two years previous to this year. The adjusted EBT is calculated annually on the basis of Rheinmetall's consolidated financial statements by adding the adjusted EBIT published in the annual report and audited by the auditor and net interest income. The average adjusted EBT in the year in question and the two previous years is calculated on this basis. This means that the distribution amount for the 2021 tranche is calculated on the basis of the average adjusted EBT of the Rheinmetall Group in the years 2019–2021.

For the respective contract term, a personal EBT factor is agreed upon with the Executive Board member. To determine the share of the LTI based on the average adjusted EBT, this factor is multiplied by the actual average adjusted EBT over the three relevant years. The average adjusted three-year EBT needed for calculating the distribution amount is capped at €750 million, which means that a higher remuneration cannot be granted even if the average adjusted three-year EBT exceeds this value. If the average adjusted three-year EBT is €0.00 or lower, this remuneration component ceases to apply.

Like the calculation of EBT for the STI, the calculation of adjusted EBT was also based on figures before IFRS 5. The adjustment for the impairment in connection with pistons activities was recognized at the same amount. The calculation of adjusted EBT for the 2021 tranche is as follows:

Adjusted EBT

€ million	2021	2020	2019
EBIT - reported	**608**	**398**	**512**
Impact IFRS 5	(88)	(309)	-
EBIT - before IFRS 5	**520**	**89**	**512**
One-off expenses and income in connection with:			
Equity investements	45	87	-
Properties	6	23	(2)
Restructuring	13	253	24
Other	2	(9)	-
EBIT (adjusted)	587	444	533
Net interest	(28)	(33)	(35)
EBT (adjusted)	**559**	**411**	**498**

Average adjusted EBT for fiscal 2021 therefore amounts to €489 million.

Based on Peter Sebastian Krause's personal EBT factor, the distribution amount for Component I is as follows:

Component I LTI – remuneration system 2020

	∅ EBT	EBT factor	Payment amount/ total incl. 20%
	€ million		€ thousand
Peter Sebastian Krause	489	0.00067	328/360

Component II of the LTI is based on the monthly average total shareholder return (TSR) over the company's past fiscal year. The decisive TSR figure is calculated as follows on the basis of thirteen month-end figures (December 31 of the previous year up to and including December 31 of the allocation year):

First, the total return (share performance including dividend) of the Rheinmetall share for each individual month of a fiscal year is determined. Intermediate dividends are reinvested on the day of the dividend markdown (ex-day) at the closing price. Decisive here is the final XETRA closing price on the Frankfurt Stock Exchange in each month. These monthly returns on shares are used to form an average value, which is compared with all the MDAX values determined by the same method. For better comparability, only the MDAX stocks listed in the index across the entire period under review are included in the calculation.

The average values of all companies – including Rheinmetall AG – are placed in order and assigned to percentiles. The percentiles, in turn, are assigned target achievement levels (as a percentage), with which a target LTI amount in euro is multiplied to generate a payment amount for Component II. The assignment is made through linear interpolation between the 75th percentile (= cap 150%), the 50th percentile (= 100%) and the 0 percentile (= 0%). For Component II, an individual target amount has been agreed in the Executive Board employment agreements, which corresponds to a target achievement of 100%.

The table below shows the individual target amount for Peter Sebastian Krause, the percentile achieved and the resulting target achievement level and payment amount for Component II of the 2021 tranche:

Component II LTI – remuneration system 2020

	Target amount	Percentile rank	Target achievement	Payout amount/ total incl. 20%
	€ thousand		in %	€ thousand
Peter Sebastian Krause	335	26	52	174/192

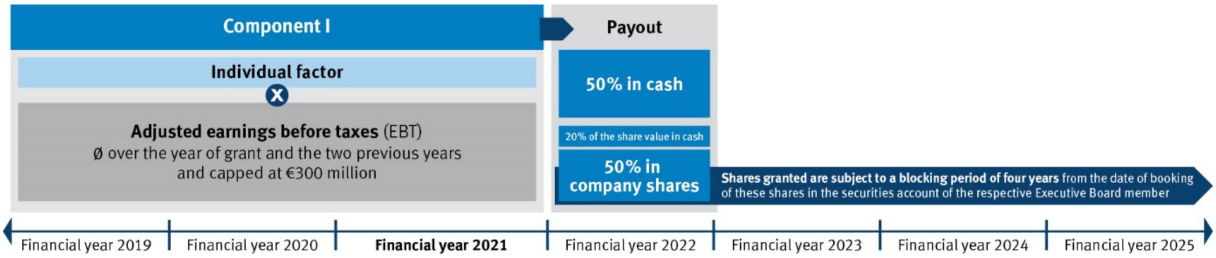
The distribution amounts determined above for Components I and II are paid out 50% in company shares and 50% in cash. The shares are subject to a lock-up period of four years as of the point at which these shares are posted to the securities account of the Executive Board member. In addition, 20% of the share value is paid in cash. The payment of the cash remuneration and posting the shares to the securities accounts of the Executive Board members take place in the year following approval of the financial statements by the Supervisory Board.

On the basis of the reference share price of €83.69 for the end of February 2021, a total of 2,756 shares in Rheinmetall AG were transferred to Peter Sebastian Krause on March 26, 2021 under the 2020 LTI tranche, while Jörg Grotendorst received 771 shares. The transfer of shares for the 2021 LTI tranche will take place on March 25, 2022, based on the reference share price as of the end of February 2022.

3.5.2 LTI – 2019 remuneration system

Due to the previous remuneration system in place, the LTI is designed differently for Armin Papperger and Helmut P. Merch. Thus only Component I as described above is used, with the average EBT over the decisive three years being capped at €300 million for the LTI for these two Executive Board members, in contrast to the 2020 remuneration system.

LTI – 2019 remuneration system



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Based on Armin Papperger and Helmut P. Merch's personal EBT factors, the distribution amounts for Component I of the 2021 LTI tranche are as follows:

Component I LTI – remuneration system 2019

	∅ EBT	EBT factor	Payout amount/ total incl. 20%
	€ million		€ thousand
Armin Papperger	300	0.0050	1.500/1.650
Helmut P. Merch	300	0.0025	750/825

The distribution amounts determined above for Component I are paid out 50% in company shares and 50% in cash. The shares are subject to a lock-up period of four years as of the point at which these shares are posted to the securities account of the Executive Board member. In addition, 20% of the share value is paid in cash. The payment of the cash remuneration and posting the shares to the securities accounts of the Executive Board members take place in the year following approval of the financial statements by the Supervisory Board.

On the basis of the reference share price of €83.69 for the end of February 2021, a total of 8,961 shares in Rheinmetall AG were transferred to Armin Papperger on March 26, 2021 under the 2020 LTI tranche, while Helmut P. Merch received 4,480 shares. The transfer of shares for the 2021 LTI tranche will take place on March 25, 2022, based on the reference share price as of the end of February 2022.

3.5.3 LTI – lock-up period for the shares granted under LTI

The shares granted under the LTI tranches are subject to a lock-up period of four years as of the point at which these shares are posted to the securities account of the Executive Board member. This means that the Executive Board member can freely dispose of these shares only after this period has expired. During the lock-up period, the shares granted are exposed to all the opportunities and risks that prevail on the capital market. The four-year lock-up period ends automatically when the Executive Board member retires. This means that Executive Board members can sell the granted shares as soon as they retire. The lock-up period also ends automatically in the event of the death of an Executive Board member, which means that the securities account holdings can be sold immediately by the heirs.

3.6 Clawback regulation

In accordance with the 2020 remuneration system, the Executive Board contracts of Peter Sebastian Krause and Jörg Grotendorst contain a "clawback" clause, which entitles the Supervisory Board to partially reclaim amounts paid under the STI and LTI, regardless of whether the targets decisive for these payments were achieved. This is subject to the condition that, after the end of the assessment period for the relevant remuneration component, the company suffers a serious deterioration in its situation as a result of serious, company-specific reasons and the "claw-back" with regard to the performance of the Executive Board member is not unreasonable at the dutiful discretion of the Supervisory Board, taking into account the conduct and performance of the Executive Board member during the assessment period. The company is entitled to reclaim amounts within two years of the end of the assessment period of the relevant remuneration component. The repayment claim is capped at 50% of the net amount of the STI and LTI paid out in the assessment period. Any claims for compensation against the Executive Board member in question remain unaffected. In fiscal 2021, there was no reason to reclaim variable remuneration components already paid, so there was no claw-back.

3.7 Payments in the event of premature termination of the Executive Board contract

Ordinary termination of the employment contract of the Executive Board is excluded. It is possible, however, for both the Executive Board member concerned and the company to terminate the contract for cause. The Executive Board contracts stipulate that the contract shall end automatically at the latest at the end of the month in which the Executive Board member reaches the standard retirement age under the statutory pension scheme or at the time when they draw a statutory retirement pension before reaching the standard retirement age. In deviation from this, Helmut P. Merch’s employment contract has been extended until December 31, 2022. Automatic termination is also stipulated in the event that the Executive Board member becomes permanently unable to work during the term of their contract.

If the Executive Board contract is terminated during the year, the basic remuneration as well as the STI and LTI are granted only on a pro rata temporis basis. The level of target achievement for the STI and LTI is always calculated to the day on which the contract ends.

Payments to an Executive Board member that are agreed upon with the Executive Board member concerned in the event of premature termination without cause of the Executive Board contract must not exceed the equivalent of two annual remuneration payments (basic remuneration, STI, LTI, fringe benefits) and must not remunerate more than the remaining term of the Executive Board contract. The Executive Board contracts do not provide for any special arrangements for a severance payment in the event of a change of control.

3.8 Remuneration for mandates

The Executive Board remuneration covers all activities for the company and for services performed with the company in accordance with sections 15 et seq. of the German Stock Corporation Act. If remuneration is agreed for mandates at affiliated companies, this is offset against the basic remuneration. For mandates at companies that are not affiliated companies or for functions in associations or similar groups to which the company or one of its affiliated companies belongs, the Supervisory Board decides on such setting-off.

In fiscal 2021, the Executive Board members held the following mandates at affiliated and non-affiliated companies:

Members of the Executive Board and mandates of the Executive Board members

	Position/area	Appointments	Membership in Supervisory Boards
Armin Papperger **Engineering graduate**	Chairman	January 1, 2017, to December 31, 2021	Rheinmetall Automotive AG*) Chairman
Born 1963 Nationality | German			Rheinmetall Denel Munition (Pty) Ltd*) Chairman
			Rheinmetall MAN Military Vehicles GmbH*) Chairman
			The Dynamic Engineering Solution Pty Ltd Deputy Chairman of the Supervisory Board
			Rheinmetall Landsysteme GmbH *) Chairman (since November 23, 2021)
Helmut P. Merch **Business graduate**	CFO	January 1, 2013, to December 31, 2017	Rheinmetall Automotive AG*)
Born 1956 Nationality | German	Finance and Controlling	January 1, 2017, to December 31, 2021	Rheinmetall Denel Munition (Pty) Ltd*)
			ElringKlinger AG (since July 7, 2020)
Peter Sebastian Krause **Lawyer**	Director of Industrial Relations	January 1, 2017, to December 31, 2019	Rheinmetall Electronics GmbH*)
Born 1960 Nationality | German	Human Resources	January 1, 2020, to December 31, 2024	Rheinmetall Landsysteme GmbH*) Chairman
			Rheinmetall Waffe Munition GmbH*) Chairman
Jörg Grotendorst **Engineering graduate**		October 1, 2020, to April 22, 2021	HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)
Born 1970 Nationality | German			Kolbenschmidt Huayu Piston Co., Ltd.*) Vice Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)
			KS HUAYU AluTech GmbH*) Vice Chairman (since December 1, 2020 to April 22, 2021)
			Pierburg Huayu Pump Technology Co., Ltd.*) Chairman of the Board of Directors (since December 1, 2020 to April 22, 2021)

*) Internal mandates
December 31, 2021

3.9 Third-party payments

In fiscal 2021, no Executive Board member received payments from a third party with regard to their work as an Executive Board member.

4. Itemized total remuneration for 2021

4.1 Target remuneration for fiscal 2021

In order to ensure transparent reporting of Executive Board remuneration, the table below first shows the individual contractually agreed target amounts of the individual remuneration components for each Executive Board member, plus the expenses for fringe benefits and the company pension. The target amount for the STI reflects the contractually regulated STI target amount in the case of 100% target achievement. For Component I of the LTI, the target amount results from the contractually determined 100% value of the average adjusted EBT for the past three years multiplied by the personal EBT factor. The target amount for Component II of the LTI corresponds to the contractually determined LTI target amount for Component II in the case of 100% target achievement.

Contractual target remuneration

	Armin Papperger		Helmut P. Merch		Peter Sebastian Krause		Jörg Grotendorst	
	CEO since January 1, 2013[1]		Member of the executive board since January 1, 2013		Member of the executive board since January 1, 2017		Member of the executive board from October 1, 2020 to April 22, 2021	
	2021	2020	2021	2020	2021	2020	2021	2020
	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Basic remuneration	1,296	1,296	713	713	540	540	600	150
Fringe benefits	34	34	25	26	36	36	20	3
Total	**1,330**	**1,330**	**738**	**739**	**576**	**576**	**620**	**153**
Short-term variable remueration (STI)								
STI 2020		864		475		360		100
STI 2021	864		475		360		400	
Long-term variable remuneration (LTI)								
LTI tranche 2020								
of which cash component*		900		450		402		113
of which share component		750		375		335		94
LTI tranche 2021								
of which cash component*	900		450		402		450	
of which share component	750		375		335		375	
Total	**3,844**	**3,844**	**2,038**	**2,039**	**1,673**	**1,673**	**1,845**	**460**
Pension expenses	1,552	1,469			787	744	221	533
Total remuneration	**5,395**	**5,313**	**2,038**	**2,039**	**2,460**	**2,417**	**2,066**	**993**

[1] Member of the executive board since Januar 1, 2012

* Also contains the additional payment to 20% of the share value

4.2 Remuneration granted and owed in fiscal 2021 – Executive Board members active in fiscal 2021

The table below discloses the remuneration granted and owed in accordance with section 162 AktG both in the fiscal year under review and in the previous year. In addition, the expenses in accordance with IAS 19 for the company pension plan in the respective fiscal year are shown.

The payment amounts of the STI and LTI allocations for fiscal 2021 are shown in the 2021 remuneration report already, as the underlying activity for the remuneration was already fully completed as of the end of fiscal 2021. The relevant results for determining the target achievement levels can already be determined as of the end of fiscal 2021, although the actual payment will not take place until the following year, i.e. in fiscal 2022.

Paid and owed remuneration for members of the executive board active in financial year

	Armin Papperger			Helmut P. Merch			Peter Sebastian Krause			Jörg Grotendorst		
	CEO since January 1, 2013[1]			Member of the executive board since January 1, 2013			Member of the executive board since January 1, 2017			Member of the executive board from October 1, 2020 to April 22, 2021		
	2021	2021	2020	2021	2021	2020	2021	2021	2020	2021	2021	2020
	€ thousand	in %	€ thousand	€ thousand	in %	€ thousand	€ thousand	in %	€ thousand	€ thousand	in %	€ thousand
Basic remuneration	1,296	21.1	1,296	713	29.1	713	540	20.2	540	600	17.7	150
Compensation										2,550	70.8	
Fringe benefits	34	0.5	34	25	1.0	26	36	1.3	36	20	0.6	3
Total	**1,330**	**21.6**	**1,330**	**738**	**30.1**	**739**	**576**	**21.5**	**576**	**3,170**	**93.5**	**153**
Short-term variable remueration (STI)												
STI 2020			1,642			903			855			238
STI 2021	1,615	26.3		888	36.2		784	29.3				
Long-term variable remuneration (LTI)												
LTI tranche 2020												
of which cash component*			900			450			278			78
of which share component			750			375			231			65
LTI tranche 2021												
of which cash component*	900	14.6		450	18.4		300	10.8				
of which share component	750	12.2		375	15.3		250	9.0				
Total of paid and owed remuneration	**4,595**	**74.8**	**4,622**	**2,451**	**100.0**	**2,467**	**1,910**	**70.6**	**1,940**	**3,170**	**93.5**	**534**
Pension expenses	1,552	25.2	1,469				787	29.4	744	221	6.5	533
Total remuneration	**6,146**	**100.0**	**6,091**	**2,451**	**100.0**	**2,467**	**2,698**	**100.0**	**2,684**	**3,390**	**100.0**	**1,067**

[1] Member of the executive board since Januar 1, 2012

* Also contains the additional payment to 20% of the share value

Jörg Grotendorst received a severance payment of €2.55 million in the context of the cancellation agreement and as compensation for the premature termination of his employment. This severance payment was disbursed in the second quarter of 2021. Basic remuneration of €50,000 per month will be paid to him until the end of his contract term as of December 31, 2022.

4.3 Remuneration granted and owed in fiscal 2021 – former Executive Board members

The remuneration granted and owed in fiscal 2021 to former Executive Board members who were active within the past ten years solely comprised pension benefits.

Paid and owed remuneration of former members of the executive board

	Horst Binnig		Klaus Eberhardt	
	Resignation date Dezember 31, 2019		Resignation date Dezember 31, 2012	
	2021	2021	2021	2021
	€ thousand	in %	€ thousand	in %
Pension payments				
Total	211	100	433	100

5. Outlook on the new remuneration system for the Executive Board

The remuneration system for the Executive Board that was approved by the Annual General Meeting on May 11, 2021 applies to all members of the Executive Board of Rheinmetall with effect from January 1, 2022. From this date on, all Executive Board contracts were changed over to the 2022 remuneration system.

As part of the review and revision of the remuneration system, shareholders' criticisms of the previous remuneration system were analyzed in detail and the remuneration system for the Executive Board was adjusted as follows on this basis and in line with the corporate strategy:

Outlook for the 2022 remuneration system

Compensation system 2020	Aspect	Compensation system 2022
• Mr. Peter Sebastian Krause • Mr. Jörg Grotendorst	**Scope**	• All board members
Performance period: 1 year Performance targets: • Earnings before taxes (EBT) • Return on capital employed (ROCE) • Non-financial/individual/collective targets Modifier: Adjustment option of +/- 20% in the event of extraordinary developments Payment in cash Cap at 300% of the target amount (including modifier)	**Short Term Incentive (STI)**	Performance period: 1 year Performance targets: • 40% Earnings before taxes (EBT) • **40% Operating Free cash flow (OFCF)** • 20% Non-financial/individual/collective targets **No modifier** Payment in cash Cap at **250%** of the target amount
Performance period: 3 years (retroactive) or 1 year Performance targets: • 50% earnings before taxes (EBT) from the past three years multiplied by a personal EBT factor • 50% relative total shareholder return (TSR) compared to the MDAX Payment 50% in cash and 50% in shares (shares are subject to a four-year blocking period) Cap at 150 % of the target amount Additional cash payment in the amount of 20% of the share value	**Long Term Incentive (LTI)**	Performance period: **4 years (forward looking)** Performance targets: • **40% relative total shareholder return (TSR) compared to EURO STOXX® Industrial Goods & Services** • **40% Return on capital employed (ROCE)** • **20% Environmental, Social and Governance (ESG)** Payment in cash Cap at **250%** of the target amount
• Claw back clause, which covers the event of a serious deterioration in the company's situation for serious company-specific reasons	**Malus and claw back provisions**	• **Malus and claw back clause in cases of compliance violations and flawed consolidated financial statements**
• No Share Ownership Guidelines	**Share Ownership Guidelines (SOG)**	• **200% of the annual gross base compensation for the Chairperson of the Executive Board and 100% of the annual gross base compensation for ordinary Executive Board members**
Maximum compensation without fringe benefits and pension plan • Automotive division: EUR 3,037,500 • Personnel division: EUR 2,725,500	**Maximum compensation**	Maximum compensation **incl.** fringe benefits and pension plan • **Chairperson of the Executive Board: EUR 8,000,000** • **Ordinary Executive Board members: EUR 4,000,000**

Overall, the strategy remains geared toward sustainable and profitable growth across economic cycles. The economic success of the operational entities and the resulting sustainable and profitable growth of the Rheinmetall Group are still assessed primarily on the basis of earnings before taxes (EBT), which are therefore included in the 2022 STI for the Executive Board as a key performance target. At the same time, liquidity on the basis of operating free cash flow (OFCF) represents the second key performance target in the 2022 STI. The option for an adjustment of +/- 20% in the event of extraordinary developments is dispensed with completely.

The corporate strategy is aimed at generating fair returns over the long term, looking at any opportunities that come our way, leveraging and expanding success potential, and, at the same time, avoiding, minimizing or compensating for the associated risks. The aim is to maintain our corporate flexibility and financial security and thereby safeguard the continued, long-term existence of the Rheinmetall Group. For this reason, profitability on the basis of the return on capital employed (ROCE) is assessed and ensured for the management of the Rheinmetall Group. ROCE is therefore included in the 2022 LTI for the Executive Board as a key performance target.

As part of the Group's strategy, specific and measurable ESG targets (E = environment, S = social, G = governance) are also taken into account in the Executive Board's variable remuneration. Furthermore, Rheinmetall believes that it has a responsibility to contribute to the implementation of the Paris Climate Agreement. The Executive Board's contribution to the target of achieving CO_2 neutrality by 2035 is therefore also taken into account in the variable part of the remuneration system and the promotion of energy efficiency increases at all Rheinmetall locations is still being advanced.

In addition, we promote a continuous increase in enterprise value for our shareholders by way of a targeted alignment of interests between the Executive Board and shareholders. By tying a significant portion of the LTI directly to the share price performance, we ensure the promotion of Rheinmetall's capital market performance.

In addition to the revision of the STI and the LTI, the penalty and clawback regulations were also expanded. The 2022 remuneration system accordingly now provides for the option to reclaim variable remuneration in the event of incorrect consolidated financial statements and to reduce/reclaim amounts in the event of a compliance infringement.

Furthermore, share ownership guidelines have been introduced for the Executive Board members. To further align the interests of the Executive Board and shareholders, the Executive Board members are required to make a significant personal investment in Rheinmetall shares. The Executive Board members are accordingly required to invest an amount equivalent to 200% of the annual gross basic remuneration in the case of the Chairman of the Executive Board, and 100% of the annual gross basic remuneration in the case of the ordinary Executive Board members, in Rheinmetall shares and to hold these shares continuously until the end of their Executive Board activity. The necessary shareholding must be accumulated within four calendar years.

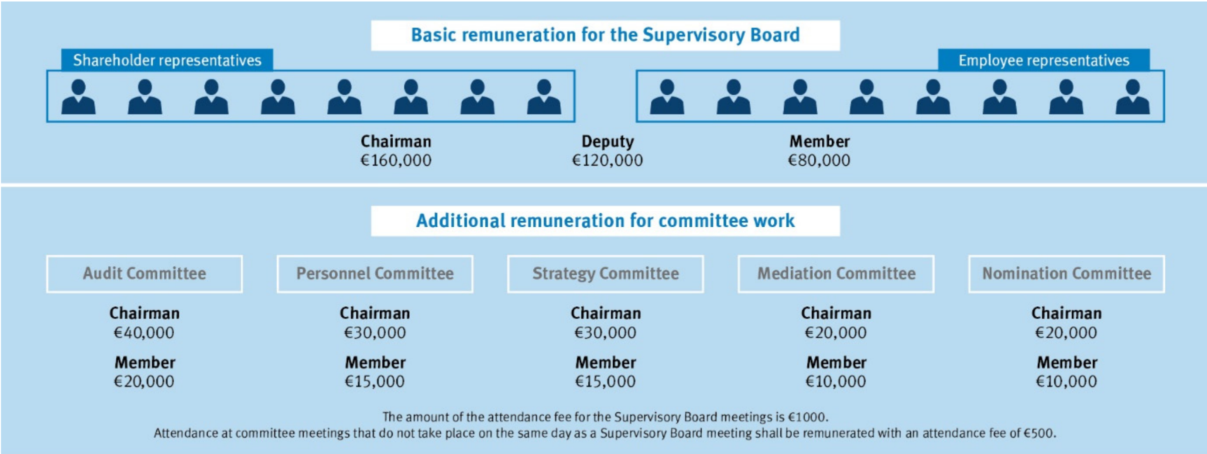
In addition, maximum remuneration in accordance with section 87a(1) no. 1 AktG has been defined for the sum of all remuneration components. This amounts to €8,000,000 for the Chairman of the Executive Board and €4,000,000 for each ordinary Executive Board member. The maximum remuneration relates to the sum of all payments resulting from the remuneration regulations for a fiscal year. If the sum of the payments from a fiscal year exceeds this defined maximum remuneration, then the remuneration component due to be paid out last (usually the LTI) is reduced.

Remuneration of the Supervisory Board

Remuneration of the Supervisory Board

The remuneration regulations for the Supervisory Board that were applicable for the year under review were adopted by the Annual General Meeting on May 8, 2018, with effect from fiscal 2019. These are set down in Article 13 of the Articles of Association of Rheinmetall AG and shown in the diagram below:

Remuneration of the members of the Supervisory Board and its committees



The Supervisory Board members also receive a meeting attendance fee. The attendance fee for Supervisory Board meetings is €1,000. The attendance fee for committee meetings that are not held on the same day as a Supervisory Board meeting is €500. Supervisory Board and committee members who belonged to the Supervisory Board or a committee for only part of the fiscal year receive remuneration on a pro rata temporis basis. In addition, Rheinmetall refunds VAT on Supervisory Board remuneration and expenses incurred for the Supervisory Board meetings to the members of the Supervisory Board upon request.

The Supervisory Board members are covered by any directors' and officers' liability insurance that has been taken out by the company in its own interests in an appropriate amount and with an appropriate deductible for members of management bodies and certain other managers. The premiums for this are paid by the company.

The shareholder representatives on the Supervisory Board in office as of December 31, 2021 received the following remuneration for fiscal 2021:

		Fixed remuneration		Committee remuneration		Attendance fee		Total remuneration
		€	%	€	%	€	%	€
Ulrich Grillo	2021	160,000	53.6	120,000	40.2	18,500	6.2	298,500
Chairman of the Supervisory Board	2020	160,000	54.7	120,000	41.0	12,500	4.3	292,500
Professor Dr. Dr. h.c. Sahin Albayrak*	2021	51,507	78.4	9,658	14.7	4,500	6.9	65,665
	2020	-						
Dr.-Ing. Dr.-Ing. E. h. Klaus Draeger	2021	80,000	75.5	15,000	14.2	11,000	10.4	106,000
	2020	80,000	77.3	15,000	14.5	8,500	8.2	103,500
Professor Dr. Andreas Georgi	2021	80,000	50.3	61,438	38.7	17,500	11.0	158,938
	2020	80,000	54.4	55,000	37.4	12,000	8.2	147,000
Dr. Britta Giesen*	2021	51,507	77.3	9,658	14.5	5,500	8.3	66,665
	2020	-						
Professor Dr. Susanne Hannemann	2021	80,000	70.2	20,000	17.5	14,000	12.3	114,000
	2020	80,000	72.4	20,000	18.1	10,500	9.5	110,500
Dr. Franz Josef Jung	2021	80,000	78.8	10,000	9.9	11,500	11.3	101,500
	2020	80,000	81.6	10,000	10.2	8,000	8.2	98,000
Klaus-Günter Vennemann	2021	80,000	79.6	10,000	10.0	10,500	10.4	100,500
	2020	80,000	82.5	10,000	10.3	7,000	7.2	97,000

*Since May 11, 2021
Figures exclude value-added tax

The employee representatives on the Supervisory Board in office as of December 31, 2021 received the following remuneration for fiscal 2021:

		Fixed remuneration		Committee remuneration		Attendance fee		Total remuneration
		€	%	€	%	€	%	€
Dr. Daniel Hay [1]	2021	120,000	60.8	60,000	30.4	17,500	8.9	197,500
Deputy Chairman of the Supervisory Board	2020	98,798	67.5	36,147	24.7	11,500	7.9	146,445
Ralf Bolm[1]	2021	80,000	70.2	20,000	17.5	14,000	12.3	114,000
	2020	40,219	75.0	9,399	17.5	4,000	7.5	53,618
Dr. Michael Mielke	2021	80,000	87.9			11,000	12.1	91,000
	2020	80,000	92.0			7,000	8.0	87,000
Reinhard Müller[1]	2021	80,000	66.9	25,000	20.9	14,500	12.1	119,500
	2020	80,000	75.4	17,049	16.1	9,000	8.5	106,049
Dagmar Muth[1]	2021	80,000	76.9	15,000	14.4	9,000	8.7	104,000
	2020	80,000	80.0	15,000	15.0	5,000	5.0	100,000
Barbara Resch[1]	2021	80,000	89.9			9,000	10.1	89,000
	2020	40,219	93.1		0.0	3,000	6.9	43,219
Markus Schnaubel[1]	2021	80,000	74.8	15,000	14.0	12,000	11.2	107,000
	2020	80,000	77.3	15,000	14.5	8,500	8.2	103,500
Sven Schmidt[1]	2021	80,000	64.4	29,658	23.9	14,500	11.7	124,158
	2020	80,000	72.7	20,000	18.2	10,000	9.1	110,000

Figures exclude value-added tax
[1] These employee representatives in the Supervisory Board and the trade union representatives in the Supervisory Board have declared that they will forward their remuneration less attendance fees to the Hans Böckler Foundation in accordance with the guidelines of the Federation of German Trade Unions.

The Supervisory Board members who left in 2021 and who had represented the shareholders received the following remuneration:

		Fixed remuneration		Committee remuneration		Attendance fee		Total remuneration
		€	% TR	€	% TR	€	% TR	€
Detlef Moog*	2021	28,712	74.4	5,384	13.9	4,500	11.7	38,596
	2020	80,000	78.8	15,000	14.8	6,500	6.4	101,500
Univ.-Prof. Dr. Marion A. Weissenberger-Eibl*	2021	28,712	77.0	3,589	9.6	5,000	13.4	37,301
	2020	80,000	83.3	10,000	10.4	6,000	6.3	96,000

* Until May 11, 2021
Figures exclude value-added tax

In accordance with section 113(3) sentence 1 AktG, the annual general meeting of a listed company must resolve on the remuneration and the remuneration system for the members of the Supervisory Board at least every four years. In the view of the Supervisory Board and the Executive Board, the constant competition for qualified and experienced individuals as candidates for the shareholder representatives on the Supervisory Board and the still increasing requirements for Supervisory Board activities made it necessary to increase the Supervisory Board remuneration as compared to the previously granted remuneration in line with usual market conditions, so as to be able to compete in the search for suitable candidates in the future, too.

Taking account of ARUG II and the German Corporate Governance Code, the Annual General Meeting on May 11, 2021 approved the management's motion put to the vote under agenda item 8 by a majority of 99.75%.

The diagram below shows the main adjustments in comparison to the previous remuneration system for the Supervisory Board. This new remuneration system applies from January 1, 2022:

Previous remuneration system	Aspect	New remuneration system
Supervisory Board Chairman: €160,000 Deputy Supervisory Board Chairman: €120,000 Member of the Supervisory Board: €80,000	**Basic remuneration for the Supervisory Board**	Supervisory Board Chairman: €180,000 Deputy Supervisory Board Chairman: €135,000 Member of the Supervisory Board: €90,000
Audit Committee Chairman: €40,000 Member: €20,000 Personnel Committee Chairman: €30,000 Member: €15,000 Strategy Committee Chairman: €30,000 Member: €15,000 Nomination Committee Chairman: €20,000 Member: €10,000 Mediation Committee Chairman: €20,000 Member: €10,000	**Additional remuneration for committee work**	Audit Committee Chairman: €60,000 Member: €30,000 Personnel Committee Chairman: €30,000 Member: €15,000 Strategy Committee Chairman: €30,000 Member: €15,000 Nomination Committee Chairman: €20,000 Member: €10,000 Mediation Committee Chairman: €20,000 Member: €10,000
In addition to reimbursement of expenses for each meeting of the Supervisory Board which the member attends in person, each member of the Supervisory Board receives an attendance fee of € 1,000 and for the personal participation in committee meetings an attendance fee of € 500 for meetings which occur on a day which is not a day of a Supervisory Board meeting	**Attendance fee**	In addition to reimbursement of expenses for each meeting of the Supervisory Board which the member attends – irrespective of whether on the basis of physical presence, by phone or in any other way, not however in the case of mere participation in a resolution – each member of the Supervisory Board receives an attendance fee of € 1,000 and for personal participation in committee meetings an attendance fee of € 1,000.
None	**Share Ownership Guidelines (SOG)**	Each member of the Supervisory Board – with the exception of the employee representatives – is required to deploy 25% of the gross remuneration paid for acquiring shares in the company and to hold the shares for the length of the membership in the Supervisory Board. Compliance with the holding obligation is to be demonstrated to the company. This obligation to buy shares does not apply to remuneration which has not yet been paid at the time of departure from the Supervisory Board. The claim to the above part of the remuneration does not apply retroactively if the member of the Supervisory Board partly or fully sells or loans the acquired shares before his departure from the Supervisory Board

Supervisory Board and committee members who belonged to the Supervisory Board or a committee for only part of the fiscal year receive remuneration on a pro rata temporis basis.

Comparison of year-on-year change in remuneration

The table below shows the year-on-year change in remuneration, Rheinmetall's earnings development, and the average remuneration of Rheinmetall employees on the basis of full-time equivalents.

The remuneration of Rheinmetall employees is shown on the basis of average personnel expenses for employees (full-time equivalents) of the Rheinmetall Group in Germany, not including the Pistons business unit. The salaries include performance-based remuneration, additional payments, fringe benefits, social security and special payments. In line with the remuneration granted and owed in accordance with section 162 AktG, pension expenses are not included.

Comparative representation

	2021	change 2021/2020*	2020
			in %
On December 31, 2021 incumbent members of the executive board			
Armin Papperger	4,595	(0.6)	4,622
Helmut P. Merch	2,451	(0.6)	2,467
Peter Sebastian Krause	1,910	(1.5)	1,940
In fiscal year 2021 retired members of the executive board			
Jörg Grotendorst	3,170	493.6	534
Former members of the executive board			
Klaus Eberhardt	433		433
Horst Binnig	211	0.5	210
On December 31, 2021 incumbent supervisory board members			
Dipl.-Kfm. Ulrich Grillo	299	2.1	293
Prof. Dr. Dr. h.c. Sahin Albayrak**	66		
Dr.-Ing. Dr. Ing. E.h. Klaus Draeger	106	2.4	104
Prof. Dr. Andreas Georgi	159	8.1	147
Dr. Britta Giesen**	67		
Prof. Dr. Susanne Hannemann	114	3.2	111
Dr. Franz Josef Jung	102	3.6	98
Klaus-Günter Vennemann	101	3.6	97
Dr. Daniel Hay	198	34.9	146
Ralf Bolm***	114	112.6	54
Dr. Michael Mielke	91	4.6	87
Reinhard Müller	120	12.7	106
Dagmar Muth	104	4.0	100
Barbara Resch***	89	105.9	43
Markus Schaubel	107	3.4	104
Sven Schmidt	124	12.9	110
In fiscal year 2021 retired members of the supervisory board			
Detlef Moog	39	(62.0)	102
Marion Weissenberger-Eibl	37	(61.1)	96
Ø remuneration of employees	86	4.4	83
Earnings trend			
Adjusted EBT Rheinmetall AG in € million	180	100.0	90
Adjusted EBT of Rheinmetall Group € million	559	36.0	411

* The change in percent in based on exact, non-rounded figures in euro.

** From May 2021

*** From July 2020

Düsseldorf, March 9, 2022

The Executive Board
Rheinmetall AG

The Supervisory Board
Rheinmetall AG

Supplementary report

Events after the end of the reporting period are explained in the notes to the consolidated financial statements under note (41) “Events after the end of the reporting period.”

Düsseldorf/Germany, March 9, 2022

Rheinmetall Aktiengesellschaft

The Executive Board

Armin Papperger Helmut P. Merch Peter Sebastian Krause

181 CONSOLIDATED FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Consolidated statement of financial position

Statement of financial position of Rheinmetall Group as of December 31, 2021

€ million	Notes	12/31/2021	12/31/2020
Assets			
Goodwill	(9)	481	476
Other intangible assets	(9)	287	240
Right-of-use assets	(10)	214	233
Property, plant and equipment	(11)	1,056	1,132
Investment property	(12)	30	39
Investments accounted for using the equity method	(13)	201	288
Other non-current assets	(15)	337	272
Deferred taxes	(30)	147	249
Non-current assets		**2,752**	**2,928**
Inventories	(14)	1,651	1,573
Contract assets	(23)	408	352
Trade receivables	(23)	1,164	1,170
Other current assets	(15)	213	192
Income tax receivables		11	24
Securities held for trade	(16)	162	-
Cash and cash equivalents	(17)	1,039	1,027
Assets held for sale	(8)	334	-
Current assets		**4,982**	**4,339**
Total assets		**7,734**	**7,267**
Equity and liabilities			
Share capital		112	112
Capital reserves		561	556
Retained earnings		1,755	1,233
Treasury shares		(9)	(13)
Rheinmetall AG shareholders' equity		**2,418**	**1,888**
Non-controlling interests		203	165
Equity	(18)	**2,620**	**2,053**
Provisions for pensions and similar obligations	(19)	773	1,177
Other non-current provisions	(20)	210	191
Non-current financial debts	(21)	706	873
Other non-current liabilities	(22)	45	82
Deferred taxes	(30)	38	4
Non-current liabilities		**1,772**	**2,326**
Other current provisions	(20)	677	796
Current financial debts	(21)	215	150
Contract liabilities	(23)	1,111	968
Trade liabilities		809	700
Other current liabilities	(22)	196	198
Income tax liabilities		87	76
Liabilities directly associated with assets held for sale	(8)	246	-
Current liabilities		**3,341**	**2,888**
Total equity and liabilities		**7,734**	**7,267**

Consolidated income statement

Income statement of the Rheinmetall Group for fiscal 2021

€ million	Notes	2021	2020
Sales	(23)	**5,658**	**5,405**
Changes in inventories and work performed by the enterprise and capitalized	(24)	117	142
Total operating performance		**5,775**	**5,547**
Other operating income	(25)	134	114
Cost of materials	(26)	2,745	2,792
Personnel costs	(27)	1,643	1,537
Amortization, depreciation and impairment	(28)	251	282
Other operating expenses	(29)	656	642
Income from investments carried at equity		11	13
Other net financial income		(17)	(24)
Earnings before interest and taxes (EBIT)		**608**	**398**
Interest income		4	9
Interest expenses		31	40
Earnings before taxes (EBT)		**582**	**367**
Income taxes	(30)	(150)	(83)
Income from continuing operations		**432**	**284**
Income from discontinued operations		(100)	(283)
Earnings after taxes		**332**	**1**
Of which:			
Non-controlling interests		41	27
Rheinmetall AG shareholders		291	(27)
Earnings per share	(31)	**€ 6.72**	**€ (0.62)**
Earnings per share from continuing operations		€ 9.04	€ 5.93
Earnings per share from discontinued operations		€ (2.32)	€ (6.55)

Consolidated statement of comprehensive income

Statement of comprehensive income of the Rheinmetall Group for fiscal 2021

€ million	2021	2020
Earnings after taxes	**332**	**1**
Remeasurement of net defined benefit liability from pensions	231	(34)
Other comprehensive income from investments accounted for using the equity method	(2)	-
Amounts not reclassified to the income statement	**229**	**(34)**
Change in value of derivative financial instruments (cash flow hedge)	11	(4)
Currency translation difference	63	(73)
Other comprehensive income from investments accounted for using the equity method	22	(10)
Amounts reclassified to the income statement	**96**	**(87)**
Other comprehensive income (after taxes)	**325**	**(120)**
Total comprehensive income	**657**	**(120)**
Of which:		
Non-controlling interests	41	21
Rheinmetall AG shareholders	615	(140)

Consolidated statement of cash flows

Cash flow statement of Rheinmetall Group for fiscal 2021

€ million	2021	2020
Earnings after taxes	332	1
Amortization, depreciation and impairment	254	303
Impairment of non-current assets of discontinued operations	91	254
Allocation of CTA assets to secure pension and partial retirement obligations	(35)	(42)
Other changes in pension provisions	(17)	(4)
Income from disposals of non-current assets	-	(6)
Changes in other provisions	(51)	88
Changes in working capital	22	(119)
Changes in receivables, liabilities (without financial debt) and prepaid & deferred items	63	(28)
Pro rata income from investments accounted for using the equity method	(15)	(10)
Dividends received from investments accounted for using the equity method	30	21
Other non-cash expenses and income	16	(5)
Cash flow from operating activities[1]	**690**	**453**
Of which continuing operations	*705*	*443*
Of which discontinued operations	*(14)*	*10*
Investments in property, plant and equipment, intangible assets and investment property	(271)	(237)
Cash inflows from the disposal of property, plant and equipment, intangible assets and investment property	3	20
Cash inflows from for the disinvestments in subsidiaries and financial assets	1	1
Cash inflows from subsequent purchase price adjustment	-	10
Cash outflows from investments in subsidiaries and financial assets	(35)	(3)
Cash inflows from the disposal of current (liquid) financial assets	-	20
Cash outflows for investments in securities held for trade	(160)	-
Cash flow from investing activities	**(462)**	**(188)**
Of which continuing operations	*(438)*	*(165)*
Of which discontinued operations	*(24)*	*(22)*
Dividends paid out by Rheinmetall AG	(87)	(104)
Other profit distributions	(5)	(2)
Borrowing of financial debt	122	444
Repayment of financial liabilities	(231)	(487)
Cash flow from financing activities	**(202)**	**(148)**
Of which continuing operations	*(300)*	*(163)*
Of which discontinued operations	*98*	*15*
Changes in cash and cash equivalents	**27**	**117**
Changes in cash and cash equivalents due to exchange rates	4	(10)
Total change in cash and cash equivalents	**30**	**108**
Opening cash and cash equivalents January 1	**1,027**	**920**
Closing cash and cash equivalents December 31	**1,058**	**1,027**
Closing cash and cash equivalents December 31 from discontinued operations	19	-
Cash and cash equivalents as per consolidated statement of financial position December 31	**1,039**	**1,027**

1) Of which:
Net interest of €-19 million (previous year: €-16 million), net income taxes of €-72 million (previous year: €-85 million)

Consolidated statement of changes in equity

Development of equity

€ million	Share capital	Capital reserve	Total retained earnings	Treasury shares	Rheinmetall AG shareholders' equity	Non-controlling interests	Equity
As of 1/1/2020	**112**	**553**	**1,478**	**(17)**	**2,125**	**146**	**2,272**
Earnings after taxes	-	-	(27)	-	(27)	27	1
Other comprehensive income	-	-	(113)	-	(113)	(7)	(120)
Total comprehensive income	**-**	**-**	**(140)**	**-**	**(140)**	**21**	**(120)**
Dividend payout	-	-	(104)	-	(104)	(2)	(106)
Disposal of treasury shares	-	-	-	4	4	-	4
Other changes	-	3	-	-	2	-	2
As of 12/31/2020	**112**	**556**	**1,233**	**(13)**	**1,888**	**165**	**2,053**
					-		-
As of 1/1/2021	**112**	**556**	**1,233**	**(13)**	**1,888**	**165**	**2,053**
Earnings after taxes	-	-	291	-	291	41	332
Other comprehensive income	-	-	325	-	325	1	325
Total comprehensive income	**-**	**-**	**615**	**-**	**615**	**41**	**657**
Dividend payout	-	-	(87)	-	(87)	(5)	(92)
Disposal of treasury shares	-	-	-	4	4	-	4
Other changes	-	5	(8)	-	(3)	1	(1)
As of 12/31/2021	**112**	**561**	**1,755**	**(9)**	**2,418**	**203**	**2,620**

Composition of retained earnings

€ million	Currency Translation differences	Remeasurement of net defined benefit liability from pensions	Hedges	OCI from investments accounted for using the equity method	Other reserves	Total retained earnings
As of 1/1/2020	**13**	**(527)**	**17**	**(8)**	**1,981**	**1,478**
Earnings after taxes	-	-	-	-	(27)	(27)
Other comprehensive income	(66)	(32)	(6)	(10)	-	(113)
Total comprehensive income	**(66)**	**(32)**	**(6)**	**(10)**	**(27)**	**(140)**
Dividend payout	-	-	-	-	(104)	(104)
As of 12/31/2020	**(53)**	**(559)**	**11**	**(17)**	**1,850**	**1,233**
As of 1/1/2021	**(53)**	**(559)**	**11**	**(17)**	**1,850**	**1,233**
Earnings after taxes	-	-	-	-	291	291
Other comprehensive income	61	229	14	20	-	325
Total comprehensive income	**61**	**229**	**14**	**20**	**291**	**615**
Dividend payout	-	-	-	-	(87)	(87)
Other changes	-	-	-	-	(8)	(8)
As of 12/31/2021	**8**	**(330)**	**25**	**3**	**2,047**	**1,755**

Notes to the consolidated financial statements
Segment report

Segment report 2021

€ million	Vehicle Systems	Weapon and Ammunition	Electronic Solutions	Sensors and Actuators	Materials and Trade	Others/ Consolidation	Group (continued operations)
Income statement							
External sales	*1,875*	*1,139*	*745*	*1,229*	*647*	*24*	*5,658*
Internal sales	*8*	*93*	*187*	*86*	*4*	*(379)*	*-*
Segment sales	1,883	1,233	932	1,315	651	(356)	5,658
Operating result	174	218	99	103	51	(49)	594
Special items	-	-	-	-	1	13	14
EBIT	174	218	99	103	52	(37)	608
Of which:							
At equity result	*2*	*(6)*	*7*	*3*	*2*	*3*	*11*
Amortization and depreciation	*44*	*41*	*29*	*95*	*20*	*9*	*237*
Impairment	*-*	*-*	*-*	*10*	*4*	*-*	*14*
Interest income	1	-	1	-	-	1	4
Interest expenses	10	16	5	4	4	(7)	31
EBT	165	203	95	100	48	(29)	582
Other data							
Operating free cash flow	321	132	(52)	29	24	3	458
Employees Dec. 31 (FTE)	4,975	4,852	3,181	4,364	2,223	591	20,185

Segment report 2020

€ million	Vehicle Systems	Weapon and Ammunition	Electronic Solutions	Sensors and Actuators	Materials and Trade	Others/ Consolidation	Group (continued operations)
Income statement							
External sales	*1,828*	*1,118*	*776*	*1,147*	*533*	*3*	*5,405*
Internal sales	*18*	*81*	*156*	*55*	*3*	*(313)*	*-*
Segment sales	1,846	1,199	931	1,202	536	(309)	5,405
Operating result	149	184	92	36	29	(44)	446
Special items	-	(7)	10	(22)	(29)	-	(48)
EBIT	149	178	102	14	-	(44)	398
Of which:							
At equity result	*2*	*3*	*15*	*4*	*(10)*	*-*	*13*
Impairment of at equity investments	*-*	*-*	*-*	*-*	*(18)*	*-*	*(18)*
Income from subsequent purchase price payment	*-*	*-*	*10*	*-*	*-*	*-*	*10*
Amortization and depreciation	*44*	*43*	*30*	*100*	*22*	*10*	*249*
Impairment	*-*	*1*	*2*	*14*	*16*	*-*	*32*
Interest income	2	-	1	1	-	3	9
Interest expenses	15	15	5	6	4	(6)	40
EBT	137	163	97	9	(5)	(35)	367
Other data							
Operating free cash flow	77	(8)	105	5	39	11	230
Employees Dec. 31 (FTE)	4,515	4,792	2,984	4,563	2,147	498	19,500

Further information and reconciliations can be found under note (33) “Notes to the segment report”.

Summary of accounting standards

(1) General information

Rheinmetall AG (Düsseldorf Commercial Register, HRB 39401) is the parent company of the Rheinmetall Group and has its registered office at Rheinmetall Platz 1, Düsseldorf (Germany). The consolidated financial statements of Rheinmetall AG have been prepared in accordance with the regulations of section 315e(1) German Commercial Code ("HGB") and the International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU). The consolidated financial statements and the Group management report, which is combined with the management report of Rheinmetall AG, are submitted to the operator of the Federal Gazette and published in the Federal Gazette. The consolidated financial statements were prepared by the Executive Board on March 9, 2022.

The Rheinmetall Group is an international group for leading technologies in the mobility and security sectors. The fiscal year of Rheinmetall AG and the financial statements of subsidiaries included in the consolidated financial statements is the calendar year. The consolidated financial statements are presented in euro (€). Unless stated otherwise, all amounts – including those for the previous year – are reported in millions of euro (€ million). All figures in these consolidated financial statements have been rounded on a standalone basis. This can result in minor deviations when adding figures together.

The consolidated income statement has been presented in the total cost (nature of expense) format. Only matters significant to the net assets, financial position and results of operations of the Rheinmetall Group are explained in the notes to the consolidated financial statements. The previous year's figures were restated on the basis of the new segment structure in place from fiscal 2021 and in line with the provisions of IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations).

(2) New and amended accounting standards

The following amendments to standards were applied for the first time in fiscal 2021:

Accounting standards, amendments to standards and interpretations applied for the first time in fiscal 2021

Standard	Name	Effective date
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	Interest Rate Benchmark Reform (Phase 1)	1/1/2021
Amendments to IFRS 16	Covid-19-Related Rent Concessions	4/1/2021

The **amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16** in the context of the second project phase of the reform of benchmark rates supplement the requirements of the first project phase and provide specific clarifications on accounting treatment in respect to replacing the benchmark rate with an alternative benchmark rate. The value changes of financial instruments or lease contracts due to the replacement of the interest rate benchmark can be spread over time. This prevents a sudden impact on profit or loss, and unnecessary discontinuations of hedging relationships as a consequence of the replacement of the interest rate benchmark.

The **amendments to IFRS 16** were published by IASB in May 2020 as a temporary expedient in respect to accounting for rent concessions. Utilizing the practical expedient, lessees can waive the assessment as to whether there is a contract modification for rent-related concessions in connection with the COVID-19 pandemic. This practical expedient was extended by a newly issued amendment to IFRS 16 on March 31, 2021. Rheinmetall did not use the expedient in fiscal 2020 or 2021.

The application of the amended standards had no material effect on the presentation of the Rheinmetall Group's net assets, financial position and results of operations.

There are also the following accounting standards, amendments to standards and interpretations published but not yet applied in fiscal 2021:

Accounting standards, amendments to standards and interpretations published but not yet applied

Standard	Name	Effective date
Endorsed by the EU		
Amendments to IAS 16	Proceeds before Intended Use	1/1/2022
Amendments to IAS 37	Onerous Contracts: Costs of Fulfilling a Contract	1/1/2022
Amendments to IFRS 3	Reference to the Conceptual Framework	1/1/2022
Annual improvements to IFRSs	Cycle 2018-2020 – IFRS 1, IFRS 9 , IAS 41 and IFRS 16	1/1/2022
Amendments to IAS 1	Disclosure of Accounting Policies	1/1/2023
Amendments to IAS 8	Definition of Accounting Estimates	1/1/2023
IFRS 17 including Amendments to IFRS 17	Insurance Contracts	1/1/2023
Endorsement by the EU pending[1)]		
Amendments to IAS 1	Classification of Liabilities as Current or Non-Current	1/1/2023
Amendments to IAS 12 (Income Taxes)	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	1/1/2023
Amendments to IFRS 17	Initial Application of IFRS 17 und IFRS 9 - Comparative Information	1/1/2023

1) For the standards and statements not yet endorsed by the EU, the date planned by the IASB as the initial date of application is assumed as the first date of application for the Rheinmetall Group.

The **amendments to IAS 16** stipulate that proceeds from selling items which are produced while bringing an asset into the location and condition necessary for it to be capable of operating in the manner intended by management in line with the effective standards are to be recognized in profit and loss and no longer deducted from the cost of an item of property, plant and equipment.

The **amendments to IAS 37** specify the cost of fulfillment when assessing whether a contract is onerous.

The **amendments to IFRS 3** update the references within IFRS 3 to the Conceptional Framework published in March 2018. In addition, an exception was introduced for separately recognized liabilities and contingent liabilities and supplemented with a clarifying statement that in a business combination an acquirer is not allowed to recognize contingent assets.

The **Annual Improvements to IFRSs 2018 to 2020 Cycle** cover small amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41. The amendments to IFRS 9 explicitly specify which fees and costs must be included in the cost of the "10 per cent" test when derecognizing a financial liability. The amendments to IFRS 16 relate to an adjustment of an example on lease incentives.

The **amendments to IAS 1** in relation to disclosure of accounting policies clarify that only material accounting policies must be explained in the notes. Material information specifically includes company-specific information in connection with material events or transactions, such as complex accounting facts, the use of an accounting option or the change of accounting policies.

The **amendments to IAS 8** aim to clarify the distinction between accounting changes and a change in estimates. It is stated that accounting estimates relate to monetary values in the financial statements subject to measurement uncertainty.

IFRS 17 is the new accounting standard for insurance contracts. The new standard regulates the recognition, measurement and disclosure of insurance contracts and replaces the previous regulations in accordance with IFRS 4 (Insurance Contracts). The **amendments to IFRS 17** from June 25, 2020, provide additional clarifications to IFRS 17 and defer the date of initial application set by IASB from January 1, 2021, to January 1, 2023.

The following amendments have not yet been implemented in European law as they are not yet endorsed:

The **amendments to IAS 1** specify the regulation on classifying liabilities as current or non-current in cases of uncertainty as to the settlement amount. In particular, it clarifies that classification is aligned to the rights the company has at the end of the reporting period. In a further clarification of IASB on July 15, 2020, the effective date stated by IASB was deferred from January 1, 2022 to January 1, 2023.

The **amendments to IAS 12** clarify that the initial recognition exemption provided in IAS 12 does not apply to certain transactions. Accordingly, the initial recognition exemption no longer applies to transactions in which equal amounts of deductible and taxable temporary differences arise on initial recognition. This amendment means that deferred tax is recognized on leases accounted for by the lessee and on decommissioning obligations.

The **amendments to IFRS 17** relate to the transition requirements for entities that will first apply IFRS 9 and IFRS 17 at the same time. The amendments improve the requirements for the comparative information presented about financial assets at initial application.

The application of the new and amended standards and interpretations is not expected to have a material effect on the presentation of the Rheinmetall Group's net assets, financial position and results of operations.

(3) Accounting policies

The key accounting policies and measurement principles applied to Rheinmetall AG's consolidated financial statements are described below.

Cost – Cost includes the purchase price and all incidental costs that can be directly (with the exception of company acquisitions as defined by IFRS 3 and financial instruments measured at fair value) attributed to the purchase. In the event of an exchange, cost equals the fair value of the asset given in an exchange of assets transaction as of the date of the exchange, whereby any cash compensation is accounted for accordingly.

Cost includes all expenditures that are directly attributable to the production process and an appropriate share of production-related overheads. The latter comprise material and production overheads including production-related depreciation and social security expenses as well as pro rata administrative costs. Overheads are allocated to production costs on the basis of the production facilities' normal capacity utilization.

Financing costs are capitalized as costs if they relate to assets which are produced or purchased over a period exceeding one year.

Grants and allowances – Government grants provided for the acquisition of an asset are deducted from the corresponding capital expenditures. Any government grants for expenses for purposes other than investment activities are recognized as deferred income and amortized to profit via other operating income when the related expenses are incurred. Private investment-related grants from customers are also recognized as deferred income and amortized to profit over the contract term. If economic ownership of the subsidized asset is transferred to the customer, sales are recognized on the date of the transfer.

Impairment – If there are indications of impairment on an asset or a cash-generating unit (CGU) and the recoverable amount is less than the amortized cost, an impairment loss is recognized. If indications for impairment cease to exist, impairment losses are reversed, with the exception of goodwill. The reversal cannot exceed the value of amortized cost that would have resulted if no impairment had been charged.

Goodwill – Goodwill in the amount of the potential benefit is allocated to the cash-generating units at the level of which management monitors goodwill. It is tested for impairment once a year at the end of the reporting period and during the year if there are indications of impairment. The impairment test compares the carrying amount to the recoverable amount. Fair value less costs to sell determined applying the discounted cash flow method based on the current corporate planning is used as the recoverable amount. If this value is below the carrying amount, a check is made as to whether the value in use results in a higher recoverable amount. If the carrying amount exceeds the recoverable amount, an impairment loss is then recognized in the amount of the difference, which is reported as a write-down. The subsequent reversal of write-downs is not permitted.

Goodwill is not amortized.

Other intangible assets – Intangible assets are capitalized at cost. Research costs are always recognized in expenses. Development costs are only capitalized if a newly developed product or process can be clearly defined, is technically feasible and is intended either for own use or marketing purposes. Furthermore, capitalization requires that the costs can be reliably measured and there is reasonable assurance of a future economic benefit. Any other development costs are immediately expensed.

Finite-lived intangible assets are amortized from the date of first use over the economic lives. The measurement is subject to the following useful lives:

Useful life of intangible assets

	Years
Concessions and industrial property rights	3-15
Development costs	3-10
Customer relations	5-15
Technology	3-15

Property, plant and equipment – Property, plant and equipment are carried at cost less accumulated depreciation and any impairment. Depreciation is recognized on a straight-line basis over the expected useful life.

Useful life of property, plant and equipment

	Years
Buildings	20-50
Other structures	8-30
Equivalent titles	5-15
Production plant and machinery	3-20
Other plant, factory and office equipment	3-15

Leases – Agreements that transfer the right to use assets for a specified period of time in return for payment or a series of payments are leases.

For leases of land, buildings, machinery, technical equipment, and vehicles, Rheinmetall as the lessee recognizes a financial liability in the amount of the present value of the lease payments to be made over the term of the lease. The calculation of present value accounts for fixed lease payments, variable index-based payments, expected payments for residual value guarantees, exercise prices of call options if their exercise is reasonably assured and payments from the early termination of the lease less any rental incentives. The calculated lease payments are discounted at the date of commencement of the lease by the appropriate incremental borrowing rate specific to the lease term. The lease liability is reduced by the repayment portion of the lease payment until the lease expires.

At the same time, Rheinmetall as lessee recognizes a right-of-use asset equal to the cost at the date of commencement of the lease. Starting at the value of the lease liability, the cost is increased in some circumstances by initial direct costs, dismantling costs, and lease payments that are made by the lessee before or at the commencement of the transfer of use and therefore not included in the lease liability. The right-of-use assets are amortized over the shorter of the remaining term of the leases and the useful life of the relevant leased asset.

In the case of leases with a term of less than one year, lease payments are recognized directly in other operating expenses. The same also applies to leases for low-value assets whose value is less than €50 thousand and which are not land, buildings, or vehicles.

Investment property – Investment property is property held to earn rental income or to benefit from long-term capital appreciation, and not for use in production or administration.

Investment property is carried at cost less cumulative depreciation and impairment. Depreciation is recognized on a straight-line basis over useful lives of 20 to 50 years.

Financial instruments – A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

The first-time recognition of financial instruments is at fair value. In the case of a financial asset that is not measured at fair value through profit or loss, incidental costs are included on first-time recognition. Standard market purchases and sales of financial assets are recognized for the first time on the settlement date. This is the date when the financial instrument is delivered or the payment is made. Notwithstanding this, derivatives are recognized for the first time as of the date when the contract is concluded or the trading date.

There are three measurement categories for the subsequent measurement of financial instruments: (1) measurement at amortized cost, (2) measurement at fair value through other comprehensive income (FVOCI), and (3) measurement at fair value through profit or loss (FVTPL). The relevant measurement category for a financial instrument depends on the contractual cash flow characteristics of the financial asset and the entity’s business model for managing financial assets.

If the contractual cash flows comprise solely payments of principal and interest (SPPI) and the business model is “hold,” financial instruments are measured at amortized cost. Financial instruments with SPPI cash flows but the “hold and sell” business model are measured at fair value through other comprehensive income. If the SPPI criterion is not met, the financial instruments are likewise measured at fair value, but the changes in value are recognized through profit or loss. In the case of debt instruments, changes in value can be recognized through profit or loss despite fulfillment of the SPPI criterion by exercising the fair value option. In the case of equity instruments, the fair value OCI option provides the opportunity to recognize any changes in value that arise through other comprehensive income. Currently there are no situations in which the fair value option is used for debt instruments.

Trade receivables and liquid financial assets are generally measured at amortized cost. Trade receivables classified by Group companies as available for sale must be measured at fair value through other comprehensive income. Other financial assets measured at amortized cost are discounted by applying rates that match their maturity on first-time recognition and written down using the effective interest method. As of the end of the reporting period, the default risk of financial assets is checked and, if necessary, an impairment recognized on the basis of expected losses. For trade receivables the simplified method is used, applying the customer credit rating and specific country risks. The loss allowance for expected default risks is recognized in the income statement.

Cash and cash equivalents are measured at amortized cost. Cash and cash equivalents comprise any liquid assets with a remaining term of less than three months at the date of their purchase.

Changes in the fair value of derivative financial instruments are recognized in the income statement. If the conditions under IFRS 9 are met, they are accounted for as cash flow hedges. The effective portion of the changes in the fair value of the designated derivative is recognized in equity in the hedge reserve. The cumulative changes in fair value are reclassified from equity to the income statement if the hedged item is recognized in the income statement. Changes in the fair value attributable to the ineffective portion of the hedge are always recognized in the income statement.

Financial liabilities are measured at amortized cost using the effective interest method.

Inventories – Inventories are carried at cost, usually using the weighted average. Inherent risks due to reduced utility or to obsolescence are adequately allowed for. If the net realizable value of inventories is lower than their carrying amount as of the end of the reporting period, they are written down to net realizable value. The write-down is recognized either as cost of materials (raw materials and supplies) or a change in inventories of finished products and work in progress. If the net realizable value of inventories previously written down increases, the ensuing reversal is routinely offset against cost of materials (raw materials and supplies) or recognized as a change in inventories of finished products and work in progress.

Assets held for sale and associated liabilities in discontinued operations – A discontinued operation is a separate major line of business or geographical area of operations that either is held for sale or has already been sold and is clearly distinct from the entity's other operations both from a business perspective and for the purposes of financial reporting.

A discontinued operation classified as held for sale in accordance with the criteria of IFRS 5 is recognized in the consolidated financial statements under discontinued operations. At the reclassification date, the discontinued operation is stated at the lower of carrying amount and fair value less costs to sell. Depreciation and amortization are suspended from the reclassification date. Assets and liabilities that are not within the scope of the measurement requirements of IFRS 5 are measured in accordance with the standards applicable to them. The elimination entries for transactions between continuing and discontinued operations are assigned in full to discontinued operations. In reporting, the activities of the discontinued operation are not assigned to a reportable segment.

Assets and liabilities of discontinued operations are reclassified to the "assets held for sale" and "liabilities directly related to assets held for sale" items in the statement of financial position. The previous year's statement of financial position items are not reclassified. In the income statement, the earnings after taxes of the discontinued operations are combined in a separate item as "Earnings from discontinued operations." The previous year's figures in the income statement are restated accordingly. The statement of cash flows continues to comprise the cash flows of the entire Group and is supplemented by an "of which" item for the net cash flows of discontinued operations.

Contract assets and contract liabilities – Contract assets are recognized in connection with contracts with customers if, in the case of contract manufacturing, the cumulative sales recognized over time exceed the sum of the advance payments received and progress billings. As of the end of the reporting period, this asset item is tested for impairment, and, if necessary, an impairment is recognized on the basis of expected losses. If the recognized sales are lower than the sum of the advance payments received and progress billings, a contract liability is recognized. A contract liability is also recognized if advance payments are received and consideration has not already been provided.

Deferred taxes – Deferred taxes are recognized for temporary measurement differences between items shown in the statement of financial position under IFRS and according to the local tax laws of the individual companies. Deferred tax assets also include the tax assets receivable from the expected future utilization of tax loss carryovers (if their realization is reasonably certain). Deferred taxes are calculated on the basis of the tax rates applicable or announced in each country as of the end of the reporting period.

Income tax liabilities are recognized on the basis of appropriate estimates for obligations to the respective national tax authorities that are uncertain in terms of amount and probability of occurrence. The tax rate specific to the company effective at the end of the reporting period is used. Other factors are also taken into account, such as experience from previous external audits and different legal interpretations between taxpayers and the tax authorities with regard to the issue at hand. Uncertain income tax items are recognized at the most likely amount.

Pensions – Pension provisions for defined benefit plan obligations are calculated using the projected unit credit method. The amount of obligations is calculated based on assumptions concerning mortality, expected future pay and pension increases, plan participant turnover rates, the discount rate and other actuarial parameters. The fair value of the plan assets is deducted from the DBO volume. Any excess of plan assets over the DBO volume (a defined benefit asset) is only recognized if and to the extent that it can actually be utilized. If there are deviations between the actuarial assumptions and the actual development of underlying parameters used to calculate the projected unit credits of the pension assets, gains and losses arise from remeasurement of the net defined benefit liability. These effects arising from remeasurement and the asset cap are recognized directly in equity under retained earnings in the year they occur.

Under defined contribution plans, the company incurs no obligations other than to pay the contributions to earmarked post-employment benefit plans. The payments incurred are recognized in personnel expenses.

The Rheinmetall Group also participates in multi-employer pension plans. As these are defined benefit plans, they are accounted for accordingly.

Provisions – Other provisions take into account all identifiable commitments and obligations to third parties if based on past transactions or events and if it is probable that an outflow of resources (which can be reliably estimated) embodying economic benefits results. If the time value of money is material, provisions are discounted to their settlement amount as of the end of the reporting period. The settlement amount also accounts for identifiable future cost increases.

Revenue recognition – Revenue is recognized when the promised goods or services are transferred to the customer and the customer obtains control over them. Revenue is measured at the transaction price that is expected to be received as consideration. The transaction price is lowered by variable consideration (e.g. rebates, bonuses, and penalties for late deliveries) or increased by agreed and estimated price adjustments. If, especially in the case of longer-term contracts with customers, the revenue is recognized and the payments are received at different times, the contract is examined to determine whether it contains a significant financing component, which must be accounted for in the calculation of the transaction price.

If a contract with a customer relates to contract manufacturing, in which customer-specific products including a significant integration service are provided, the revenue is recognized over time. The revenue to be recognized is determined by the percentage of completion of the respective contract. This is calculated as the ratio of costs actually incurred to the estimated total costs. The costs associated with the customer contract are recognized in the income statement when incurred. In the case of service contracts, the revenue for the period is usually determined pro rata temporis.

Expenses – Operating expenses are recognized when caused or when the underlying service is used.

Interest and dividends – Interest income and expense are recognized on an accrual basis. Dividends are recognized in income when the legal claim to payment is established.

Summary of main measurement methods:

Assets	
Goodwill	Cost (subsequent measurement: impairment test)
Other intangible assets	(Amortized) cost
Right-of-use assets	(Amortized) cost
Property, plant and equipment	(Amortized) cost
Investment property	(Amortized) cost
Investments accounted for using the equity method	Equity method
Inventories	(Amortized) cost
Trade receivables	(Amortized) cost / FVOCI[1]
Cash and cash equivalents	(Amortized) cost
Other financial assets	
"Hold" business model, SPPI[2] met	(Amortized) cost
Hold and sell business model, SPPI[2] met	Fair value through other comprehensive income
Derivatives	Fair value through profit or loss
All other financial assets	Fair value through profit or loss
Equity and liabilities	
Provisions for pensions and similar obligation	Present value of DBO
Other provisions	Discounted settlement amount
Financial liabilities	(Amortized) cost
Trade liabilities	(Amortized) cost
Other liabilities	
Derivatives	Fair value
Miscellaneous	(Amortized) cost

1) FVOCI – fair value through other comprehensive income
2) SPPI – solely payments of principal and interest

Estimates – The preparation of the consolidated financial statements requires assumptions and estimates affecting the application of accounting principles within the Group and the disclosure of assets, liabilities, income and expenses.

When examining the recognition of goodwill of €481 million as of December 31, 2021 (previous year: €476 million), assumptions and estimates relating to forecasts and the discounting of future cash flows were made to calculate the recoverable amount of the relevant cash-generating units. Details of the parameters used are provided under note (9).

The carrying amounts of other intangible assets of €287 million (previous year: €240 million), right-of-use assets of €214 million (previous year: €233 million), property, plant and equipment of €1,056 million (previous year: €1,132 million) and investment property of €30 million (previous year: €39 million) are assessed as of December 31, 2021, to determine whether there are indications of a possible impairment and whether the recoverable amount is lower than the carrying amount. When calculating the recoverable amounts, assumptions and estimates are made on the cash flows from realizable sales prices, costs and the discount rates. The yield curves used in the measurement of derivatives include assumptions about the expected future development of interest rates, taking into account estimated liquidity risks dependent on terms. Moreover, the measurement models used also incorporate parameters that are based on assumptions about volatilities and discount rates.

At the end of the reporting period, discontinued operations are stated at the lower of carrying amount and fair value less costs to sell. The measurement of fair value less costs to sell is based on assumptions and estimates and takes value-relevant information from the ongoing selling process into account. As of December 31, 2021, the net carrying amount of discontinued operations was €88 million.

The measurements of pension provisions and similar obligations of €773 million as of December 31, 2021 (previous year: €1,177 million), were based on the determination of actuarial parameters such as the discount rate, pension development and probability of death. The effect of changes in the parameters used as of the end of the reporting period on the present value of the DBO is shown under note (19). Any discrepancy between the parameters assumed at the beginning of the fiscal year and the actual conditions at the end of the reporting period has no impact on earnings after taxes, as gains and losses due to the remeasurement of the net defined benefit liability resulting from the discrepancy are recognized through other comprehensive income in the statement of comprehensive income.

The recognition of sales over time in the amount of €1,354 million in fiscal 2021 (previous year: €1,402 million) is based on estimates of the expected total contract costs and contract revenue. Comparing the actual contract costs incurred to expected total costs shows the percentage of completion as of the end of the reporting period, on the basis of which the pro rata sales for the period are calculated.

The calculation of future tax advantages which reflect the recognition of deferred tax assets of €147 million as of December 31, 2021 (previous year: €249 million) is based on assumptions and estimates on the development of tax income over a planning period of usually five years and tax legislation in the countries of the Group companies based there.

When assessing and accounting for legal risks and opportunities, estimates on the possible occurrence and the amount of the expected obligations are made. In the process, the management deploys internal legal assessments and evaluations by external attorneys.

The respective assumptions and estimates are based on premises which account for the most recent knowledge. Actual developments may result in amounts differing from these estimates. Changes in accounting estimates are recognized in the period of change where the change affects this period only. If changes in estimates affect both the current period and future periods, these are recognized in the periods in question.

Judgments – Alongside the impact of estimates on the presentation of assets and liabilities as well and income and expenses in the consolidated financial statements, the application of accounting principles is partly dependent on judgments.

A key element of business activities in the Vehicle Systems, Weapon and Ammunition, and Electronic Solutions divisions comprises long-term customer contracts with different performance obligations. Thus, sales are frequently recognized over a period of time. The application of accounting standards also requires judgments in determining the type of sales realization and identifying (individual) performance obligations.

The acquisition of the shares in Rheinmetall BAE Systems Land Ltd. in 2019 requires Rheinmetall to make payments to the BAE Group's pension fund for the entitlements earned by the acquired employees. At the same time, for the recognized pension obligations of Rheinmetall BAE Systems Land Ltd. that are not covered by plan assets, Rheinmetall has a claim to reimbursement from the BAE Group in the same amount. Taking into consideration the relevant accounting principles, both the obligation and the claim to reimbursement are recognized on a gross basis.

(4) Currency translation

In the separate financial statements of consolidated companies, each foreign currency transaction is recognized at the historical rate. Monetary assets and liabilities denominated in a foreign currency are translated at the closing rate. Other assets and liabilities are translated at the rate prevailing at the time of the transaction if they are accounted for using the historical cost convention. These assets and liabilities are translated at the rate prevailing at the respective measurement date if they are measured at fair value. Any currency translation differences that arise are duly recognized in the net financial result.

The single-entity financial statements of Group companies whose functional currency is not the euro are translated into euro as the Group currency. Assets and liabilities are translated at the middle spot exchange rate as of the end of the reporting period and the income statement items at the average annual rate. The translation differences resulting from this are recognized in, and only in, equity as other comprehensive income (OCI).

(5) Consolidation principles

Subsidiaries – Besides Rheinmetall AG, the consolidated financial statements include all German and foreign subsidiaries over which Rheinmetall AG can directly or indirectly exercise a controlling influence. Rheinmetall AG controls an entity if it holds the majority of voting rights or other rights and is therefore able to steer the significant activities of the investee, is exposed to the risk of variable returns from the investment and can use its power over the investee to influence its returns.

Receivables and payables, expenses and income and intercompany profits/losses among consolidated companies are eliminated. Taxes are deferred for all temporary differences from the consolidation of receivables/payables, income/expenses, and the elimination of intercompany profits/losses.

A subsidiary is included in consolidation for the first time in accordance with the acquisition method. The assets and liabilities acquired are carried at fair value at the time of acquisition. Any positive difference between the purchase cost and the pro rata net assets of the acquired company is reported as goodwill under intangible assets. Any negative goodwill is recognized in other operating income. The cost of the acquired subsidiary equals the fair values of the assets given, liabilities assumed, and equity instruments issued by the acquirer in exchange for the acquisition. Any acquisition-related costs incurred are recognized as other operating expenses.

Joint ventures and associates – Jointly controlled entities in which Rheinmetall has rights to the net assets of the investee (joint ventures) are included in the consolidated financial statements using the equity method. Entities over which Rheinmetall can exert significant influence (associates) are also recognized using the equity method.

On first-time inclusion, based on the cost at the time the investment interest is acquired, the respective investment carrying amount is increased or decreased by changes in equity of the joint venture or associate to the extent these can be attributed to equity interest of the Rheinmetall Group. Goodwill for these investments is calculated in line with the principles applying to full consolidation. Any resulting goodwill is included in the investment carrying amount. If there are intercompany profits from transactions between the Rheinmetall Group and the joint venture or associate, these are eliminated on a pro rata basis.

Joint operations – In joint operations, the jointly controlling parties have rights to the assets and liabilities of the joint arrangement. In the consolidated financial statements, the assets, liabilities, expenses and income attributable to the jointly controlling parties are recognized pro rata.

(6) Scope of consolidation

The scope of consolidation with fully and proportionally consolidated companies developed as follows in fiscal 2021:

Scope of consolidation – companies included

	12/31/2020	Additions	Reductions	12/31/2021
Fully consolidated subsidiaries				
Germany	*52*	*4*	-	*56*
Foreign	*108*	*1*	-	*109*
	160	**5**	**-**	**165**
Joint Operations				
Germany	*3*	-	-	*3*
	3	**-**	**-**	**3**
Investments accounted for using the equity method				
Germany	*17*	-	*1*	*16*
Foreign	*17*	-	*1*	*16*
	34	**-**	**2**	**32**

In fiscal 2021, a total of four companies were added to the group of consolidated subsidiaries through being founded and one through being acquired. Two companies accounted for using the equity method left the consolidated group due to liquidation.

The companies included in the consolidated financial statements and all shareholdings in accordance with section 313(2) HGB are listed in the list of shareholdings under note (42) of the notes to the consolidated financial statements.

(7) Acquisitions

Acquisition of shares in Zeppelin Mobile Systeme – On November 18, 2021, Rheinmetall acquired 100% of the shares in Zeppelin Mobile Systeme GmbH (ZMS) at a purchase price of €3 million. The company specializing in container and shelter solutions for use in crisis zones will be integrated into Rheinmetall Project Solutions GmbH, in which the Group's resources and capabilities for supplying services for armed forces and security services are bundled. The acquisition is a strategically important addition to Rheinmetall's existing portfolio in order to further expand the activities in this key international market.

Allocation of assets and liabilities

€ million	Fair Values
Goodwill	3
Other non-current assets	7
Inventories	11
Receivables	1
Other current assets	2
Cash and cash equivalents	3
Total assets	**27**
Provisions for pensions and similar obligations	3
Non-current liabilities	7
Current liabiliteis	14
Total liabilities	**24**
Purchase price	**3**

The goodwill of €3 million resulting from the acquisition primarily reflects the company's specific know-how, especially in medical technology, and the strategically important positioning in this growing market. The goodwill is not tax-deductible.

Between the acquisition date and the end of the reporting period, ZMS contributed sales of €10 million and EBIT of €1 million to the consolidated result.

Agreed transaction with EMT – With effect from January 1, 2022, Rheinmetall is taking over the activities of unmanned aerial vehicle maker EMT Ingenieurgesellschaft Dipl.-Ing. Hartmut Euer mbH (EMT). The two sides signed the agreement on the asset deal on November 18, 2021.

EMT's activities include developing, producing and maintaining unarmed, tactical aviation systems for reconnaissance missions. The acquisition is the result of Rheinmetall's digitalization strategy and its associated goal of expanding its portfolio of systems and equipment to meet the complete needs of its military customers. EMT's activities will henceforth form part of the Electronic Solutions division at Rheinmetall Technical Publications GmbH. In addition, EMT's existing land and buildings will be taken over by the newly founded Rheinmetall Immobilien VEGA GmbH & Co. KG, which is allocated to the Group's other activities.

(8) Discontinued operations

As part of the realignment of the Rheinmetall Group, the Executive Board decided to sell the Pistons business unit, classified as a non-core business. Since May 1, 2021, the business unit – which primarily comprises the small- and large-bore pistons business of the former Hardparts division – has been classified as held for sale and recognized in the consolidated financial statements as a discontinued operation.

Taking the effects of the market environment on the ongoing sale process into account, impairment on the net carrying amount of the discontinued operations of €110 million after taxes was recognized as of June 30, 2021. In addition to an impairment loss on non-current assets of €91 million, deferred tax assets were written down by €19 million. The write-downs had no other effects on income taxes. The impairments are recognized in full in earnings from discontinued operations. The net carrying amount of discontinued operations as of December 31, 2021, was €88 million.

Key information on discontinued operations is summarized in the following tables:

Key information on discontinued operations (income statement)

€ million	2021	2020
Revenues	563	490
Expenses	(646)	(800)
Earnings from discontinued operations before taxes	**(83)**	**(310)**
Income taxes	(18)	27
Earnings from discontinued operations after taxes	**(100)**	**(283)**
Of which:		
Non-controlling interests	-	-
Rheinmetall AG shareholders	*(100)*	*(283)*

The earnings of the previous year were particularly influenced by the impairment of €300 million recognized in the second quarter of 2020 due to the significantly reduced growth forecasts in the automotive sector. This impairment related almost exclusively to the former Hardparts division.

Key information on discontinued operations (statement of financial position)

€ million	12/31/2021
Property, plant and equipment and right-of-use assets	71
Investments accounted for using the equity method	48
Other non-current assets	10
Non-current assets	**129**
Inventories	88
Trade receivables	77
Other current assets	40
Current assets	**205**
Provisions	109
Other non-current liabilities	17
Non-current liabilities	**126**
Provisions	23
Trade liabilities	57
Other current liabilities	40
Current liabilities	**120**

The cumulative losses recognized in other comprehensive income amounted to €137 million as of December 31, 2021 (previous year: €148 million).

Notes to the statement of financial position

(9) Goodwill, other intangible assets

Cost

€ million	Goodwill	Development costs	Sundry other intangible assets	Total
As of 1/1/ 2020	**567**	**298**	**421**	**1,286**
Additions	-	45	12	56
Disposals	-	(7)	(4)	(10)
Book transfers	-	(4)	2	(2)
Adjustment in scope of consolidation	-	-	(1)	(1)
Currency differences	(4)	(1)	(7)	(12)
As of 12/31/2020 and 1/1/ 2021	**562**	**332**	**424**	**1,318**
Additions	-	77	13	89
Disposals	-	(17)	(20)	(38)
Book transfers	-	-	3	3
Book transfers (IFRS 5)	(83)	-	(13)	(96)
Adjustment in scope of consolidation	3	-	-	3
Currency differences	2	3	7	12
As of 12/31/2021	**484**	**393**	**414**	**1,292**

Amortization and depreciation/impairment

€ million		Goodwill	Development costs	Sundry other intangible assets	Total
As of 1/1/ 2020		**-**	**175**	**312**	**487**
Current period		88	21	28	137
Reversals		-	(5)	-	(5)
Disposals		-	(7)	(4)	(11)
Currency differences		(1)	(1)	(5)	(7)
As of 12/31/ 2020 and 01/01/ 2021		**86**	**185**	**331**	**602**
Current period	(28)	-	24	24	48
Disposals		-	(17)	(19)	(37)
Book transfers (IFRS 5)		(83)	-	(12)	(96)
Currency differences		-	2	5	7
As of 12/31/ 2021		**3**	**193**	**328**	**524**
Carrying amount as of Dec. 31, 2020		476	147	93	716
Carrying amount as of Dec. 31, 2021		**481**	**201**	**86**	**767**

Goodwill is managed at the level of the five divisions of the Rheinmetall Group and tested for impairment at least once a year.

As part of the realignment of the Group, the Executive Board decided to sell the Pistons business unit, classified as a non-core business. The Pistons business unit primarily comprises the small- and large-bore pistons business of the former Hardparts division and has been classified as a discontinued operation since May 1, 2021, taking account of the provisions of IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations). Goodwill of €88 million at the former Hardparts division was already written off in full in the first half of 2020, of which €83 million is assigned to discontinued operations.

Goodwill recognized for continuing operations was tested for impairment as of December 31, 2021. No impairment loss was required. The impairment test uses the fair value less costs to sell of the cash generating units, which is calculated using the discounted cash flow method based on a three-year detailed planning period. In the Rheinmetall Group, the corporate plan is prepared on the basis of empirical and current forecast data. These underlying assumptions include intra-Group estimates as well as external sources of information. In security technology, planning is predicated on projects already included in its order backlog, on customer inquiries and, most importantly, on national defence budgets of relevant customers. Key planning assumptions in the area of the automotive industry are based on the sector forecasts underlying sales plans and covering the worldwide automotive market trend, the planned engine programs of carmakers, specific customer commitments to individual projects and adjustments specific to Automotive to allow for planned product innovations and cost savings. For periods after the detailed planning phase, cash flows are extrapolated from the last planning period, taking into account growth rates based on long-term business expectations, which are guided by the long-term inflation forecast. The measurement of fair value less costs to sell is therefore primarily based on unobservable inputs and allocated to level 3 of the fair value hierarchy.

The discount rates used and the carrying amounts of the goodwill of the five divisions are shown below.

Carrying amounts and discount rates

€ million	12/31/2021			12/31/2020		
	Carrying amount	WACC before taxes	WACC after taxes	Carrying amount	WACC before taxes	WACC after taxes
Vehicle Systems	98	9.8%	7.2%	97	9.5 %	6.9 %
Weapon and Ammunition	181	10.0%	7.3%	179	9.4%	6.9%
Electronic Solutions	120	10.1%	7.4%	118	9.8%	7.2%
Sensors and Actuators	67	10.2%	7.5%	67	9.7%	7.3%
Materials and Trade	15	10.7%	7.9%	15	11.2%	8.3%

For the period after the last planning year, an unchanged growth rate of 1.0% (previous year: also 1.0 %) was deducted from the risk-specific pretax discount rate.

In addition to the impairment test, each cash-generating unit was subjected to sensitivity analyses. These analyses assumed scenarios based firstly on a 0.5 percentage point higher discount rate after taxes and secondly a 0.5 percentage point lower growth rate. For further sensitivity, the cash flows used to calculate the terminal value were reduced by a flat rate of 10%. None of the sensitivity analyses would have resulted in an impairment of the recognized goodwill.

In addition to capitalized development costs of €77 million (previous year: €45 million), €206 million was recognized as expenses for research and development costs of continuing operations in 2021 (previous year: €231 million).

(10) Right-of-use assets

The capitalized right-of-use assets from leases primarily relate to rented office and production space at various locations in Germany and abroad. The rental agreements for property usually include options for renewals and index-based rent price adjustment clauses.

Cost

€ million	Property – land	Property – buildings	Passenger cars	Other right-of-use assets	Total
As of 1/1/2020	**22**	**220**	**24**	**14**	**281**
Additions	11	56	8	4	80
Disposals	-	(3)	(3)	(3)	(10)
Book transfers	-	1	-	-	1
Currency differences	-	(2)	-	-	(3)
As of 12/31/2020 and 1/1/2021	**33**	**271**	**28**	**15**	**349**
Additions	-	17	5	1	23
Disposals	-	(5)	(4)	-	(9)
Book transfers (IFRS 5)	(1)	(10)	(2)	(2)	(16)
Currency differences	1	3	-	-	4
As of 12/31/2021	**33**	**276**	**28**	**14**	**351**

Amortization and depreciation/impairment

€ million		Property – land	Property – buildings	Passenger cars	Other rightof-use assets	Total
As of 1/1/2020		**2**	**58**	**13**	**5**	**77**
Current period		1	35	7	4	47
Disposals		-	(1)	(3)	(2)	(7)
Currency differences		-	(1)	-	-	(2)
As of 12/31/2020 and 1/1/2021		**3**	**90**	**17**	**6**	**116**
Current period	(28)	1	29	6	2	38
Disposals		-	(1)	(3)	-	(5)
Book transfers (IFRS 5)		-	(10)	(2)	(2)	(14)
Currency differences		-	1	-	-	1
As of 12/31/2021		**3**	**109**	**19**	**6**	**137**
Carrying amount as of Dec. 31, 2020		31	181	11	9	233
Carrying amount as of Dec. 31, 2021		**30**	**167**	**9**	**8**	**214**

Expenses and payments in connection with leases were incurred as follows (previous year's figures include discontinued operations):

Leases - expenses and payments

€ million	2021	2020
Expenses from short-term leases	3	5
Expenses for low-value leased assets	4	4
Interest expenses from lease liabilities	6	7
Repayment of lease liabilities	41	39
Total lease payments	**54**	**55**

As of the end of the reporting period, nominal future lease payments amounted to €246 million (previous year: €279 million). On the recognition of lease liabilities of €220 million (previous year: €249 million), interest rates of appropriate terms and currencies were used to calculate the present values. Lease liabilities have the following maturity structure:

Maturity structure of lease liabilities

€ million	12/31/2021				12/31/2020			
	2022	2023 -2026	from 2027	Total	2021	2022 -2025	from 2026	Total
Right-of-use asset – property (land)	1	3	18	22	1	4	25	30
Right-of-use asset – property (buildings)	31	91	59	180	32	111	53	197
Right-of-use asset – cars	5	4	-	9	6	6	-	12
Right-of-use asset – others	2	4	1	8	2	6	2	10
	39	**102**	**79**	**220**	**42**	**126**	**80**	**249**

(11) Property, plant and equipment

Cost

€ million	Land, land rights, and buildings	Production plant and machinery	Other plant, factory and office equipment	Prepayments made and construction in progress	Total
As of 1/1/2020	**1,093**	**2,243**	**737**	**201**	**4,273**
Additions	12	42	38	89	182
Disposals	-	(22)	(17)	(9)	(48)
Book transfers	4	61	26	(88)	3
Adjustments in scope of consolidation	-	-	-	-	1
Currency differences	(15)	(66)	(14)	(9)	(103)
As of 12/31/2020 and 1/1/2021	**1,093**	**2,259**	**770**	**184**	**4,306**
Additions	13	34	40	69	156
Disposals	(5)	(35)	(38)	(1)	(78)
Book transfers	32	35	7	(71)	3
Book transfers (IFRS 5)	(71)	(576)	(70)	(37)	(754)
Currency differences	21	30	8	4	62
As of 12/31/2021	**1,085**	**1,746**	**717**	**148**	**3,695**

Amortization and depreciation/impairment

€ million		Land, land rights, and buildings	Production plant and machinery	Other plant, factory and office equipment	Prepayments made and construction in progress	Total
As of 1/1/2020		**644**	**1,723**	**539**	**6**	**2,911**
Current period		45	232	83	12	372
Disposals		-	(21)	(17)	(5)	(43)
Book transfers		-	(1)	-	1	-
Currency differences		(7)	(49)	(10)	-	(66)
As of 12/31/2020 and 1/1/2021		**682**	**1,885**	**595**	**13**	**3,174**
Current period	(28)	20	80	60	4	163
Reversal		-	-	-	(1)	(1)
Disposals		(4)	(35)	(37)	-	(75)
Book transfers		2	4	(5)	-	1
Book transfers (IFRS 5)		(57)	(537)	(68)	(3)	(666)
Currency differences		15	23	5	-	43
As of 12/31/2021		**657**	**1,420**	**550**	**13**	**2,640**
Carrying amount as of Dec. 31, 2020		411	374	175	172	1,132
Carrying amount as of Dec. 31, 2021		**428**	**326**	**167**	**135**	**1,056**

(12) Investment property

Development of investment property

€ million		2021	2020
Cost			
As of Jan. 1		**52**	**54**
Book transfers		(9)	(2)
As of Dec. 31		**43**	**52**
Amortization and depreciation/impairment			
As of Jan. 1		**14**	**12**
Current period	(28)	1	1
Book transfers		(1)	-
As of Dec. 31		**13**	**14**
Carrying amount as of Dec. 31		**30**	**39**

The carrying amount of the investment properties as of December 31, 2021, was €30 million. In fiscal 2021, parts of buildings at the site in Düsseldorf with a carrying amount of €8 million were reclassified to property, plant and equipment as the premises are to be used by companies of the Rheinmetall Group in the future. Investment property has a fair value of €44 million (previous year: €70 million). The fair value is calculated on the basis of generally accepted measurement methods using multiples. The methods used come under level 3 of the measurement hierarchy in IFRS 13.

(13) Investments accounted for using the equity method

Due to the strategic realignment of the Group and the classification of Pistons as a discontinued operation, the presentation of the major investments accounted for using the equity method has changed. The previous year's figures have been restated accordingly. The major investments accounted for using the equity method still include the Shanghai-based joint ventures HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd. and Pierburg Huayu Pump Technology Co., Ltd. The objective of these two joint ventures is to strengthen the position on the Chinese market for pumps in the context of automotive applications and other engine parts. The joint venture KOLBENHÖFE GmbH & Co. KG, based in Hamburg, is operated for the purpose of developing and constructing as well as marketing and selling land and buildings. As a major associate, AIM Infrarot-Module GmbH, based in Heilbronn, develops, manufactures and sells infrared detectors and thermal sights.

Development of the major investments accounted for using the equity method

	HASCO KSPG Nonferrous Components		Pierburg Huayu Pump Technology		KOLBENHÖFE		AIM Infrarot-Module	
€ million	2021	2020	2021	2020	2021	2020	2021	2020
Net assets Jan. 1	**224**	**220**	**38**	**33**	**19**	**19**	**13**	**11**
Total comprehensive income	28	24	13	5	5	-	1	4
Earnings after taxes	4	30	8	6	5	-	4	4
Other comprehensive income	24	(6)	5	(1)	-	-	(3)	1
Capital increase	-	-	-	-	15	-	-	-
Dividend	38	20	-	-	-	-	3	3
Net assets Dec. 31	**214**	**224**	**50**	**38**	**39**	**19**	**11**	**13**
Investment in %	50	50	50	50	50	50	50	50
Carrying amount of investment Dec. 31	107	112	25	19	1	-	21	22
Dividend received	19	10	-	-	-	-	2	1

Financial information on the major investments accounted for using the equity method (100% basis)

	HASCO KSPG Nonferrous Components		Pierburg Huayu Pump Technology		KOLBENHÖFE		AIM Infrarot-Module	
€ million	2021	2020	2021	2020	2021	2020	2021	2020
Summarized financial statement of financial position (Dec. 31)								
Cash and cash equivalents	53	58	15	15	9	1	19	17
Other current assets	286	243	74	72	150	152	21	23
Total current assets	**340**	**301**	**89**	**87**	**160**	**153**	**40**	**40**
Non-current assets	**312**	**306**	**63**	**61**	**-**	**-**	**11**	**9**
Financial liabilities	118	90	34	46	-	-	-	-
Other current liabilities	242	228	57	55	10	2	11	12
Total current liabilities	**360**	**318**	**91**	**101**	**10**	**2**	**11**	**12**
Financial liabilities	72	62	5	5	110	-	-	-
Other non-current liabilities	6	4	5	4	1	132	28	24
Total non-current liabilities	**77**	**65**	**11**	**9**	**111**	**132**	**28**	**24**
Income statement information								
Sales	630	608	153	166	57	1	70	66
Amortization and depreciation	48	45	13	11	-	-	1	1
EBIT	12	47	10	10	7	-	6	5
Net interest	(7)	(7)	(2)	(2)	(1)	-	-	-
Income taxes	(1)	(10)	(1)	(2)	(1)	-	(2)	(2)
Earnings after taxes	4	30	8	6	5	-	4	4

The following table shows the financial information for the investments accounted for using the equity method that, considered individually, are immaterial for the Rheinmetall consolidated financial statements. The amounts given all relate to the share held by Rheinmetall:

Financial information of the immaterial investments accounted for using the equity method

	2021		2020	
€ million	Joint ventures	Associated companies	Joint ventures	Associated companies
Carrying amount of shares	37	10	36	11
Earnings after taxes	6	(5)	5	2
Other comprehensive income	1	4	(1)	-
Total comprehensive income	7	(2)	4	2

(14) Inventories

Classification of inventories

€ million	12/31/2021	12/31/2020
Raw materials and supplies	597	512
Work in process	687	712
Finished products	162	143
Merchandise	133	104
Prepayments made	71	101
	1,651	**1,573**

Additions to write-downs totaled €17 million (previous year: €13 million).

(15) Other assets

Classification of other assets

€ million	12/31/2021	Of which current	Of which non-current	12/31/2020	Of which current	Of which non-current
Derivatives	41	31	10	47	34	13
Receivables from contracts with customers	12	12	-	12	12	-
Receivables from finance leases	30	17	13	14	1	14
Bonds	3	-	3	4	-	4
Other	46	17	29	18	16	2
Financial assets	**131**	**76**	**55**	**94**	**62**	**32**
Other taxes	59	49	10	64	50	15
Contract acquisition costs	101	-	101	101	-	101
Contract costs	6	-	6	3	-	3
Subsidies/grants receivable	24	15	9	32	21	11
Deferred income	43	33	10	32	27	5
Pension reimbursement claim	34	-	34	88	-	88
Net definded benefit from plan assets	102	-	102	-	-	-
Reimbursement claims from insurances	12	12	-	12	12	-
Other	37	28	10	36	20	16
Non-financial assets	**419**	**137**	**282**	**369**	**129**	**240**
Other assets	**551**	**213**	**337**	**464**	**192**	**272**

The finance lease receivables result from the leasing of properties to the joint venture KS HUAYU and a customer contract. The following table provides information on the minimum lease payments in relation to the leases:

Finance lease receivables

€ million	12/31/2021			12/31/2020		
	2022	2023 - 2026	from 2027	2021	2022 - 2025	from 2026
Minimum lease payments	17	5	12	1	5	14
Present value of minimum lease payments	17	4	9	1	4	10

The unearned financial income amounted to €4 million as of December 31, 2021 (previous year: €6 million).

The increase in other non-current financial assets includes the granting of a loan to a joint venture and the acquisition of a financial investment.

The contract acquisition costs are described in note (23) “Sales”.

The subsidies/grants receivable essentially relate to grants paid by public administrative bodies to subsidize the in-house development of new technologies.

Prepaid expenses particularly include advance payments for insurance and other services.

The claim to reimbursement for pensions and the net asset from plan assets are explained under note (19) “Provisions for Pensions and Other Post-Employment Benefits.”

(16) Securities held for trade

Due to Rheinmetall AG's good liquidity situation, funds have been invested in a Rheinmetall special fund since the third quarter of 2021 (strategic liquidity reserve). The invested funds are available for Rheinmetall to pay out at short notice at any time.

(17) Cash and cash equivalents

Classification of cash and cash equivalents

€ million	12/31/2021	12/31/2020
Bank balances in credit institutions, checks, cash in hand	1,039	870
Short term investments (up to 3 months to maturity)	-	157
	1,039	**1,027**

(18) Equity

Subscribed capital – The subscribed capital of Rheinmetall AG is unchanged at €111,510,656 and is divided into 43,558,850 no-par value shares (shares with no nominal value). The notional value per share is €2.56.

Authorized capital – By way of resolution of the Annual General Meeting on May 11, 2021, the Executive Board was authorized, with the approval of the Supervisory Board, to increase the company's share capital in the period to May 10, 2026, by issuing, once or several times, new no-par bearer shares in return for contributions in cash and/or in kind up to a maximum total of €22,302,080. As a rule, shareholders have pre-emption rights. The Executive Board is authorized, with the approval of the Supervisory Board, to disapply the shareholders' pre-emption rights (i) in order to exclude fractional amounts from the pre-emption rights, (ii) in order to grant holders or creditors of options and/or conversion rights a conversion or pre-emption right to new shares, (iii) in the event of a capital increase against cash contributions if the amount of the share capital attributable to the new shares does not exceed 10% of the share capital and the issue price is not significantly lower than the stock market price in accordance with sections 203(1) and (2), 186(3) sentence 4 AktG, (iv) in order to issue employee shares and (v) for the purpose of acquiring companies, parts of companies or investments.

Contingent capital – By way of resolution of the Annual General Meeting on May 11, 2021, the Executive Board was authorized to issue convertible bonds, bonds with warrants or income bonds, participation rights or combinations of these instruments (together referred to as "bonds") with or without a term limit, once or several times, with a total nominal value of up to €1,045,410,000 in the period to May 10, 2026. By way of resolution of the Annual General Meeting on May 11, 2021, the Executive Board was also authorized, with the approval of the Supervisory Board, to increase the company's share capital in the period to May 10, 2026, by issuing, once or several times, new no-par bearer shares in return for contributions in cash and/or in kind up to a maximum total of €22,302,080. To service the above authorization, the company's share capital was contingently increased by up to €22,302,080 by the issue of up to 8,711,750 new no-par bearer shares by way of resolution of the Annual General Meeting on May 11, 2021. The Executive Board is authorized, with the approval of the Supervisory Board, to determine the further details for the implementation of the contingent capital increase.

As a rule, shareholders have pre-emption rights to the bonds. The Executive Board is authorized, with the approval of the Supervisory Board, to disapply the pre-emption rights (i) in order to exclude fractional amounts from the pre-emption rights, (ii) in order to grant holders or creditors of options and/or conversion rights a pre-emption right, (iii) if bonds are issued as consideration especially for the purpose of acquiring companies, parts of companies or investments and (iv) if the bonds are issued against cash payment and the Executive Board believes that the issue price of the bond is not significantly lower than its theoretical market value calculated using recognized, especially actuarial methods. Bonds may only be issued with pre-emption rights disapplied if the shares issued to service the resulting conversion rights and/or options or conversion and/or option obligations do not exceed 10% of the share capital in total, neither at the date of the resolution by the Annual General Meeting on this authorization, nor at the effective date, nor at the date this authorization is exercised. This 10% limit includes the pro rata amount of the share capital attributable to shares that (i) are disposed of or used during the term of this authorization until the respective resolution on the issue of the bond without pre-emption rights as treasury shares on the basis of an authorization of the Annual General Meeting in accordance with section 71(1) no. 8 AktG with pre-emption rights disapplied, (ii) are issued from authorized capital with pre-emption rights disapplied during the term of this authorization until the respective resolution on the issue of the bond without pre-emption rights and (iii) were issued or can still be issued to service conversion rights and/or options, provided the underlying bonds are issued during the term of this authorization.

Retained earnings – The retained earnings include earnings generated by the Rheinmetall Group in the past less profit distributed.

Effects from the currency translation of subsidiaries' financial statements not prepared in euro, from the remeasurement of pension plans recognized in other comprehensive income, from the measurement of derivatives in the cash flow hedge and other comprehensive income from investments accounted for using the equity method (other income) are also reported here.

Treasury shares – By way of resolution of the Annual General Meeting on May 11, 2021, the Executive Board of the company is authorized to acquire treasury shares of the company equivalent to a maximum of 10% of the share capital up to May 10, 2026. The decisive figure for the company's share capital here is the lowest level either when the Annual General Meeting adopted the resolution on this authorization, when this authorization took effect or when this authorization was exercised. At the discretion of the Executive Board, the shares are acquired (i) via the stock exchange, (ii) by way of a public bid directed at all shareholders, (iii) by way of a public invitation to submit offers for sale or (iv) by granting put options. In the event of acquisition via the stock exchange, the purchase price per share (not including ancillary acquisition costs) must not be more than 10% higher or lower than the average closing price of the no-par shares in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the three preceding trading days. In the event of a public bid, the purchase price offered and paid (not including ancillary acquisition costs) must not be more than 10% higher or 20% lower than the average closing price of the no-par shares in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the three preceding trading days prior to publication of the purchase bid. In the event of a public invitation to submit offers for sale or acquisition by granting put options, the equivalent value paid by the company per share (not including ancillary acquisition costs) must not be more than 10% higher or 20% lower than the average closing price of the no-par shares in Xetra trading (or a comparable successor system) on the Frankfurt Stock Exchange on the three preceding trading days prior to the day the offers for sale are accepted or the day of the Executive Board's final decision on the granting of put options.

The Executive Board is authorized to use the treasury shares acquired on the basis of this authorization or earlier authorizations for any legally permissible purpose, especially as follows:

(i) The shares can be sold via the stock exchange or with the approval of the Supervisory Board via a public offer to all shareholders in proportion with their shareholding.

(ii) The treasury shares can also be sold with the approval of the Supervisory Board through channels other than the stock exchange or by offering them to all shareholders, provided they are sold against cash payment and at a price that is not significantly lower than the stock market price of company shares with the same terms at the time of the sale (simplified disapplication of pre-emption rights in accordance with section 186(3) sentence 4 AktG).

(iii) The treasury shares can with the approval of the Supervisory Board be transferred to third parties against contributions in kind, especially as (partial) consideration for the indirect or direct acquisition of companies, parts of companies or investments in companies or in connection with business combinations and the acquisition of other assets including rights and receivables.

(iv) The treasury shares can be used to fulfill options and/or conversion rights, option and/or conversion obligations or a share delivery right of the company from bonds with warrants and/or convertible bonds and/or participation rights, which the company or one of its Group companies within the meaning of section 18 AktG issues or has issued on the basis of an authorization by the Annual General Meeting.

(v) The treasury shares can with the approval of the Supervisory Board be used to the benefit of people who are or were in an employment contract with the company or one of its Group companies within the meaning of section 18 AktG, as well as to the benefit of board members of corresponding Group companies, whereby the employment contract, other employment relationship or board membership must be in place at the time of the offer or commitment. The further details of any commitments and transfers, including any direct consideration, any claim requirements, holding or lock-up periods and expiry or compensation rules, especially for special cases such as retirement, disability or death, are defined by the Executive Board.

(vi) The treasury shares can be canceled without an additional Annual General Meeting resolution. As a rule, the cancellation results in a capital reduction. In deviation from this, the Executive Board can determine that the share capital remains unchanged and the cancellation instead increases the share of the remaining shares in the share capital in accordance with section 8(3) AktG. In this case, the Executive Board is authorized to amend the number of shares stated in the articles of association.

As in the previous year, no treasury shares were acquired in the reporting year. Disposals related to the long-term incentive program which is described under note (36) “Share programs”. Sales proceeds from the disposals are used for general financing purposes. As of December 31, 2021, the portfolio of treasury shares amounted to 255,201 shares (previous year: 361,392 shares) with acquisition costs of €9 million (previous year: €13 million). The amount of subscribed capital attributable to treasury shares totaled €653 thousand (previous year: €925 thousand). This represents a share in subscribed capital of 0.6% (previous year: 0.8%).

Other comprehensive income

€ million	2021			2020		
	Gross amount	Tax effect	Net amount	Gross amount	Tax effect	Net amount
Remeasurement of net defined benefit liability from pensions	291	(60)	231	(50)	16	(34)
Other comprehensive income from investments accounted for using the equity method	(2)	-	(2)	-	-	-
Amounts not reclassified to the income statement	**290**	**(60)**	**229**	**(50)**	**16**	**(34)**
Change in value of derivatives (Cash flow hedges)	13	(2)	11	(1)	(2)	(4)
Currency translation difference	63	-	63	(73)	-	(73)
Other comprehensive income from investments accounted for using the equity method	22	-	22	(10)	-	(10)
Amounts reclassified to the income statement	**98**	**(2)**	**96**	**(85)**	**(2)**	**(87)**
Other comprehensive income	**388**	**(63)**	**325**	**(135)**	**14**	**(120)**

In fiscal 2021, Rheinmetall AG paid a dividend of €87 million or €2.00 per share (previous year: €104 million or €2.40 per share) to its shareholders from current earnings.

Significant non-controlling interests – Significant non-controlling interests of other shareholders in the subgroup of Rheinmetall MAN Military Vehicles GmbH, Munich. Here other shareholders hold an interest of 49%. The Group's financial information is shown below.

Significant non-controlling interests

€ million	2021	2020
Non-controlling interests included in equity (Dec. 31)	87	56
Assets (Dec. 31)	565	523
Of which non-current	133	118
Of which inventories	230	198
Liabilities (Dec. 31)	370	409
Of which non-current	81	84
Sales	767	761
Earnings after taxes	59	50
Of which from minority interests	31	25
Total comprehensive income	60	49
Of which from minority interests	30	24
Cash flows from operating activities	136	106

Non-controlling interests in earnings after taxes – The table below shows the earnings after taxes attributable to shareholders that hold non-controlling interests in Group companies.

Earning after taxes of non-controlling interests

€ million	Non-controlling interests	2021	2020
Subgroup of Rheinmetall MAN Military Vehicles GmbH	49%	31	25
Rheinmetall Denel Munition Pty. Ltd.	49%	1	(1)
Nitrochemie Aschau GmbH	45%	4	4
Rheinmetall BAE Systems Land Ltd.	45%	3	1
Nitrochemie Wimmis AG	45%	3	2
Other		(1)	(4)
		41	27

Capital management – Capital management is geared towards sustainably increasing enterprise value, securing sufficient liquidity and preserving the Rheinmetall Group's credit standing. The Group manages and monitors its capital structure in order to achieve its business targets regarding operations, necessary capital expenditure and strategic acquisitions and to optimize capital costs. Debt management pursues a diversified financing strategy to guarantee continual access to liquid funds both via money and capital markets and via bank financing.

The key figures for capital management in the Rheinmetall Group are net financial debts or net liquidity and the equity ratio. The debt repayment period is also disclosed, which is calculated as the ratio of financial debts to EBITDA.

Key figures of capital management

€ million	12/31/2021	12/31/2020
Cash and cash equivalents	1,039	1,027
Financial liabilities	921	1,023
Net financial debt (-)/Net liquidity (+)	118	4
Equity	2,620	2,053
Equity ratio	33.9%	28.2%
Leverage (in years)	1.1	1.5

Further information on the financing strategy and on the asset and capital structure is contained in the combined management report.

(19) Provisions for pensions and similar obligations

Rheinmetall's company pension systems consist of both defined contribution and defined benefit plans.

Defined contribution plans – Under defined contribution plans, the relevant company pays contributions to earmarked pension institutions, which are reported in personnel expenses. The company does not enter into any further obligations; a provision is not recognized.

In continuing operations, personnel expenses of €79 million (previous year: €70 million) were incurred in the year under review for defined contribution pension commitments, which mainly relate to payments to statutory pension institutions in Germany.

Defined benefit plans – Under its defined benefit plans, Rheinmetall is required to meet confirmed benefit obligations to active and former employees. Provisions are recognized for obligations under vested rights and current pensions payable to eligible active and former employees, retirees and surviving dependents, taking into account any plan assets. There are material pension plans at the Rheinmetall Group's German and Swiss companies and at Rheinmetall BAE Systems Land Ltd. in the United Kingdom.

Rheinmetall has implemented a Group-wide defined benefit plan for its subsidiaries based in Germany, which consists of three elements: a basic plan and a corporate performance-related intermediate plan, each of which are financed by the employer, and a supplementary plan financed through deferred compensation. The agreed retirement benefits comprise old-age pensions, invalidity pensions and pensions for surviving dependents. The annual pension contribution or the amount of deferred compensation for each beneficiary in accordance with actuarial principles is converted into a capital component. The total pension capital when benefits become due is based on the sum of all capital components. In the case of the basic plan and intermediate plan, pension capital is paid out in the form of a life-long pension that increases annually in accordance with an agreement. In the case of the supplementary plan financed solely by the employee, the pension capital is paid out as a lump sum when benefits become due.

Other pension plans exist in Germany, but these are no longer available to new employees joining the Group. The agreed retirement benefits comprise old-age pensions, invalidity pensions and pensions for surviving dependents. Depending on the plan, these are based on agreed fixed amounts per year of service or on a percentage of the employee's final salary before leaving the Rheinmetall Group. Ongoing retirement benefits are subject to compensation for inflation.

The pension obligations of the German companies are largely financed internally. Rheinmetall has set up a contractual trust agreement (CTA) with the aim of spreading the financing of its pension and partial retirement obligations across several pillars over the long term. For continuing operations, a total of €190 million has been paid into a fund managed by a trustee since 2016, of which €175 million was allocated to pension obligations and €15 million to partial retirement obligations. Pension payments to the beneficiaries are made by the respective Group companies.

There are pension plans at the Swiss subsidiaries, each of which is managed via pension funds for several companies (multi-employer plans). These are defined benefit plans used to cover pensions and risks arising from invalidity and death for former employees, their relatives and surviving dependents. On retirement, the pension is based on the available retirement assets multiplied by conversion rates determined by pension fund regulations, whereby payment can take place monthly or in certain cases as a lump sum. Pension plans are financed by contributions made by the employer and employee, primarily at a rate of 50% each, which are paid into pension funds. The pension funds are independent foundations that do not belong to the Rheinmetall Group, whose funds are due solely to pension beneficiaries. Any return of assets and income to the contributing companies is excluded. The top bodies in the foundations comprise equal numbers of employer and employee representatives of the relevant companies. The foundations are responsible for investments. Principles of security, risk distribution, yield and liquidity must be observed in this process in order to be able to render the agreed benefits from the foundation's assets when due. Both contributions paid into the pension funds and future benefits arising from these are reviewed regularly by the foundation's bodies and may be changed after taking into account the foundation's financial options. In the event of a shortage of cover, the pension funds can levy remedial contributions from all associated employers if other measures do not lead to the desired result. Liability of the Swiss subsidiaries towards the companies belonging to the pension funds is excluded. At one Swiss subsidiary, benefits from the pension fund provided for in accordance with the pension plan are also covered by an insurance policy.

The acquisition of the shares in Rheinmetall BAE Systems Land Ltd. requires Rheinmetall to make payments to the BAE Group's pension fund for the entitlements earned by the acquired employees. It is not possible to withdraw from the pension fund. For the recognized pension obligations of Rheinmetall BAE Systems Land Ltd. that are not covered by plan assets, Rheinmetall has a claim to reimbursement from the BAE Group in the same amount (see note (15)), which compensates for the remeasurement of the net defined benefit liability from pensions. In addition, the BAE Group is obliged to make the ongoing pension payments to retirees. Excess or deficient cover of the pension fund and its performance are therefore neutral in terms of earnings and risk. By acquiring the shares, Rheinmetall took on full joint liability for the BAE Group's pension agreements. The occurrence of a liability claim is considered to be highly unlikely.

The present value of the DBO, plan assets and the net liability for defined benefit obligations developed as follows:

Present value, plan assets and net liability for defined benefit obligations

€ million	2021			2020		
	Present value of DBO	Plan assets	Net liability for defined benefit obligations	Present value of DBO	Plan assets	Net liability for defined benefit obligations
As of Jan. 1	**2,949**	**(1,772)**	**1,177**	**2,877**	**(1,708)**	**1,169**
Current service cost	39	-	39	42	-	42
Past service cost	-	-	-	-	-	-
Interest cost	12	-	12	22	-	22
Interest income	-	(7)	(7)	-	(11)	(11)
Settlement	-	-	-	-	-	-
Entry benefits/leaving benefits	-	-	-	-	-	-
Amounts recognized in the income statement	**51**	**(7)**	**44**	**64**	**(11)**	**53**
Income from plan assets (excluding interest income)	-	(168)	(168)	-	(96)	(96)
Actuarial gains (-) and losses (+)						
Change in financial assumptions	(114)	-	(114)	137	-	137
Change in demographic assumptions	(62)	-	(62)	9	-	9
Empirical adjustments	(8)	-	(8)	7	-	7
Other comprehensive income from remeasurement of net defined benefit	**(184)**	**(168)**	**(352)**	**153**	**(96)**	**57**
Employer contributions	-	(51)	(51)	-	(57)	(57)
Employee contributions	11	(9)	1	10	(9)	1
Pension payments	(122)	82	(40)	(130)	89	(42)
Adjustment in scope of consolidation	3	-	3	-	-	-
Book transfers (IFRS 5)	(113)	-	(113)	-	-	-
Currency differences/Other	79	(78)	1	-24	20	(4)
As of Dec. 31	**2,674**	**(2,004)**	**670**	**2,949**	**(1,772)**	**1,177**
Of which Switzerland	1,150	(1,247)	(97)	1,222	(1,114)	109
Of which Germany	918	(224)	693	1,108	(173)	935
Of which United Kingdom	539	(505)	34	537	(449)	88
Of which others	67	(27)	40	82	(37)	45

At €60 million, the changes in demographic assumptions relating to actuarial gains and losses arose almost exclusively at the companies in Switzerland. This resulted primarily from the use of the new BVG 2020 generation table.

At the Swiss companies, the value of the plan assets exceeds the present value of the DBO. The resulting net asset from plan assets is recognized on the asset side under other non-current non-financial receivables (see note (15)). An asset ceiling is not applied, as the future economic benefit is higher than the surplus assets.

Balance sheet reporting of the net liability of the defined benefit obligation

€ million	12/31/2021	12/31/2020
Net liability for defined benefit obligations	670	1,177
Net defined benefit from plan assets	102	-
Provisions for pensions	**773**	**1,177**

The service cost and the balance of entry/leaving benefits are reported under personnel expenses.

The interest expense and interest income from pensions are netted in net interest income.

Employers and employees made total payments of €57 million to plan assets (previous year: €66 million). €35 million (previous year: €40 million) of this relates to the allocation to CTA assets for pension obligations in Germany.

Key pension plans – The statements below refer to the pension plans of Group companies based in Germany, Switzerland, and in the United Kingdom.

The pension plans of continuing operations relate to the following beneficiaries:

Beneficiaries

Number of people	12/31/2021		12/31/2020	
	Germany	Switzerland	Germany	Switzerland
Active employees	10,642	1,170	11,082	1,144
Vested rights of former employees not subject to expiration	1,765	-	2,073	-
Pensioners	9,379	1,650	11,024	1,722
Total	**21,786**	**2,820**	**24,179**	**2,866**

In the current year, there are 167 (previous year: 177) active employees entitled to a pension in the United Kingdom. Rheinmetall is obliged to pay into a pension fund for these employees.

The average durations of pension obligations are 17 years at the German companies, as in the previous year, 17 years at the companies in the United Kingdom (previous year: 18 years) and 11 years (previous year: 12 years) at companies based in Switzerland.

In order to determine the present value of the DBO in due consideration of actuarial factors, measurement assumptions were made according to standard principles and per country, taking into account the respective economic circumstances. Discount rates are derived from yields on fixed-interest corporate bonds with a suitable duration and currency which are rated “AA” or better. To determine the discount rate for Germany, a more detailed granular approach is used (often also called the “spot-rate approach”). This means that both the contractual obligation of the weighted defined benefit obligation as well as the current service cost and the net interest expense are calculated using the entire yield curve of the Group’s actuary as of the December 31, 2021 reporting date. The following table presents the key underlying actuarial parameters:

Actuarial parameters

in %	12/31/2021			12/31/2020		
	Germany	Switzerland	United Kingdom	Germany	Switzerland	United Kingdom
Discount rate	1.13	0.33	1.90	0.68	0.14	1.40
Pension development	1.75	-	3.10	1.75	-	2.70
Life expectancy	Richttafeln 2018G Heubeck	BVG2020 Generationen-tafeln	CMI 2020 projection tables	Richttafeln 2018G Heubeck	BVG2015 Generationen-tafeln	CMI 2019 projection tables

The following table shows the parameters where a change in values determined as of the end of the reporting period would have a significant impact on the present value of the DBO. Pension commitments in Switzerland are excluded from changes in the present value of the DBO based on assumptions on pension development, as the pension funds' regulations do not stipulate ongoing adjustment to future pensions. Instead, the foundation board decides on any adjustments. The potential impact of a change in mortality expectations was analyzed by increasing the individual statistical life expectancy of each employee by one year.

Change in present value of DBO

€ million	12/31/2021			12/31/2020		
	Germany	Switzerland	United Kingdom	Germany	Switzerland	United Kingdom
Discount rate -0.25%	35	32	20	46	38	23
Discount rate +0.25%	(33)	(31)	(18)	(43)	(37)	(22)
Pension development -0.50%	(25)	-	(23)	(34)	-	(26)
Pension development +0.50%	27	-	23	37	-	30
Increase in life expectancy by 1 year	50	59	19	62	61	23

The Rheinmetall Group is exposed to various risks as a result of defined benefit pension commitments. As well as general actuarial risks arising from the measurement of pension obligations, the plan assets harbor investment risks. The investment strategy and composition of assets managed by pension funds are geared towards yield targets, risk tolerance and short-term and medium-term liquidity requirements.

Classification of the plan assets

in %	12/31/2021	12/31/2020
Properties	30	32
Shares, funds	42	40
Corporate bonds	18	14
Other	10	14
Total	**100**	**100**

The fair values of shares, fund units, fixed-interest securities and other investments are determined based on market prices in an active market. The fair values of property are not based on market prices in an active market.

For the following year, the estimated cash outflows of continuing operations for contributions to plan assets are shown below.

Estimated cash outflows to plan assets

€ million	2022
Employer contributions to plan assets	66
Employee contributions to plan assets	10

The forecast cash outflows of continuing operations for the payment of pensions from the pension plans are as follows for the following periods:

Cash outflows for payments of pensions from pension plans

€ million	Payments from plan assets	Payments from companies
2022	70	40
2023	67	39
2024	66	36
2025	66	38
2026	64	39
2027-2031	315	179

(20) Other provisions

Classification of other provisions

€ million	Human Resources	Structural measures	Guarantees	Identifiable losses	Contract-related costs	Other provisions	Total
As of 1/1/2020	**187**	**44**	**115**	**55**	**341**	**181**	**923**
Utilization	(136)	(19)	(29)	(28)	(99)	(57)	(367)
Reversal	(10)	(5)	(10)	-	(5)	(17)	(47)
Added/provided for	165	70	47	16	108	81	487
Currency differences/Other	(5)	(1)	(2)	-	6	(6)	(9)
As of 12/31/2020	**202**	**89**	**122**	**43**	**351**	**181**	**987**
Of which current	*178*	*42*	*81*	*40*	*315*	*140*	*796*
Of which non-current	*24*	*46*	*41*	*3*	*36*	*41*	*191*
As of 1/1/2021	**202**	**89**	**122**	**43**	**351**	**181**	**987**
Utilization	(150)	(30)	(20)	(7)	(90)	(38)	(336)
Reversal	(4)	(7)	(30)	2	(7)	(19)	(65)
Added/provided for	163	22	24	(7)	76	57	335
Currency differences/Other	2	(11)	2	0	5	2	-
Book transfers (IFRS 5)	(13)	(5)	(5)	(1)	-	(11)	(34)
As of 12/31/2021	**200**	**58**	**93**	**30**	**334**	**172**	**887**
Of which current	*176*	*23*	*50*	*30*	*271*	*128*	*677*
Of which non-current	*24*	*36*	*43*	-	*64*	*44*	*210*

Personnel provisions essentially relate to variable remuneration of €101 million (previous year: €105 million) and obligations from vacation, overtime and flexitime accounts of €57 million (previous year: €56 million).

Provisions for restructuring mainly relate to termination settlements and expenses for partial retirement obligations.

The provisions for contract-related costs comprise offset obligations of €89 million (previous year: €60 million), contractual penalties of €17 million (previous year: €24 million), price review risks of €20 million (previous year: €22 million) and other contract costs of €144 million (previous year: €158 million). Contract-related commissions of €64 million (previous year: €86 million) were reclassified from miscellaneous provisions to contract-related costs. The previous year's figures have been restated accordingly.

Miscellaneous provisions relate to environmental risks at €28 million (previous year: €26 million), rebates and bonuses at €15 million (previous year: €13 million), and other individual provisions.

(21) Financial debts

Classification of financial debts

€ million	12/31/2021	Of which current	Of which non-current	12/31/2020	Of which current	Of which non-current
Promissory note loans	374	121	253	402	28	374
Bank liabilities	324	52	272	360	69	291
Leasing	220	39	181	249	42	207
Other	3	2	1	11	11	1
	921	**215**	**706**	**1,023**	**150**	**873**

Promissory note loans – As of the end of the reporting period, there are various promissory note loans with a nominal value totaling €375 million that serve the Group's general corporate financing.

Overview of promissory note loans

Interest terms	Year concluded	Currency	Nominal value in € million	Maturity	Average weighted nominal interest rate (in %)
Fixed rate			**251**		
	2014	€	25	2024	3.00
	2017	€	117	2022	1.15
	2018	€	42	2025	1.67
	2019	€	68	2024-2029	0.97
6-month EURIBOR + spread			**124**		
	2017	€	5	2022	6-month EURIBOR + 1.00
	2018	€	32	2025	6-month EURIBOR + 1.06
	2019	€	88	2024–2026	6-month EURIBOR + 0.88
			375		

Bank liabilities

€ million			12/31/2021	12/31/2020
Maturing in	**Type of loan**	**Interest terms**	**Nominal value**	**Nominal value**
August 2023	EIB loan	0.962%	250	250
2025	Construction loan	1.90%	17	20
2022–2026	KfW loan	2.55%	5	11
2022–2026	Various – medium-term	Ø 0,95 %	8	21
2022 / 2021	Various – short-term		44	58
			324	**360**

The loan from the European Investment Bank (EIB), Luxembourg, is a project-related loan granted to finance research and development activities, especially in connection with projects for the reduction of emissions from combustion engines and for alternative drive technologies.

€30 million (previous year: €41 million) of liabilities to banks are secured by land charges and similar rights.

The cash and non-cash changes in financial debts are shown below.

Cash and non-cash changes in financial debts

€ million	Promissory notes		Bank liabilities		Leasing	Other	Total
	< 1 year	> 1 year	< 1 year	> 1 year			
As of 1/1/2020	**-**	**402**	**74**	**305**	**208**	**3**	**992**
Cash changes	-	-	(7)	(5)	(39)	8	(43)
Borrowing of financial debts	-	-	252	-	-	191	444
Repayment of financial debts	-	-	(259)	(5)	(39)	(183)	(487)
Non-cash changes	28	(28)	3	(9)	80	-	74
Currency differences	-	-	(5)	(1)	(2)	-	(8)
Adjustment in scope of consolidation	-	-	-	-	-	-	-
Addition of right-of-use assets	-	-	-	-	83	-	83
Book transfers	28	(28)	8	(8)	(1)	-	(1)
As of 12/31/2020 and 1/1/2021	**28**	**374**	**69**	**291**	**249**	**11**	**1,023**
Cash changes	(28)	-	(19)	(9)	(41)	(9)	(107)
Borrowing of financial debts	-	-	106	-	-	2	107
Repayment of financial debts	(28)	-	(125)	(9)	(41)	(10)	(214)
Non-cash changes	121	(121)	13	(10)	21	1	24
Currency differences	-	-	2	-	3	-	5
Adjustment in scope of consolidation	-	-	-	-	7	-	7
Addition of right-of-use assets	-	-	-	-	12	-	12
Book transfers	121	(121)	10	(10)	(1)	1	-
Book transfers (IFRS 5)	-	-	(10)	-	(9)	-	(20)
As of 12/31/2021	**121**	**253**	**52**	**272**	**220**	**3**	**921**

(22) Other liabilities

Classification of other liabilities

€ million	12/31/2021	Of which current	Of which non-current	12/31/2020	Of which current	Of which non-current
Monies in transit from debt collection	44	44	-	32	32	-
Derivatives	18	14	4	21	14	7
Other	27	22	4	32	28	5
Financial liabilities	**89**	**81**	**9**	**86**	**74**	**12**
Liabilities from other taxes	62	62	-	76	76	-
Liabilities from social security	10	10	-	12	12	-
Other	80	44	36	106	36	70
Non-financial liabilities	**152**	**116**	**36**	**194**	**124**	**70**
Other liabilities	**241**	**196**	**45**	**280**	**198**	**82**

Notes to the income statement

(23) Sales

The Group generates sales from the transfer of goods and services in security technology and mobility. The following table shows the timing of sales recognition broken down by division. As a result of an internal harmonization of the criteria between the former business units as part of the realignment of the Group, existing contracts with customers in the Vehicle Systems division were reassessed in fiscal 2021. The reassessment had no material effects on the amount and timing of sales recognition. The previous year's figures have been restated accordingly.

Disaggregation of sales by point in time and over time

€ million	2021			2020		
	At a point in time	Over time	Total	At a point in time	Over time	Total
Vehicle Systems	1,036	848	1,883	976	871	1,846
Weapon and Ammunition	1,144	89	1,233	1,129	70	1,199
Electronic Solutions	460	472	932	414	517	931
Sensors and Actuators	1,315	-	1,315	1,202	-	1,202
Materials and Trade	651	-	651	536	-	536
Other/Consolidation	(301)	(55)	(356)	(254)	(55)	(309)
Group total	**4,304**	**1,354**	**5,658**	**4,003**	**1,402**	**5,405**

Customer contracts in security technology include the manufacture and supply of goods as well as service contracts for service and maintenance activities and the provision of development services. Depending on contract design, sales are recognized at the time at which risk is transferred, which is agreed individually. Sales are recognized at a point in time in particular in the case of orders for protection and weapon systems and for ammunition.

In the business areas of civilian mobility, contracts with customers relate primarily to serial deliveries of modules and systems for engine technology. The customers are predominantly large automotive manufacturers. As a rule, sales are recognized at the time of delivery.

In the case of customer-specific contract manufacturing, sales are recognized over time. This predominantly applies to contracts with customers in the Electronic Solutions division, to development and pilot production contracts, and to the delivery of vehicle programs.

The sales for 2021 include €5 million (previous year: €3 million), which resulted from the inclusion of a financing component.

The following contract balances result from contracts with customers:

Contract balances resulting from contracts with customers

€ million	12/31/2021	12/31/2020
Trade receivables	1,164	1,170
Contract assets	408	352
Contract liabilities	1,111	968

Trade receivables are recognized as soon as the goods and services have been transferred to the customer and there is an unconditional legal entitlement to the corresponding consideration. The credit term for contracts with customers is predominantly 90 days.

Contract assets exist for contracts with customers under which sales are recognized over time and the performance rendered has not yet been billed. In comparison to the previous year, contract assets increased by €56 million to €408 million (previous year: €352 million).

Contract liabilities result from the excess of advance payments received and other customer payments over the performance already rendered. Approximately two thirds of contract liabilities included in the items at the beginning of the fiscal year were recognized as income in fiscal 2021. Contract liabilities increased by €143 million to €1,111 million (previous year: €968 million).

In addition, there are assets in connection with the acquisition of contracts with customers, which are as follows:

Assets recognized from the costs to obtain a contract with a customer

€ million	2021	2020
As of Jan. 1	**101**	**81**
Addition	35	37
Write-down	(37)	(12)
Reversal	-	(6)
Currency differences	2	-
As of Dec. 31	**101**	**101**

The assets from contract acquisition relate to contracts with customers in security technology and primarily comprise commissions for agents and indirect offset costs. Offset costs are usually incurred for contracts with customers in which the customer wishes to support the local economy in order to offset an import business through an additional agreement. Indirect offset costs are costs that are incurred in addition to the manufacturing-related costs. The assets are recognized at the time the costs arise and are written down in line with the sales recognition over the time of contract fulfillment.

The order backlog as of December 31, 2021 reflects the total of performance obligations not fulfilled or partly not yet fulfilled. Besides the contract value, the order backlog also includes adjustments from variable remuneration, such as index-based price adjustment clauses, which are customary in the case of longer-term orders. Future sales from the order backlog are expected for the following periods:

Future sales from the order backlog

€ million	Order backlog	Expected sales		
	12/31/2021	2022	2023	ab 2024
Rheinmetall Group[1]	13,930	3,309	2,208	8,413

1) The order backlog and corresponding impact on sales result for the Weapon and Ammunition, Electronic Solutions and Vehicle Systems divisions. The performance obligations of the Sensors and Actuators and Materials and Trade divisions are less than one year.

(24) Changes in inventories and work performed by the enterprise and capitalized

Composition of changes in inventory and work performed by the enterprise and capitalized

€ million	2021	2020
Increase/decrease in inventory of finished and unfinished products	20	83
Other work performed by the enterprise and capitalized	97	59
	117	**142**

(25) Other operating income

Composition of other operating income

€ million	2021	2020
Reversal of provisions	58	38
Government grants	13	11
Sundry rental agreements and leases	6	6
Residual/scrap disposal	5	3
Reversal of assets (excl. financial assets)	2	11
Disposal of fixed assets/divestments	2	-
Refunds	1	3
Miscellaneous operating income	46	42
	134	**114**

(26) Cost of materials

Composition of costs of materials

€ million	2021	2020
Cost of raw materials, supplies, and merchandise purchased	2,220	2,080
Cost of services purchased	525	712
	2,745	**2,792**

(27) Personnel costs

Personnel expenses for the Rheinmetall Group break down as follows:

Composition of personnel expenses

€ million	2021	2020
Wages and salaries	1,353	1,244
Social security and related employee benefits	160	145
Pension expenses	112	105
Expenses for redundancy plans, termination indemnities, partial retirement	17	43
	1,643	**1,537**

The increase in personnel expenses in 2021 is attributable to the increase in personnel in continuing operations as well as the discontinuation of the short-time working allowance received in 2020. The average number of employees in the Rheinmetall Group is divided among the divisions and other business area as follows:

Annual Average headcount

Capacity - Full Time Equivalents (FTE) (annual average)	2021	2020
Division Vehicle Systems	4,774	4,298
Division Weapon and Ammunition	4,801	4,878
Division Electronic Solutions	3,095	2,952
Division Sensors and Actuators	4,445	4,645
Division Materials and Trade	2,197	2,197
Rheinmetall AG / Other	530	488
Rheinmetall Group (continuing operations)	**19,843**	**19,458**
Discontinued operations (Pistons)	3,872	3,971
Rheinmetall Group (continuing and discontinued operations)	**23,715**	**23,428**

(28) Amortization, depreciation and impairment

Composition of amortization, depreciation and impairment

€ million	2021	2020
Goodwill	-	3
Other intangible assets	48	48
Right-of-use assets	38	37
Property, plant and equipment and investment properties	165	194
	251	**282**

The impairment losses of €14 million (previous year: €32 million) included in amortization, depreciation and impairment break down as follows:

Composition of impairment

€ million	2021	2020
Goodwill	-	3
Other intangible assets	9	6
Property, plant and equipment and investment properties	6	23
	14	**32**

(29) Other operating expenses

Composition of other operating expenses

€ million	2021	2020
IT costs	119	102
Repairs and maintenance	82	78
Distribution and advertising costs	93	73
Operating Costs	55	47
Incidental personnel costs	50	48
Travel expenses	24	22
Audit, legal and consultancy fees	30	47
Insurances	35	31
Rents, leases and ancillary costs	21	21
Warranty	18	39
Patent and licensing fees (Others)	15	7
Other taxes	9	9
Miscellaneous operating expenses	105	116
	656	**642**

(30) Income taxes

Composition of income taxes

€ million	2021	2020
Current income tax expense	108	91
Earlier-period income taxes	(6)	5
Deferred taxes	48	(13)
	150	**83**

As in the previous year, a single corporate income tax rate of 15% plus the solidarity surcharge of 5.5% is used to calculate deferred income taxes for Germany. Including the respective trade tax gives the recognized total tax rate, which in Germany is mostly 30%. At foreign companies, deferred taxes are calculated using country-specific tax rates, which range from 15% to 34% (previous year: 16% to 34%).

The table below presents a reconciliation of expected tax expense to reported actual tax expense. Rheinmetall AG's tax rate of 30% is applied to earnings before taxes in order to calculate the expected tax expense. This includes German corporate income tax, the solidarity surcharge and trade tax.

Reconciliation of tax expenses

€ million	2021	2020
Earnings before taxes according to income statement	582	367
Of which: Earnings before taxes of discontinued operations	-	(310)
Earnings before taxes	582	57
Expected income tax expense (tax rate of 30%; previous year: 30%)	**174**	**17**
Foreign tax rate differentials	(15)	-
Effects of unrecognized loss carryforwards and temporary differences	(1)	25
Reduction of tax expense due to previously unrecognized loss carryovers and temporary differences	(4)	(11)
Tax-exempt income	(7)	(10)
Non-deductible expenses	5	8
Earlier-period income taxes	(6)	5
Taxes on entities carried at equity	(3)	(6)
Taxes on dividend and other withholding taxes	6	5
Goodwill impairment	-	26
Other	1	(3)
Actual income tax expense	150	56
Of which: Income tax income of discontinued operations	-	27
Actual income tax expense according to income statement	**150**	**83**

Allocation of deferred taxes to items in the statement of financial position

€ million	12/31/2021		12/31/2020	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Loss carryforwards and tax credits	56	-	54	-
Fixed assets	16	114	21	106
Inventories and receivables	38	100	30	58
Pension provisions	140	-	194	-
Other provisions	41	1	62	2
Liabilities	44	27	66	20
Other	18	2	16	13
Subtotal	**353**	**244**	**443**	**199**
Set off	(206)	(206)	(195)	(195)
Deferred taxes according to the statement of financial position	**147**	**38**	**249**	**4**

In addition to capitalized deferred tax assets from loss carryovers and tax credits from continuing operations, further tax loss carryovers and tax credits exist in Germany and abroad totaling €324 million (previous year: €339 million), which cannot be utilized or whose deferred tax assets were adjusted by value adjustments. €166 million (previous year: €166 million) of this relates to German loss carryovers, €157 million (previous year: €172 million) to foreign loss carryovers and €1 million to tax credits (previous year: €1 million). The German loss carryovers, and €107 million of the foreign loss carryovers (previous year: €118 million), are not subject to expiration. As in the previous year, the limited foreign loss carryforwards can still be utilized for up to eight years. Within the Group, €31 million (previous year: €21 million) in deferred tax assets were recognized at companies of continuing operations with losses in the current year or in the previous year due to positive corporate planning. These relate particularly to companies with start-up losses and companies where restructuring measures were taken. No deferred tax liabilities have been recognized for temporary differences in connection with shares in subsidiaries from continuing operations, as the Group is able to manage the progress of reversal over time and the temporary differences will not be reversed in the foreseeable future. Unrecognized deferred tax liabilities of €12 million (previous year: €12 million) relate to the main differences. Deferred tax liabilities of €1 million were recognized for profits earmarked for distribution with international and German subsidiaries from continuing operations (previous year: €1 million) to the extent that taxation is incurred within the Group.

(31) Earnings per share

Earnings per share are calculated as a ratio of the consolidated result of the shareholders of Rheinmetall AG and the weighted average number of shares in circulation during the fiscal year. As there were no shares, options or similar instruments outstanding that could dilute earnings per share as of December 31, 2021, or December 31, 2020, basic and diluted earnings per share are identical. Treasury shares reduce the weighted number of shares.

Earnings per share

	2021	2020
Weighted number of shares in millions	**43.28**	**43.17**
Earnings after taxes for shareholders of Rheinmetall AG in € million	**291**	**(27)**
Of which: Earnings after taxes from continuing operations for shareholders of Rheinmetall AG in € million	391	256
Of which: Earnings after taxes from discontinued operations for shareholders of Rheinmetall AG in € million	(100)	(283)
Earnings per share	**€ 6.72**	**€ (0.62)**
Earnings per share from continuing operations	€ 9.04	€ 5.93
Earnings per share from discontinued operations	€ (2.32)	€ (6.55)

Other explanatory information

(32) Notes to the statement of cash flows

€4 million (previous year: €9 million) of the net interest income included in the cash flow from operating activities related to interest payments received and €23 million (previous year: €25 million) to interest payments made.

Payments for investments in subsidiaries and other financial assets amounted to €35 million (previous year: €3 million). €20 million of this is attributable to loans to KS HUAYU AluTech GmbH, Neckarsulm, and €8 million to the acquisition of the non-controlling interest in Polycharge America, Inc., Tucson, United States. In addition, capital of €8 million was paid to the joint venture Kolbenhöfe GmbH & Co KG, Hamburg. The purchase price for Zeppelin Mobile Systeme GmbH, Meckenbeuren, amounted to €3 million, offset by the acquisition of cash and cash equivalents of €3 million.

The payments for investments in fund units of €160 million resulted from the investment of cash and cash equivalents on the capital market as a strategic liquidity reserve.

(33) Notes to the segment report

The organizational structure and the internal reporting structure of the Rheinmetall Group were adjusted in fiscal 2021 as a result of the strategic realignment. The previous organizational separation into the reportable Automotive and Defence sectors was discontinued. The intermediate holding company Rheinmetall Automotive AG was discontinued as a separate control and management unit for the divisions operating in the automotive business and integrated into the existing Group structure.

Rheinmetall's new organizational structure comprises five divisions as reportable segments, which are managed directly by the Executive Board of Rheinmetall AG. The five segments – Vehicle Systems, Weapon and Ammunition, Electronic Solutions, Sensors and Actuators, and Materials and Trade – differ with regard to their technologies, products and services. The previous year's figures have been restated in line with the altered segment structure.

The Defence segment, which had been reportable until December 31, 2020, was divided into the three reportable Vehicle Systems, Weapon and Ammunition, and Electronic Solutions segments. The Vehicle Systems segment offers a diverse portfolio of vehicles, including combat, support, logistics, and special vehicles. The portfolio of the Weapon and Ammunition segment comprises products and solutions for threat-appropriate, effective and accurate firepower as well as comprehensive protection. The Electronic Solutions segment offers the entire chain of effects in the system network – from sensors and the networking of platforms and soldiers to the (partially) automated connection of effectors – as well as solutions for protection in cyberspace. In addition, the division offers extensive training and simulation solutions.

In addition to the divisions of the former Defence sector, the new Group structure also includes two further segments. The Sensors and Actuators segment primarily comprises the Automotive sector's former Mechatronics division. The segment offers a product portfolio with exhaust gas recirculation systems; throttle valves, control dampers and exhaust flaps for electromotors; solenoid valves; actuators and valve train systems; oil, water and vacuum pumps for passenger cars, commercial vehicles and light and heavy-duty off-road applications; as well as industrial solutions. The Materials and Trade segment comprises companies of the former Aftermarket division and of the former Hardparts division (Bearings and Castings). The activities in the segment focus on the development of system components for the basic motor. The segment also contains Rheinmetall's global aftermarket activities.

In addition to the Group holding company (Rheinmetall AG), "Other/Consolidation" still includes Group service companies and other non-operating companies, plus consolidation transactions. Moreover, the Pistons business unit (non-core business) has been classified as a discontinued operation since May 1, 2021, and is no longer part of a segment or segment reporting. The Pistons business unit bundled the small- and large-bore pistons business of the former Hardparts division in the old Automotive segment.

The sectors of the Rheinmetall Group are controlled by means of sales, operating result (EBIT before special items) and EBT. The indicators for internal controlling and reporting purposes are based on the accounting principles described under note (3). Other core performance indicators are return on capital employed (ROCE) and operating free cash flow (OFCF). Return on capital employed for the year represents the ratio of EBIT to average capital employed (average of values as of January 1 and December 31 of the year under review). In addition, operating free cash flow comprises the cash flow from operating activities and capital expenditure on property, plant and equipment, intangible assets, and investment property.

The reconciliation of segment EBIT to consolidated EBT is shown below:

Reconciliations of segment results to earning before taxes (EBT)

€ million	2021	2020
EBIT of segments	645	442
Others	16	(56)
Consolidation	(53)	12
Group EBIT	**608**	**398**
Group net interest	(27)	(31)
Group Earnings before taxes (EBT)	**582**	**367**

In the following presentation of information by geographical region, foreign sales in the Vehicle Systems, Weapon and Ammunition and Electronic Solutions segments are reported based on the country of destination, while those of the Sensors and Actuators and Materials and Trade segments are reported according to where the customer is based. Non-current assets include intangible assets, right-of-use assets, property, plant and equipment and investment property according to the respective location of the company.

Disclosures according to geographical areas

	Germany		Other Europe		North-, Middle- and South America		Asia and the Near East		Other regions		Worldwide (Group)	
€ million	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
External Sales Vehicle Systems	898	931	505	319	11	1	49	73	411	504	1,875	1,828
External Sales Weapon and Ammunition	368	333	336	336	103	110	280	278	52	62	1,139	1,118
External Sales Electronic Solutions	318	368	93	93	31	54	296	251	7	10	745	776
External Sales Sensors and Actuators	186	179	526	537	227	204	290	227	-	-	1,229	1,147
External Sales Materials and Trade	137	113	287	241	91	69	110	93	23	17	647	533
Others/Consolidation	24	2	(2)	-	-	-	14	5	(13)	(4)	24	3
Group sales	1,931	1,926	1,745	1,526	462	437	1,040	926	480	590	5,658	5,405
in % of worldwide Group sales	34	36	31	28	8	8	18	17	8	11	100	100
Non-current assets	1,245	1,239	490	507	83	117	90	116	160	140	2,067	2,119

Of the sales in the Vehicle Systems, Weapon and Ammunition, and Electronic Solutions divisions approximately € 1.6 billion (previous year: € 1.5 billion) relate to sales with the Group's largest customer. In 2021 or 2020, no other single customer contributed 10% or more to Group sales.

(34) Contingent liabilities

Several guarantees were issued in favor of third parties as part of joint projects, which are primarily carried out in the form of joint ventures. A letter of comfort involving a joint and several liability was issued to secure the obligation of a third party for a joint venture to fulfill a contract. No cash outflows are expected. In addition, commitments exist in favor of joint ventures and associated affiliates for credit and guarantee facilities granted to the affiliated companies and pro rata accession of liability in favor of guarantees by joint ventures and associates. Rheinmetall's liability is equal to the equity interest held. Here too no cash outflows are expected.

Contingent liabilities

€ million	12/31/2021	12/31/2020
Letters of comfort	1,232	583
Other	28	11
	1,260	**594**

There are also obligations in connection with service agreements and other purchase commitments of €129 million (previous year: €184 million). The purchase commitment from firm capital expenditure contracts totals €22 million (previous year: €15 million).

(35) Additional information on financial instruments

Financial instruments according to the measurement categories of IFRS 9

	12/31/2020				
	Measurement category in accordance with IFRS 9				
€ million	Amortized cost	Fair value/OCI	Fair value/PL	No category	Total
Trade receivables	586	584	-	-	1,170
Cash and cash equivalents	1,027	-	-	-	1,027
Securities held for trade	-	-	-	-	-
Derivatives without hedge accounting	-	-	18	-	18
Derivatives with cash flow hedge	-	-	-	29	29
Other financial assets	28	4	-	1	33
Financial assets	**1,642**	**587**	**18**	**30**	**2,277**
Promissory notes	402	-	-	-	402
Other financial debts	372	-	-	-	372
Trade liabilities	700	-	-	-	700
Derivatives without hedge accounting	-	-	10	-	10
Derivatives with cash flow hedge	-	-	-	11	11
Other financial liabilities	65	-	-	-	65
Financial liabilities	**1,538**	**-**	**10**	**11**	**1,560**

€ million	Amortized cost	Fair value/OCI	Fair value/PL	No category	Total
	12/31/2021				
	Measurement category in accordance with IFRS 9				
Trade receivables	1,164	-	-	-	1,164
Cash and cash equivalents	1,039	-	-	-	1,039
Securities held for trade	-	-	162	-	162
Derivatives without hedge accounting	-	-	7	-	7
Derivatives with cash flow hedge	-	-	-	34	34
Other financial assets	51	3	8	-	61
Financial assets	**2,253**	**3**	**177**	**34**	**2,466**
Promissory notes	374	-	-	-	374
Other financial debts	327	-	-	-	327
Trade liabilities	809	-	-	-	809
Derivatives without hedge accounting	-	-	11	-	11
Derivatives with cash flow hedge	-	-	-	7	7
Other financial liabilities	71	-	-	-	71
Financial liabilities	**1,581**	**-**	**11**	**7**	**1,600**

For trade receivables measured at fair value through other comprehensive income, measurement of fair value is to be allocated to level 2. With trade receivables measured at amortized cost, the carrying amount approximates the fair value.

The market value of other financial assets and financial liabilities measured at fair value is determined on the basis of input factors observed directly or indirectly on the market (level 2). The foreign exchange rates applicable at the end of the reporting period and the yield curves are key inputs in calculating the fair value of derivatives for currency and interest rate hedges. The discounted cash flow method is used for interest rate swaps, currency swaps and currency forwards. The euro yield curve used to measure the interest rate derivatives takes into account basis spreads. The fair value of the commodity futures is derived from the market price as of the measurement date. The forward rates applicable at the end of the reporting period are used to calculate the fair value of energy derivatives (gas derivatives). Fund units held for trading are measured at the market value for each asset class. The net result from financial assets, recognized at fair value through profit or loss, was a gain of €4 million (previous year: loss of €4 million).

The carrying amounts and fair values of financial instruments that are measured at amortized cost and whose carrying amounts do not approximate fair value are shown below.

Carrying amount and fair value of financial instruments that are measured at amortized cost

€ million		12/31/2021 Carrying amount	12/31/2021 Fair value	12/31/2020 Carrying amount	12/31/2020 Fair value
Promissory notes	Level 2	374	382	402	415
Other financial debts	Level 2	327	366	372	381

The fair value of the promissory note loans and the other financial debts was determined by discounting the associated future cash flows at rates that match the time to maturity of similar debts.

Sale of customer receivables – Under an asset-backed securities program, the Rheinmetall Group sold customer receivables to a financial service provider each month on a revolving basis. The customer receivables sold are recognized as disposals. In 2021, the maximum volume of the program was €27 million (previous year:

€127 million). The program was terminated in June 2021. As part of financial risk management, sales of receivables have since been carried out on a situational basis as part of supplier finance solutions, forfeiting or comparable instruments.

Net result from financial instruments

€ million	2021	2020
Interest income	4	9
Interest expenses	(17)	(20)
Guarantee commission	(9)	(9)
Currency result	(14)	2
Loss allowances on trade receivables	(9)	(11)
Amortization of other financial assets	-	(13)
Other	(1)	(1)
	(46)	**(43)**

€0 million of the loss allowances on trade receivables (previous year: €4 million) is attributable to financial instruments of the measurement at fair value through other comprehensive income category. Interest expenses of €0 million (previous year: €1 million) are attributable to the same category. All other items relate to financial instruments measured at amortized cost.

Financial risks – The operations and financing transactions of the Rheinmetall Group as an international group are exposed to financial market risks, mainly from liquidity, counterparty default, electricity, gas and commodity prices, exchange rate volatility and interest rate changes. In accordance with the Group-wide risk management system of Rheinmetall AG, such risks are not only identified, analyzed and measured, but also managed by taking actions to avoid, contain or limit such risks. Inherent financial risks are actively managed to ensure that no significant risks arise from financial instruments as of the end of the reporting period.

Derivative financial instruments – Derivative financial instruments are used to reduce currency, interest rate and commodity price risks. Provided value changes of the hedged item and the hedging instrument are not recognized in profit and loss at the same time, and the necessary conditions are met, changes in the fair value of hedging transactions are recognized in the hedge reserve in the context of cash flow hedge accounting. The effectiveness of these transactions is subject to ongoing monitoring, using the critical terms match method prospectively. Ineffective portions to be recognized are determined using the dollar offset testing method.

The table below shows the fair value of all hedges accounted for as financial assets or financial liabilities as of the end of the reporting period.

Fair value of hedges

	12/31/2021		12/31/2020	
€ million	Assets	Liabilities	Assets	Liabilities
Currency hedges	7	(11)	18	(10)
Commodity hedges	-	-	-	(1)
Interest rate hedges	-	-	-	-
Energy price hedges	-	-	-	-
Without hedge accounting	**7**	**(11)**	**18**	**(10)**
Currency hedges	21	(7)	24	(10)
Commodity hedges	12	-	5	(1)
Interest rate hedges	-	-	-	-
Energy price hedges	-	-	-	-
With hedge accounting	**34**	**(7)**	**29**	**(11)**

In the year under review, positive changes in the fair value of derivatives of €30 million before the deduction of deferred taxes (previous year: total negative changes in fair value of €6 million) were recognized in the hedge reserve. From the reserve, income of €6 million (previous year: expenses of €1 million) was reclassified to sales, income of €9 million (previous year: expenses of €1 million) was reclassified to the cost of materials, and positive fair value of €1 million was reclassified to inventories in the year under review.

For derivatives in hedge accounting, the nominal volumes for currency and commodity hedges are shown below. For significant currency pairs and commodity hedges, the average hedging rates are also shown.

Nominal volumes and average hedging rate of derivatives

	12/31/2021			12/31/2020		
	2022	2023	from 2024	2021	2022	from 2023
Currency hedges						
Nominal volumes (gross, in € million)	1,782	288	116	2,134	310	171
Average hedging rate						
Average rate CHF/EUR	1.06	1.07	1.07	1.08	1.07	1.07
Average rate AUD/EUR	1.58	1.63	1.65	1.61	1.67	1.66
Average rate USD/EUR	1.14	1.21	1.22	1.21	1.20	1.21
Average rate USD/ZAR	0.06	0.05	-	0.06	0.05	0.05
Average rate CZK/EUR	26.08	26.34	-	26.60	27.08	-
Commodity hedges						
Nominal volumes (gross, in € million)	32	18	8	25	13	3
Average hedging rate						
Average rate aluminum (EUR/ton)	1,900	2,054	2,112	1,627	1,660	1,725
Average rate copper (EUR/ton)	6,611	6,944	7,563	5,051	5,222	4,978

There were only immaterial ineffective portions, so the fair value changes of the hedged item and the hedging instrument largely cancel each other out.

Currency risk – Owing to the international nature of the Rheinmetall Group's business, certain operational currency risks arise from the fluctuating exchange rates between the functional currencies of Group companies and other currencies. Open positions exposed to a currency risk are hedged through derivatives, generally currency forwards and swaps. Where legally possible, foreign exchange trading is contracted exclusively with Rheinmetall AG. Here, currency hedge transactions are concluded with subsidiaries and squared either directly or in a portfolio approach via banks. The most important currency hedges in the Group refer to Swiss franc, US dollar and Australian dollar transactions. These hedges are measured as of the end of the reporting period and recognized at fair value calculated according to the discounted cash flow method.

Interest rate risk – Rheinmetall AG uses interest rate hedging instruments (interest rate swaps) as part of its Group-wide management of interest rate risks. The interest rate swaps essentially serve to hedge variable interest on promissory note loans and future variable interest payments. The last derivative financial instrument to limit interest rate risks expired in October 2021, so there were no longer any interest rate derivatives as of the end of the reporting period.

Commodity price risks – The Rheinmetall Group is exposed to price volatility risks from commodity buying, such as metals. By means of materials cost escalator agreements with customers, the major part of these risks from volatile metal prices is shifted to customers, albeit with a time lag. Moreover, the Sensors and Actuators and Materials and Trade divisions (where most of these risks exist) have also used derivative financial instruments for risk management, mainly commodity futures and swaps maturing by 2024 at the latest contracted on the basis of a financial settlement.

Energy price risk (electricity and gas price) – Owing to volatile prices on the energy market, derivative financial instruments in the form of forward contracts have been concluded to secure the price of gas for the consumption volumes planned up to 2021. There are no outstanding price hedges via derivative financial instruments for electricity and gas.

Sensitivity analysis – As part of sensitivity analyses for the risk variables concerned, the effects that a change in the relevant underlying instruments as of the end of the reporting period would have on other net financial income and the hedge reserve, before taking deferred taxes into account, are examined.

Sensitivity analysis of derivatives

		Other net financial result		Cash flow hedge reserve	
€ million		12/31/2021	12/31/2020	12/31/2021	12/31/2020
Currency	Exchange rates (total) -10%/+10%	+39 / -39	+48 / -48	-35 / +35	-54 / +54
Commodity	Price curve for material prices -10%/+10%	- / -	- / -	-7 / +7	-4 / +4
Interest rate	Yield curve -100 BP/+100 BP	- / -	- / -	- / -	- / -
Energy price	Forward curve (total) -10%/+10%	- / -	- / -	- / -	- / -

Default risk (expected credit risk) – The default risk from financial assets is that the other contractual party does not fulfill its obligations. The maximum risk is the carrying amount recognized. In order to minimize the default risk with derivative financial instrument contracts, the Rheinmetall Group sets high requirements in respect of its counterparties, restricting itself exclusively to German and foreign banks with impeccable ratings.

The Rheinmetall Group monitors and tracks the default risk on customer receivables at the level of its operating units in line with the corporate policies for proper debtor management. Individual assessments (where appropriate, based on current trends and qualitative information) can be used in addition to database-supported rating and default data of an external data supplier. Current del credere risks are covered by valuation allowances.

There are no significant valuation allowances for customer receivables at the Rheinmetall Group. Given the type of business and the customer structure, default rarely occurs and instead there are only delays in payment. There were no other material impairments not recognized on the basis of collateral. In addition, potential default risks are assessed on an individual basis in connection with long-term orders and reduced or hedged by means of prepayments, credit insurance, guarantees or letters of credit. In 2021, the risk provision for general default risk calculated according to the simplified approach for the measurement of trade receivables amounted to €11 million (previous year: €14 million). €2 million of these related to receivables more than 180 days past due (previous year: €3 million). The risk calculated using business model-specific default rates for receivables up to 30 days past due is less than 1.0% (previous year: less than 1.5%). As of the end of the reporting period, there were no indications that the debtors of any receivables past due will fail to make payment. Because of the customer structure, the risk does not significantly increase even when the receivables are a long time past due.

Default risk of trade receivables, amount before loss allowance

€ million	12/31/2021	12/31/2020
Not past due and less than 30 days past due	933	917
Up to 180 days past due	59	83
More than 180 days past due	186	182
	1,177	**1,182**

No important credit concentrations exist in the Rheinmetall Group.

Liquidity risk – In particular, the Rheinmetall Group ensures sufficient liquidity at all times by a cash budget and forecast over a specified time horizon, and through existing, partly unutilized finance facilities, including credit lines granted by banks on a syndicated and bilateral basis, a commercial paper (CP) program and various loans. For further details of such credit facilities, see the “Financing” section of the management report.

The undiscounted contractually agreed payments from repayment and interest components in connection with financial debts and derivative financial instruments as of the end of the reporting period are listed below.

Cash outflows

	12/31/2021			12/31/2020		
€ million	2022	2023-2026	from 2027	2021	2022-2025	from 2026
Promissory notes	126	250	118	33	343	44
Other bank liabilities	57	276	-	73	297	-
Other financial debts	2	-	-	10	-	-
	185	**525**	**118**	**117**	**640**	**45**
Derivatives with positive fair value						
Cash outflow	934	199	-	1,193	201	-
Cash inflow	968	216	-	1,254	226	-
Derivatives with negative fair value						
Cash outflow	831	203	-	943	276	3
Cash inflow	846	193	-	927	271	3

The fair values of derivatives as of the end of the reporting period should be seen in the context of the associated underlyings, whose values develops in the opposite direction to that of derivatives, regardless of whether these have already been recognized or are pending. The derivatives would produce a cash outflow at the amount shown above only if they were terminated early.

The Rheinmetall Group's financial resources comprise cash, cash equivalents and a liquidity reserve invested on the capital market, financial current assets available for sale, and the cash provided by operating activities. By contrast, the capital requirements cover the redemption of financial liabilities (principal and interest), capital expenditure and the funds for the ongoing financing of operating activities.

(36) Share programs

Long-term-incentive program – There is a long-term incentive remuneration program (LTI) for the Executive Board and the managers of the Rheinmetall Group in order to involve management in the company's long-term development. Under this program, the beneficiaries are paid performance-related remuneration for the past fiscal year in the subsequent year. The calculation of the amount of remuneration is based on the average adjusted EBT of the Rheinmetall Group for the past three fiscal years, capped at a maximum of €300 million/€750 million. The individual remuneration is the result of multiplying this amount by a personal factor in line with the individual arrangement. For two members of the Executive Board, part of the LTI remuneration results from the average monthly total shareholder return (TSR) of the company's grant year as a proportion of the average monthly TSR of the MDAX.

The remuneration for members of the Executive Board comprises a component settled in shares of 50% of the assessment basis and a cash component of 60% of the assessment basis. The remuneration for German managers is measured according to the respective assessment basis, with 40% and 60% being settled in shares and cash respectively. Managers working outside Germany receive remuneration of 50% of the determined assessment basis in shares.

The details on the LTI for members of the Executive Board are presented in the remuneration report in the combined management report.

The number of shares granted is determined in the subsequent year on the basis of the average price on the last five trading days in February of a year (reference price), with a deduction of 20% in the case of managers (relevant share value). The portion of the assessment basis to be granted in shares is divided by the relevant share value to determine the number of shares to be granted. The shares granted are subject to a lock-up period of four years. If employment is terminated by the employer, the Executive Board member or manager receives remuneration pro rata for each completed calendar month of employment.

An expense totaling €16 million (previous year: €16 million) was recognized for the LTI program in fiscal 2021.

The reference price in March 2021 was €81.34. For fiscal 2020, a total of 106,191 shares were transferred to the entitled participants of the LTI program on March 26, 2021 (previous year: a total of 114,216 shares were transferred for fiscal 2019 on March 27, 2020, and on October 8, 2020).

The shares attributable to the Executive Board members are presented in the remuneration report included in the combined management report.

Share purchase program – Since 2018, there has been a new share purchase program for Rheinmetall employees in Germany, in which employees of participating Group companies can purchase Rheinmetall shares at reduced prices on the basis of monthly savings plans. The program comprises two elements: a monthly basic savings plan and a monthly extra savings plan. Under the basic savings plan, employees can acquire Rheinmetall shares for a monthly sum of at least €30 up to a maximum of €100. Rheinmetall contributes 30% of the defined savings amount. For example, a monthly savings amount of €100 comprises €70 from the employee and the employer's contribution of €30.

In addition, employees can acquire additional Rheinmetall shares as part of the extra savings plan. Here, the monthly savings contribution can amount to up to 10% of the annual gross salary divided by 12. There is a cap of €900 per month. Here, too, Rheinmetall contributes 30% of the defined savings amount.

In 2021, employees acquired a total of 105,118 shares (previous year: 95,219 shares) under this share purchase program. The employer contribution amounted to €3 million (previous year: €2 million). The shares acquired under the share purchase program within a year are subject to a lock-up period of two years starting on January 1 of the following year.

(37) Other information on related parties

The Rheinmetall Group's corporate related parties are the joint ventures and associated companies accounted for using the equity method. The products/services provided primarily relate to recognized sales proceeds from the sale of finished and unfinished goods and from construction contracts with project companies. The receivables and liabilities are chiefly attributable to customer receivables, trade payables and prepayments received and made. The scope of related-party transactions is shown in the table below.

Transactions with related parties

	Joint Ventures		Associated companies	
€ million	2021	2020	2021	2020
Products/services provided	407	428	193	121
Products/services received	3	11	21	21
Receivables Dec. 31	83	96	131	87
Liabilities Dec. 31	4	11	3	3
Receivables from finance leases Dec. 31	14	14	-	-

Please see note (15) "Other assets" for information on the finance lease receivable.

Please see the comments under note (34) "Contingent liabilities" for details of the Rheinmetall Group's contingent liabilities in connection with joint ventures.

There are business relationships between a subsidiary of Rheinmetall AG and PL Elektronik GmbH, Lilienthal, whose sole shareholder is Mr. Armin Papperger, Chairman of the Rheinmetall AG Executive Board, and which is managed by a related party of Mr. Papperger. PL Elektronik GmbH provides development services and produces and supplies electric igniters to order. The transactions are carried out on an arm's-length basis. In fiscal 2021, the volume of products/services received amounted to €2 million (previous year: €3 million).

Remuneration of the Executive Board and the Supervisory Board – The reportable remuneration of senior management within the Group comprises that paid to Executive Board and Supervisory Board members.

The remuneration of members of the Executive Board active in the fiscal year breaks down as follows:

Renumeration of the Executive Board

€ thousand	2021	2020
Short-term benefits	6,551	6,434
Post-employment benefits	2,560	2,746
Other long-term benefits	3,025	3,125
Termination benefits	2,550	-
Share-based payments	-	-
Total	**14,686**	**12,305**

The net present value of pension commitments, which corresponds to the amount of provisions, totals €28,479 thousand for members of the Executive Board active at year-end (previous year: €28,497 thousand). There are provisions of €6,312 thousand (previous year: €6,764 thousand) for variable remuneration of the Executive Board.

Supervisory Board remuneration including attendance fees amounted to €2,034 thousand (previous year: €1,941 thousand). In addition to Supervisory Board remuneration, those employee representatives who are employees of the Rheinmetall Group also receive compensation unrelated to their service on the Supervisory Board. The employee representatives received €799 thousand in total from such activities (previous year: €677 thousand).

For further details and itemization of each member's remuneration, see the Board remuneration report within the combined management report of the Rheinmetall Group and Rheinmetall AG.

€1,959 thousand (previous year: €2,097 thousand) was paid to former members of the Executive Board or their surviving dependents. Pension provisions for these persons totaled €28,821 thousand (previous year: €32,455 thousand). €620 thousand (previous year: €614 thousand) was paid to former Executive Board members of Rheinmetall DeTec AG (merged with Rheinmetall AG in 2005) or their surviving dependents. Pension provisions for these persons totaled €7,565 thousand (previous year: €8,428 thousand).

(38) Auditor's fees

The following fees for the auditor Deloitte GmbH Wirtschaftsprüfungsgesellschaft were recognized:

Auditor's fees

	Fees Germany
€ million	2021
Audit services	2.3
Other attestation services	0.2
Tax services	0.2
Other services	0.4
	3.1

The fees for the audit services comprise primarily remuneration for the audit of the consolidated annual financial statements and the audit of the financial statements of Rheinmetall AG and its German subsidiaries. They also comprise the audit of financial statements prepared in accordance with accounting principles for a particular purpose. The other attestation services relate primarily to statutorily required and voluntary verification services not relating to the audit of the financial statements. In addition, there were tax services which did not impact the annual or consolidated financial statements either in a direct or material fashion and other accounting-related project services provided.

(39) Exercise of exemption provisions under German Commercial Code ("HGB")

The following German enterprises are exercising the exemption provisions under section 264(3) HGB for corporations and section 264b HGB for partnerships for fiscal 2021:

Amprio GmbH, Neuss
BF Germany GmbH, Tamm
EMG EuroMarine Electronics GmbH, Neckarsulm
GVMS Grundstücksverwaltung Service GmbH & Co. KG, Neckarsulm
Kolbenschmidt Liegenschaftsverwaltung GmbH Berlin, Neckarsulm
Kolbenschmidt Pierburg Innovations GmbH, Neckarsulm
KS ATAG Beteiligungsgesellschaft mbH, Neckarsulm
KS Gleitlager GmbH, St. Leon-Rot
KS Grundstücksverwaltung Beteiligungs-GmbH, Neckarsulm
KS Grundstücksverwaltung GmbH & Co. KG, Neckarsulm
KS Kolbenschmidt GmbH, Neckarsulm
MEG Marine Electronics Holding GmbH, Düsseldorf
MS Motorservice Deutschland GmbH, Tamm
MS Motorservice International GmbH, Neuenstadt
Pierburg GmbH, Neuss
Pierburg Grundstücksverwaltung GmbH & Co. KG, Neuss
Pierburg Pump Technology GmbH, Neuss
Rheinmetall Automotive AG, Neckarsulm
Rheinmetall Aviation Services GmbH, Bremen
Rheinmetall Berlin Verwaltungsgesellschaft mbH, Berlin
Rheinmetall Brandt GmbH, Neuss
Rheinmetall Cyber Solutions GmbH, Bremen
Rheinmetall Eastern Markets GmbH, Düsseldorf
Rheinmetall Electronics GmbH, Bremen
Rheinmetall Financial Services GmbH, Düsseldorf
Rheinmetall Immobilien Flensburg GmbH & Co. KG, Düsseldorf
Rheinmetall Immobilien GmbH, Düsseldorf
Rheinmetall Immobilien Hamburg Friedensallee GmbH, Düsseldorf
Rheinmetall Immobilien Hamburg GmbH, Düsseldorf
Rheinmetall Immobilien Neckarsulm GmbH, Düsseldorf (formerly: GVN Grundstücksverwaltung Neckarsulm GmbH & Co. KG, Neckarsulm)
Rheinmetall Immobilien Neuss GmbH, Düsseldorf
Rheinmetall Immobilien St. Leon-Rot GmbH, Düsseldorf (formerly: GVG Grundstücksverwaltung Gleitlager GmbH & Co. KG, Neckarsulm)
Rheinmetall Immobilien VEGA GmbH & Co. KG, Düsseldorf
Rheinmetall Industrietechnik GmbH, Düsseldorf
Rheinmetall Insurance Services GmbH, Düsseldorf
Rheinmetall Invent GmbH, Neckarsulm
Rheinmetall IT Solutions GmbH, Düsseldorf
Rheinmetall Landsysteme GmbH, Südheide
Rheinmetall Maschinenbau GmbH, Düsseldorf
Rheinmetall Project Solutions GmbH, Düsseldorf
Rheinmetall Protection Systems GmbH, Bonn
Rheinmetall Soldier Electronics GmbH, Stockach
Rheinmetall Technical Assistance GmbH, Kassel
Rheinmetall Technical Publications GmbH, Bremen
Rheinmetall Technology Center GmbH, Düsseldorf
Rheinmetall Verwaltungsgesellschaft mbH, Düsseldorf
Rheinmetall Waffe Munition GmbH, Südheide
SUPRENUM Gesellschaft für numerische Superrechner mbH, Bremen
Unternehmerstadt GmbH, Düsseldorf
Unternehmerstadt Verwaltungsges. mbH, Düsseldorf

(40) Corporate governance

In August 2021, Rheinmetall AG published its declaration of conformity in accordance with the German Corporate Governance Code pursuant to section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) on the Internet at www.rheinmetall.com in the section “Company – Corporate Governance – Declaration of conformity”, thus making it available to shareholders.

(41) Events after the end of the reporting period

Influenced by the military conflict between Russia and Ukraine, the German Chancellor Olaf Scholz announced a U-turn in German security and defence policy in the German Bundestag on February 27, 2022. The German government intends to create a “special armed forces fund” – enshrined in Germany’s Basic Law – with a one-off investment of €100 billion in order to quickly implement the German armed forces’ most urgent procurement projects. In addition, the German government is committed to the NATO spending target and henceforth intends to invest at least 2% of its gross domestic product in defence every year. Defence spending, which most recently amounted to around €47 billion (2021), will therefore increase to between €70 billion and €80 billion per year. For Rheinmetall as one of the major suppliers of main weapons systems to the German armed forces, these decisions are associated with considerable additional business potential.

As a consequence of its digitalization strategy, on January 25, 2022, Rheinmetall signed an agreement to acquire 25.12% of the shares in the Hungarian digitalization service provider and IT supplier 4iG Nyrt (4iG). On March 3, 2022, Rheinmetall acquired 24.13% of the shares in the listed company via a share purchase. In addition, 4iG will carry out a capital increase by issuing new shares before the end of the first quarter. Once the capital increase has been implemented, Rheinmetall’s final capital share in 4iG will amount to 25.12%. The total volume of the transaction is around €165 million.

Düsseldorf/Germany, March 9, 2022

Rheinmetall Aktiengesellschaft
The Executive Board

Armin Papperger Helmut P. Merch Peter Sebastian Krause

(42) Shareholdings

Shareholdings 2021

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € thousand	Net income for the year after PLTA in € thousand
Fully consolidated subsidiaries					
Holding companies/service companies/others					
American Rheinmetall Defense, Inc., Biddeford, Maine/USA		100		21,146	159
EMG EuroMarine Electronics GmbH, Neckarsulm			100	63,029	1,064
Eurometaal N.V., Hengelo/Netherlands			100	(89)	(45)
Kolbenschmidt Liegenschaftsverwaltung GmbH Berlin, Neckarsulm	(1)		100	7,179	-
Kolbenschmidt Pierburg Innovations GmbH, Neckarsulm	(1)		100	25	-
KS ATAG Romania S.R.L., Bucharest/Romania			100	2,588	(35)
KS Grundstücksverwaltung Beteiligungs GmbH, Neckarsulm			100	151	2
KS Grundstücksverwaltungs GmbH & Co. KG, Neckarsulm			100	25,360	1,174
KSPG Holding USA Inc., Delaware/USA			100	281,132	4,120
KSPG Netherlands Holding B.V., Amsterdam/Netherlands			100	83,926	(16)
KSPG Services Ltd., St. Julians/Malta			100	10,464	14
MEG Marine Electronics Holding GmbH, Düsseldorf			100	227,968	1,719
Rheinmetall Automotive AG, Neckarsulm	(1)		100	323,217	-
Rheinmetall Automotive Malta Holding Ltd., St. Julians/Malta		21	79	60,542	(16)
Rheinmetall Berlin Verwaltungsgesellschaft mbH, Berlin	(1)	100		213,750	-
Rheinmetall (China) Investment Co., Ltd., Shanghai/China			100	44,322	1,001
Rheinmetall Eastern Markets GmbH, Düsseldorf	(1)	100		1,449	-
Rheinmetall Financial Services GmbH, Düsseldorf	(1)	100		336,961	-
Rheinmetall Immobilien Flensburg GmbH & Co. KG, Düsseldorf			100	2,369	(856)
Rheinmetall Immobilien GmbH, Düsseldorf		100		175,111	1,501
Rheinmetall Immobilien Hamburg Friedensallee GmbH, Düsseldorf	(1)		100	23,535	-
Rheinmetall Immobilien Hamburg GmbH, Düsseldorf		100		1,687	-
Rheinmetall Immobilien Neuss GmbH, Düsseldorf	(1)		100	4,025	-
Rheinmetall Industrietechnik GmbH, Düsseldorf	(1)	100		3,526	-
Rheinmetall Insurance Services GmbH, Düsseldorf	(1)	100		350	-
Rheinmetall International Services Limited, Masdar City/UAE			100	(7,803)	(1,906)
Rheinmetall IT Solutions GmbH, Düsseldorf	(1)	100		21	-
Rheinmetall Maschinenbau GmbH, Düsseldorf			100	63,119	214
Rheinmetall Netherlands B.V., Hengelo/Netherlands			100	583	(277)
Rheinmetall Singapore Pte. Ltd., Singapore/Singapore			100	9,401	4,117
Rheinmetall Technology Center GmbH, Düsseldorf	(1)		100	26	-
Rheinmetall Verwaltungsgesellschaft mbH, Düsseldorf	(1)		100	733,843	-
RM Euro B.V., Hengelo/Netherlands		100		56,942	355
SUPRENUM Gesellschaft für numerische Superrechner mbH, Bremen			100	(1,397)	-
Unternehmerstadt GmbH, Düsseldorf	(7)		100	2	1
Unternehmerstadt Verwaltungsges. mbH, Düsseldorf	(7)		100	35	4
Rheinmetall Immobilien VEGA GmbH & Co.KG, Düsseldorf			100	2,023	(2)
Division Vehicle Systems					
American Rheinmetall Vehicles LLC, Dover, Delaware/USA			100	(9,152)	(3,783)
BIL Industriemetalle GmbH & Co. 886 KG, Grünwald	(3)	94		(485)	389
Rheinmetall BAE Systems Land Limited, Telford/Great Britain			55	45,938	4,393
Rheinmetall Ceska Republika s.r.o., Trmice/Czech Republic			100	(1)	(1)
Rheinmetall Defence Australia Pty. Ltd., Redbank/Australia		100		(5,413)	3,794
Rheinmetall Defence Lietuva, UAB, Vilnius/Lithuania			100	68	(288)
Rheinmetall Defence Nederland B.V., Ede/Netherlands			100	(24,078)	2,419
Rheinmetall Polska Sp. Z o. o., Warsaw/Poland			100	264	38

Shareholdings 2021

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € thousand	Net income for the year after PLTA in € thousand
Rheinmetall Defence UK Limited, London/Great Britain		100		32,454	338
Rheinmetall Hungary Zrt, Budapest/Hungary			51	(647)	(1,269)
Rheinmetall International Defence and Security Ltd., Riyadh/Saudi Arabia			100	(1,948)	(1,997)
Rheinmetall Landsysteme GmbH, Südheide	(1)	100		202,547	-
Rheinmetall MAN Military Vehicles Australia Pty. Ltd., Melbourne/Australia			100	28,985	2,993
Rheinmetall MAN Military Vehicles Canada Ltd., Ottawa/Canada			100	545	(11)
Rheinmetall MAN Military Vehicles GmbH, Munich		51		63,036	6,787
Rheinmetall MAN Military Vehicles Österreich GesmbH, Vienna/Austria			100	169,543	50,858
Rheinmetall MAN Military Vehicles Österreich Holding GesmbH, Vienna/Austria			100	100,026	(14)
Rheinmetall MAN Military Vehicles UK Ltd., Swindin/Great Britain			100	4,183	1,958
Rheinmetall Tatra Land Systems s.r.o., Koprivnice/Czech Republic			51	-	-
Rheinmetall Technical Assistance GmbH, Kassel	(1)		100	25	-
Division Weapon and Ammunition					
American Rheinmetall Munition Inc., Stafford, Virginia/USA			100	(10,983)	1,638
EOD TEKNOLOJILERI LIMITED SIRKETI, Istanbul/Turkey			100	66	23
IBD Engineering France, Paris/France			100	30	(16)
Nitrochemie Aschau GmbH, Aschau			100	40,510	9,986
Nitrochemie South Africa (Pty) Ltd, Somerset West/South Africa			100	581	(54)
Nitrochemie Wimmis AG, Wimmis/Switzerland			55	55,919	6,084
Provectus Robotics Solutions Inc., Ottawa/Canada			100	3,642	407
Rheinmetall Canada Inc., St.-Jean-sur-Richelieu/Canada		100		100,005	8,198
Rheinmetall Combat Platforms North America Inc., Wilmington, Delaware/USA			100	(203)	(10)
Rheinmetall Denel Munition Pty. Ltd, Somerset West/South Africa			51	87,616	2,738
Rheinmetall Fraen Fuzes LLC, Wilmington, Delware/USA			51	-	-
Rheinmetall Laingsdale (Pty) Ltd., Cape Town/South Africa			100	7,901	266
Rheinmetall NIOA Munitions Pty Ltd, Bundaberg/Australia			51	(1,264)	(1,815)
Rheinmetall Projects Development Consultancy LLC, Abu Dhabi/UAE	(2)	49		750	262
Rheinmetall Projects Solutions GmbH, Düsseldorf	(1)		100	4,546	-
Rheinmetall Protection Systems GmbH, Bonn			100	66,790	(990)
Rheinmetall Protection Systems Gulf (FZE), SAIF-Zone, Sharjah/UAE			100	(1,457)	(198)
Rheinmetall Protection Systems Nederland B.V., Ede/Netherlands			100	1,348	(143)
Rheinmetall Savunma Sanayi Anonim Sirketi, Ankara/Turkey			90	1,731	188
Rheinmetall Waffe Munition ARGES GmbH, Schwanenstadt			100	2,073	108
Rheinmetall Waffe Munition GmbH, Südheide	(1)		100	146,434	-
Rheinmetall Waffe Munition South Africa (Pty) Ltd., Somerset West/South Africa			100	(3)	(5)
RWM Beteiligungsverwaltung Austria GmbH, Schwanenstadt/Austria			100	21,844	821
RWM Italia S.p.A., Ghedi/Italy			100	120,779	19,570
RWM Schweiz AG, Zurich/Switzerland			100	119,120	16,778
RWM Zaugg AG, Lohn-Ammannsegg/Switzerland			100	17,547	1,840
Zeppelin Mobile Systeme GmbH, Meckenbeuren			100	1,006	875
Division Electronic Solutions					
American Rheinmetall Systems LLC, Biddeford/USA			100	35,431	802
Benntec Systemtechnik GmbH, Bremen	(2)		49	3,436	690
Cyber Works AG, Zurich/Switzerland			100	(4,113)	(40)
Logistic Solutions Australasia Pty. Ltd., Melbourne/Australia			100	2,958	244
Oerlikon Contraves GmbH, Zurich/Switzerland		100		20	-

Shareholdings 2021

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € thousand	Net income for the year after PLTA in € thousand
RD Investment AG, Zurich/Switzerland			69	79	(19)
RFEL Ltd, Newport, Isle of Wight/Great Britain			100	3,488	737
Rheinmetall Air Defence AG, Zurich/Switzerland		100		267,223	36,148
Rheinmetall Aviation Services GmbH, Bremen	(1)		100	100	-
Rheinmetall Communication and Simulation Technology Pty. Ltd., Singapore/Singapore			100	849	352
Rheinmetall Cyber Solutions GmbH, Bremen	(1)		100	211	-
Rheinmetall Electronic Solutions AG, Zurich/Switzerland		100		46	(49)
Rheinmetall Electronics GmbH, Bremen	(1)	100		88,285	-
Rheinmetall Electronics Pty. Ltd., Deakin West/Australia			100	-	-
Rheinmetall Italia S.p.A, Rome, Italy			100	107,461	(831)
Rheinmetall Mexico Simulation and Training S.A. de C.V., Mexico City/Mexico			100	4,795	53
Rheinmetall Norway AS, Nøtterøy/Norway		100		19,045	459
Rheinmetall Soldier Electronics GmbH, Stockach	(1)	100		5,349	-
Rheinmetall Technical Publications GmbH, Bremen	(1)	100		5,953	-
Rheinmetall Technical Publications Schweiz AG, Zurich/Switzerland			100	621	62
Rheinmetall VIRE (Nanjing) Technologies Co., Ltd., Beijing/China			100	100	(130)
RRS-MITCOS Rheinmetall Rohde&Schwarz Military IT and Communications Solutions GmbH, Berlin		75		106	-
RTP-UK Ltd., Bristol/Great Britain			100	7,998	35
Division Materials and Trade					
Amprio GmbH, Neuss	(1)		100	255	-
BF Engine Parts LLC, Istanbul/Turkey			100	514	379
BF Germany GmbH, Tamm	(1)		100	3,223	-
GVMS Grundstücksverwaltung Service GmbH & Co. KG, Neckarsulm			100	37	(3)
Intec France S.A.S., Meyzieu/France			100	847	(43)
Karl Schmidt Unisia Michigan, LLC, Southfield/USA			100	-	-
KS ATAG Beteiligungsgesellschaft m.b.H., Neckarsulm	(1)		100	10,263	-
KS CZ Motorservice s.r.o., Usti/Czech Republic			100	3,779	1,636
KS France S.A.S., Basse-Ham (Thionville)/France			100	17,366	673
KS Gleitlager de México S. de R.L. de C.V., Celaya/Mexico			100	17,614	2,794
KS Gleitlager GmbH, St. Leon-Rot	(1)		100	24,291	-
KS Gleitlager North America LLC, Marinette/USA			100	3,167	(62)
KSG Pistons, Inc., South Haven/USA			100	-	-
KS Kolbenschmidt France S.A.S., Basse-Ham/France			100	5,409	(3,432)
MS Motorservice Aftermarket Iberica S.L., Abadiano/Spain			100	13,649	1,130
MS Motorservice Asia Pacific Co., Ltd., Shanghai/China			100	3,993	389
MS Motorservice Deutschland GmbH, Tamm	(1)		100	3,592	-
MS Motorservice France S.A.S., Villepinte/France			100	26,326	2,023
MS Motorservice International GmbH, Neuenstadt	(1)		100	52,849	-
MS Motorservice Istanbul Dis Ticaret ve Pazarlama A.S., Istanbul/Turkey			51	1,808	1,149
MS Motorservice Trading (Asia) Pte. Ltd., Singapore/Singapore			100	480	109
ORR Training Systems LLC, Moscow/Russian Federation	(7)		100	40	(9)
Rheinmetall Immobilien Neckarsulm GmbH, Düsseldorf			100	6,611	180
Rheinmetall Immobilien St. Leon-Rot GmbH, Düsseldorf			100	6,576	(6)
Rheinmetall Invent GmbH, Neckarsulm	(1)		100	25	-
Rheinmetall Ltd., Moscow/Russian Federation			100	517	(49)

Shareholdings 2021

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € thousand	Net income for the year after PLTA in € thousand
Division Sensors and Actuators					
H.Brandt Cauciuc & Mase Plastice S.R.L., Sibiu/Romania	(6),(7)		99	957	137
KSPG Automotive India Private Limited, Pune Maharashtra/India			100	34,860	3,696
Mechadyne International Ltd., Kirtlington/Great Britain			100	3,572	25
Pierburg China Ltd., Kunshan City/China			100	34,040	5,578
Pierburg Gestion S.L., Abadiano/Spain			100	13,442	53
Pierburg GmbH, Neuss	(1)		100	104,164	-
Pierburg Grundstücksverwaltung GmbH & Co. KG, Neuss			100	6,445	281
Pierburg Korea, Ltd., Seoul/South Korea			100	118	12
Pierburg Mikuni Pump Technology (Shanghai) Corp., Shanghai/China			51	1,154	(686)
Pierburg Mikuni Pump Technology Corporation, Odawara/Japan			51	1,245	(30)
Pierburg Pump Technology France S.A.R.L., Basse-Ham/France			100	50,644	7,618
Pierburg Pump Technology GmbH, Neuss	(1)		100	101,578	-
Pierburg Pump Technology Italy Livorno (Pump Technology), Lanciano/Italy			100	37,359	1,044
Pierburg Pump Technology Mexico S.A. de C.V., Mexico City/Mexico			100	12,114	1,442
Pierburg Pump Technology US LLC., Marinette/USA			100	53,811	5,094
Pierburg S.A., Abadiano/Spain			100	65,563	9,507
Pierburg s.r.o., Usti/Czech Republic			100	47,766	3,029
Pierburg US LLC, Fountain Inn (Greensville)/USA			100	47,358	837
Rheinmetall Brandt GmbH, Neuss	(1)		100	234	-
Rheinmetall R&D S.L., Abadiano/Spain			100	334	24
Société Mosellane de Services S.C.I., Basse-Ham (Thionville)/France			100	10,183	(12)
Pistons (Non-core business)					
Karl Schmidt Trading Company S. de R.L. de C.V., Celaya/Mexico			100	11	(34)
Kolbenschmidt de México, S. de R.L. de C.V., Celaya/Mexico			100	14,276	1,707
Kolbenschmidt K.K., Hiroshima/Japan			100	36,977	53
KS Kolbenschmidt Czech Republic a.s., Usti/Czech Republic			100	2,284	5,455
KS Kolbenschmidt GmbH, Neckarsulm	(1)		100	77,627	-
KS Kolbenschmidt US Inc., Marinette/USA			100	(66,716)	(16,569)
KS Large Bore Pistons LLC, Marinette/USA			100	36,529	1,133
KSLP (China) Co. Ltd., Kunshan/China			100	(10,952)	1,385
KSPG Automotive Brazil Ltda., Nova Odessa/Brazil			100	(8,889)	2,531
KSUS International, LLC., Marinette/USA			100	41,252	(3,825)
Investments carried at equity					
Holding companies/service companies/others					
casa altra development GmbH, Düsseldorf	(5)		35	(3)	926
KOLBENHÖFE GmbH & Co. KG, Hamburg			50	38,575	4,777
LIGHTHOUSE Development GmbH, Düsseldorf	(4)		10	205	-
Vehicle Systems					
ARTEC GmbH, München	(5)		64	5,383	1,287
HIL Industrie-Holding GmbH, Bonn	(5), (6)		33	52	-
PSM Projekt System & Managment GmbH, Kassel	(5)		50	2,121	1,019
The Dynamic Engineering Solution Pty Ltd, Magill/Australia			49	5,398	1,171
Weapon and Ammunition					
Advanced Pyrotechnic Materials Pte. Ltd., Singapore/Singapore	(5)		49	3,784	240
Defense Munitions International, LLC, Wilmington, Delaware/USA	(5)		50	9	-

Shareholdings 2021

Company		Direct share of capital in %	Indirect share of capital in %	Equity in € thousand	Net income for the year after PLTA in € thousand
DynITEC GmbH, Troisdorf			35	1,340	-
GIWS Gesellschaft für Intelligente Wirksysteme mbH, Nürnberg	(5)		50	290	(949)
Hartchrom Defense Technology AG, Steinach/Switzerland			38	1,835	(48)
RDZM, LLC, Wilmington, Delaware/USA	(5)		50	1,263	635
Rheinmetall Barzan Advanced Technologies QSTP-LLC, Doha/Qatar			49	7,565	5,189
Werk Aschau Lagerverwaltungsgesellschaft mbH, Aschau	(5)		50	25	-
Electronic Solutions					
AIM Infrarot-Module GmbH, Heilbronn			50	10,761	4,175
ARGE RDE/CAE (GbR), Bremen	(5)		50	66	480
ARGE TATM, Bremen	(5)		50	(5)	(2)
BHIC Systems Integration Sdn Bhd, Kuala Lumpur/Malaysia			49	(79)	(13)
Contraves Advanced Devices Sdn Bhd, Malaka/Malaysia	(5)		49	22,884	(274)
EuroSpike GmbH, Röthenbach an der Pegnitz	(5)		40	6,397	1,372
HFTS Helicopter Flight Training Services GmbH, Hallbergmoos	(5)		25	56,599	10,825
Oy Finnish Defence Powersystems Ab, Helsinki/Finland			30	59	-
Rheinmetall Arabia Simulation and Training LLC, Riyadh/Saudi Arabia	(5)		40	9,842	4,619
Sensors and Actuators					
Pierburg Huayu Pump Technology Co., Ltd., Shanghai/China	(5)		50	50,406	7,814
Materials and Trade					
Advanced Bearing Materials LLC, Greensburg/USA			25	-	-
Carbon Truck & Trailer GmbH, Stade			25	(195)	(477)
HASCO KSPG Nonferrous Components (Shanghai) Co., Ltd., Shanghai/China	(5)		50	213,822	4,039
KS HUAYU AluTech GmbH, Neckarsulm	(5)		50	31,839	-
Pistons (Non-core business)					
Kolbenschmidt Huayu Piston Co., Ltd., Shanghai/China	(5)		50	89.659	3.077
Riken Automobile Parts (Wuhan) Co., Ltd., Wuhan/China			40	51.561	6.311
Shriram Pistons & Rings Ltd., New Delhi/Indien			20	148.312	17.611
Joint Operations					
ARGE Franco-German C-130J, Bremen			50	-	-
ARGE Hochenergie-Laser Marinedemonstrator, Südheide			50	-	-
MGCS SADS 1 ARGE, Koblenz			25	-	-

1) Profit and loss transfer agreement
2) Included in consolidation due to majority of voting rights
3) Structured entity (real estate management company)
4) Significant influence due to distribution of voting rights
5) Joint Ventures
6) Equity and income from previous years
7) Subsidiaries not included in the consolidated financial statements due to minor significance

Further information
Auditor's Report

Independent Auditor's Report

To Rheinmetall Aktiengesellschaft, Düsseldorf/Germany

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Rheinmetall Aktiengesellschaft, Düsseldorf/Germany, and its subsidiaries (the Group) which comprise the balance sheet, as at December 31, 2021, the statement of profit and loss, the statement of comprehensive income, the statement of cash flows and the statement of changes in equity for the financial year from January 1 to December 31, 2021, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report on the parent and the group of Rheinmetall Aktiengesellschaft, Düsseldorf/Germany, for the financial year from January 1 to December 31, 2021, in accordance with Sections 289, 289a, 315, 315a, 315b, 315c in conjunction with 289c to 289e German Commercial Code (HGB). In accordance with the German legal requirements, we have not audited the content of the combined corporate governance statement pursuant to Sections 289f and 315 d HGB included in the section "Corporate Governance" of the combined management report nor the content of the subsection "Energy Management" of the section "Environmental Protection and Conservation" included in the section "Non-financial Aspects of Business Activities" of the combined management report.

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2021, and of its financial performance for the financial year from January 1 to December 31, 2021, and

- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not cover the content of the combined corporate governance statement referred to above nor the content of the subsection "Energy Management" of the section "Environmental Protection and Conservation" included in the chapter "Non-financial Aspects of Business Activities" of the combined management report.

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

Basis for the Audit Opinions

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

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2021. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In the following we present the key audit matters we have determined in the course of our audit:

1. Recoverability of goodwill
2. Revenue recognition over a period of time
3. Valuation and presentation of discontinued operations

Our presentation of these key audit matters has been structured as follows:

a. description (including reference to corresponding information in the consolidated financial statements)
b. auditor’s response

1. Recoverability of goodwill

a)

In the consolidated financial statements of Rheinmetall Aktiengesellschaft, an amount of mEUR 481 is recognized as goodwill under the corresponding balance sheet item (6.2% of the consolidated balance sheet total). Goodwill is tested for impairment at least once a year or if there is any indication that the item may be impaired. In these impairment tests, the carrying amounts of the cash-generating units are compared with their respective recoverable amount which is determined based on the fair value less cost of sale. For this purpose, the expected future cash inflows are discounted using a discounted cash flow method. The cash flow projections are based on the corporate planning for the upcoming three years valid at the time the impairment test is carried out, with expectations on future market developments and country-specific assumptions also being taken into account. The cash flows are discounted using the weighted average cost of capital of the respective cash-generating unit. The five divisions of the Group were identified as cash-generating units. The restructuring of the Group did not affect the allocation of the existing goodwill.

After the goodwill of the former division Hardparts had been completely written down in the prior year, no further impairment need was on hand in the reporting year.

The outcome of these impairment tests is highly dependent on the executive board's assessment of the future cash flows and on the used discount rate and is therefore subject to great uncertainty. Therefore, this matter was of particular significance in the scope of our audit.

For information provided by the Company on goodwill, please refer to the sections "Accounting and measurement policies" and "Goodwill, other intangible assets" of the notes to the consolidated financial statements.

b)

During our audit, we, among other things, obtained an understanding of the method applied to carry out the impairment test, evaluated the determination of the weighted average cost of capital and assessed the calculation method used in the impairment test in consultation with our valuation specialists. For the purpose of risk assessment, we obtained an overview of the business development in the reporting year and assessed to what extent the impairment tests were influenced by subjectivity, complexity or other inherent risk factors. We examined whether the corporate planning underlying the impairment tests is consistent with the corporate planning prepared by the executive board and acknowledged by the supervisory board. In assessing the quality and reliability of the corporate planning, we compared the planning of the previous financial year with the results that were actually realized and analyzed any deviations (adherence to the plan). Together with the persons in charge, we discussed the assumptions and premises underlying the planning and examined them for plausibility. For this purpose, we, among other things, reconciled the assumptions made with macro-economic and industry-specific market expectations. We also assessed whether the future incoming financial surpluses have been appropriately derived from the assumptions and premises made. In addition, our audit included an examination of whether the cost of group functions had been appropriately considered in the impairment testing of the respective cash-generating units. Furthermore, we have verified through appropriate audit procedures that the restructuring of the Group had no impact on the allocation of the existing goodwill.

As relatively small variations of the used discount rate may already have material effects on the value of the recoverable amount determined, we assessed the parameters that were relied on for determining the respective discount rate, including the cost of capital, and verified that they were within the normal market ranges. In each case, we assessed the appropriateness of calculation of the measurement scheme for determining the recoverable amount. Furthermore, due to the material significance of goodwill for the Group's assets and liabilities, we performed a complementary sensitivity analysis in order to be able to assess a possible impairment risk in case of a potential change of a material assumption concerning the valuation parameters.

In addition, we audited the completeness and appropriateness of the disclosures in the notes to the consolidated financial statements required under IAS 36.

2. Revenue recognition over a period of time

a)

In the consolidated financial statements of the company as at December 31, 2021, an amount of mEUR 5,658 is recognized as revenue in the statement of profit and loss, of which mEUR 1,354 were recognized over a period of time. The balance sheet as at December 31, 2021, states contract assets and contract liabilities of mEUR 408 and mEUR 1,111, respectively. A material part of the activities in the business with safety technology is realized under long-term customer-specific agreements. Revenue from these agreements is generally recognized over the period in which the relevant asset was created unless Rheinmetall Aktiengesellschaft has an alternative possibility to use the asset and is legally entitled to receive payment of the services already rendered. Also, if an asset is created or enhanced and the customer gains control over the asset as the asset is created or enhanced, revenue is recognized over a period of time. When recognizing revenue over a period of time, revenue is recognized according to the percentage of completion, which is calculated as the ratio of the actually incurred contract cost to the estimated total cost to complete the contract.

From our point of view, recognizing revenue over a period of time in project business constitutes an area with a considerable risk of material misstatements and therefore constitutes a key audit matter as the executive board's judgment has a material influence on the determination of the percentage of completion. This is particularly true for the estimated total cost as well as the costs that is still to be incurred until completion, including any contract risks and their probability of occurrence. Due to new evidence obtained on the cost development and changes in the ordered project scope over the term of the contract and the rendering of the services, which may frequently span several years, revenue, estimated contract cost and completion of the contract may sometimes deviate considerably from the original project calculation.

For information provided by the Company on revenue recognition, please refer to the sections "Accounting and measurement policies" and "Revenue" in the notes to the consolidated financial statements.

b)

During our audit, we consulted the parts of the underlying contracts relevant to accounting and evaluated the process of proper identification of the performance obligation and classification of satisfying the performance obligation over a given period of time. For the purpose of risk assessment, we obtained an overview of the business development in the reporting year and assessed to what extent the revenue recognition was influenced by subjectivity, complexity or other inherent risk factors. Based on the understanding we have obtained of the processes, we evaluated the design of identified internal controls and ascertained whether they have been established. We focused our audit of these control procedures on the controls for approval of the project valuation taking into account the percentage of completion and the forecast project margin. To the extent that we relied on identified controls, we also assessed the functionality of those controls.

We evaluated the appropriateness of the project calculation and the assessment of the percentage of completion by means of customer-specific agreements that were selected based on risk-related aspects. Key criteria for the selection of the projects were the amount of total contract value, revenue realized with the project in the current financial year and the contract volume as well as the development of the project margin or its amount in the current financial year. In addition, some contracts were randomly selected on a sample basis. Besides gaining an understanding of the underlying parts of the contract, our audit procedures included inquiries of the project management, the division management and the executive board concerning the development of the projects, the current evaluation of the expected cost to be still incurred until completion as well as the estimated exposure to contract risks and opportunities. Moreover, we reconstructed the proper recognition and netting of direct cost as well as the amount and netting of overheads. In addition, we audited the completeness and appropriateness of the corresponding disclosures in the notes to the consolidated financial statements.

3. Valuation and presentation of discontinued operations

a)

The assets and liabilities presented in the consolidated financial statements of Rheinmetall Aktiengesellschaft as at December 31, 2021, as held for sale and the result from discontinued operations relate to the Pistons business unit as a discontinued operation. The assets reported in this regard as at the balance sheet date amount to mEUR 334, the liabilities held for sale amount to mEUR 246, and the associated result from discontinued operations amounts to mEUR -100 in the financial year 2021. The measurement and presentation of discontinued operations is based on the provisions of IFRS 5.

As part of the realignment of Rheinmetall Group, the executive board had already decided in the prior year to sell the small and large-bore piston business of the former Hardparts division, which formed no longer part of the core business. As of May 1, 2021, the Pistons business was classified as a discontinued operation for the first time due to compliance with the requirements of IFRS 5. In the half-year financial statements as of June 30, 2021, the updated calculation of fair value less costs of sale in accordance with IFRS 5 resulted in an impairment loss of mEUR 110.

Although it was not possible to find a buyer for the Pistons business in the financial year 2021, the executive board continues to pursue the goal of selling the small and large-bore pistons business. In this context, offers for individual investments or parts of the piston business are also being examined.

Due to the considerable significance of the discretionary estimates and valuations relating to the discontinued operation for the Group's net assets and financial position and the significance of the effects on earnings realized in the financial year for the financial performance, this matter was of particular importance in the context of our audit.

The Company's disclosures on the discontinued operation and the result from discontinued operations are included in the section "Discontinued operations" of the notes to the consolidated financial statements.

b)

In our audit we assessed whether the conditions for the classification of the Pistons business as held for sale are met. To this end, we conducted interviews with members of the executive board and divisional management and reviewed executive board and supervisory board minutes. On that basis, we assessed the computation of the fair value less costs of sale pursuant to IFRS as of December 31, 2021, made by the executive board.

In addition, we assessed the definition of the business activities classified as falling within the scope of IFRS 5 and the implementation of the allocation of the corresponding assets and liabilities in the consolidation system. We also reconciled the determination of expenses and income allocated to discontinued operations and disclosed separately in the consolidated statement of income. Our audit procedures also comprised the consolidation entries as well as the adjustment of the prior year's values within the consolidated statement of profit and loss and within the consolidated statement of cash flows.

As part of our audit of the valuation in accordance with IFRS 5 as of the balance sheet date, we also assessed whether the methods applied, assumptions made and data used by the executive board can be considered reasonable. To this end, we conducted interviews with members of the executive board, divisional management and employees from the departments involved in the sale, and critically evaluated the information and evidence obtained, such as discounted cash flow valuations, an existing purchase offer and minutes of the executive board.

We also assessed whether the related disclosures in the notes to the consolidated financial statements are complete and correct.

Other Information

The executive board and the supervisory board are responsible for the other information. The other information comprises:

- the report of the supervisory board,
- the combined corporate governance statement pursuant to Sections 289f and 315d HGB included in the section “Corporate Governance” of the combined management report,
- the subsection “Energy Management” which is included in the section “Environmental Protection and Conservation” in the chapter “Non-financial Aspects of Business Activities” of the combined management report,
- the executive board’s confirmation pursuant to Section 297 (2) sentence 4 HGB and Section 315 (1) sentence 5 HGB, respectively, regarding the consolidated financial statements and the combined management report and
- all other parts of the published annual report,
- but not the consolidated financial statements, not the audited content of the combined management report and not our auditor’s report thereon.

The supervisory board is responsible for the report of the supervisory board. The executive board and the supervisory board as well are responsible for the declaration according to Section 161 German Stock Corporation Act (AktG) on the German Corporate Governance Code, which is part of the combined corporate governance statement pursuant to Sections 289f and 315d HGB included in the section “Corporate Governance” of the combined management report. Otherwise, the executive board is responsible for the other information.

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

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

- is materially inconsistent with the consolidated financial statements, with the audited content of the combined management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

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

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

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

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

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

The executive board and the supervisory board are further responsible for the preparation of the remuneration report, including the related disclosures, which is included in a separate section of the combined management report and which complies with the requirements of Section 162 German Stock Corporation Law (AktG). In addition, they are responsible for such internal control as they have determined necessary to enable the preparation of a remuneration report, including the related disclosures, that is free from mate-rial misstatement, whether due to fraud or error.

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

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

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

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

- identify and assess the risks of material misstatement of the consolidated financial statements and of the 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 consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- evaluate the appropriateness of accounting policies used by the executive board and the reasonableness of estimates made by the executive board and related disclosures.
- conclude on the appropriateness of the executive board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related

disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRS as adopted by the EU and with the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- perform audit procedures on the prospective information presented by the executive board in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive board as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements 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.

Emphasis of Matter– Immanent risk due to uncertainties regarding the legal conformity of the interpretation of the EU Taxonomy Regulation

We refer to the disclosures of the executive board in the section "EU taxonomy" contained in the chapter "Non-financial Aspects of Business Activities" of the combined management report. Specifying that the EU taxonomy regulation and the delegated acts issued in this respect contain formulations and terms that are still subject to considerable uncertainties of interpretation and for which clarifications have not yet been published in every case. The executive board sets out how it has undertaken the necessary interpretation of the EU taxonomy regulation and the delegated acts issued in this regard. Due to the inherent risk that uncertain legal terms can be interpreted differently, the legal conformity of the interpretation is subject to uncertainties. Our audit opinion on the combined management report is not modified in respect of this matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Audit of the Electronic Reproductions of the Consolidated Financial Statements and of the Combined Management Report Prepared for Publication Pursuant to Section 317 (3a) HGB

Audit Opinion

We have performed an audit in accordance with Section 317 (3a) HGB to obtain reasonable assurance whether the electronic reproductions of the consolidated financial statements and of the combined management report (hereafter referred to as "ESEF documents") prepared for publication, contained in the provided file, which has the SHA-256 value 289CB58CE1DB40EDF22FDE0374B05109943B9F654DDD4233BC2D71D7BE9E88C4, meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB ("ESEF format"). In accordance with the German legal requirements, this audit only covers the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format, and therefore covers neither the information contained in these electronic reproductions nor any other information contained in the file identified above.

In our opinion, the electronic reproductions of the consolidated financial statements and of the combined management report prepared for publication contained in the 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 consolidated financial statements and on the accompanying combined management report for the financial year from January 1 to December 31, 2021 contained in the "Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report" above, we do not express any assurance opinion on the information contained within these electronic reprodutcions or on any other information contained in the file identified above.

Basis for the Audit Opinion

We conducted our audit of the electronic reproductions of the consolidated financial statements and of the combined management report contained in the 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 "Group 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 parent is responsible for the preparation of the ESEF documents based on the electronic files of the consolidated financial statements and of the combined management report according to Section 328 (1) sentence 4 no. 1 HGB and for the tagging of the consolidated financial statements according to Section 328 (1) sentence 4 no. 2 HGB.

In addition, the executive board of the parent is responsible for such internal controls that they have determined necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements for the electronic reporting format pursuant to Section 328 (1) HGB.

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

Group Auditor's Responsibilities for the Audit of the ESEF Documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-complaince with the requirements of Section 328 (1) HGB. We exercise professional judgment and maintain professional skepticism 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 of 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 audited consolidated financial statements and to the audited combined management report.
- evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, in the version in force at the balance sheet date, enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further information pursuant to Article 10 of the EU Audit Regulation
We were elected as group auditor by the annual general meeting on May 11, 2021. We were engaged by the supervisory board on November 4, 2021. We have been the group auditor of Rheinmetall Aktiengesellschaft, Düsseldorf/Germany, without interruption, since the financial year 2020.

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

OTHER MATTER – USE OF THE AUDITOR'S REPORT

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

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is René Kadlubowski.

Düsseldorf/Germany, March 9, 2022

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Signed: (André Bedenbecker)
Wirtschaftsprüfer
(German Public Auditor)

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

Responsibility statement

To the best of our knowledge and in accordance with the applicable accounting principles, the consolidated financial statements of Rheinmetall AG give a true and fair view of the net assets, financial position and results of operations of the Group, and the management report of Rheinmetall AG includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Düsseldorf, March 9, 2022

Rheinmetall Aktiengesellschaft
The Executive Board

Armin Papperger Helmut P. Merch Peter Sebastian Krause

Financial calender and Legal information

This annual report was published on March 17, 2022.

May 5, 2022
Statement on the 1st quarter 2022
May 10, 2022
Annual General Meeting Rheinmetall AG
August 4, 2022
Report on the 1st half-year 2022
November 10, 2022
Statement on the 3rd quarter 2022

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